Product Identification

Home Button **LCD Display** **Select Button**

Up Arrow **Back Button**

Display Panel

Product Valves

Down Arrow

SILVER KING

LEDs

X S M L XL **Size Buttons**

USB Port

Latte Cap. Cool. **Recipe Buttons**

Door-Display Connector Cable

Cup Guide

Milk Cream Skim **Product Buttons**

Power Switch (on side)

Power Cord (under)

Drip Tray

SELECT PRODUCT
MILK CRM SKIM

Home Select

TABLE OF CONTENTS

Limited Warranty

This Silver King branded product is warranted to be free from defects in material and/or workmanship for a period of two (2) years from the date of original installation, not to exceed 30 months from date of shipment from our factory. Any part or component which proves to be faulty in material and/or workmanship (in the opinion of Prince Castle) within the warranty period will be replaced or repaired (at the option of Prince Castle) without cost to the customer for parts or labor, except as provided below. The compressor will carry an additional three (3) years parts only warranty.

This Limited Warranty is subject to the following exceptions/conditions.

- Use of any non OEM parts voids warranty unless otherwise approved by Prince Castle. All work must be performed by an authorized Prince Castle Service Agent, except as provided herein.
- All covered labor requires preauthorization from the factory (Call 1-888-375-2938) and shall be performed during regular work hours. Overtime premium will not be covered.
- Travel charges are to be limited to 100 miles (200 Kilometers) round trip: 2 hours travel time per one trip repair.
- Adjustments of any kind are not covered under this Limited Warranty.
- Damage caused by carelessness, neglect, and/or abuse (e.g., using incorrect voltage, dropping, tampering with or altering electrical components, or improper cleaning) is not covered.

- Equipment damaged in shipment or by fire, flood or act of God is not covered.
- Damage to coated surfaces is not covered by this Limited Warranty.
- Use of refrigerants other than specified on the equipment serial plate voids the warranty.
- Labor repair or replacement of the following parts is not covered by this Limited Warranty:
  - Main Control Board p/n 36992S; Prince Castle will provide replacement parts to customer so customer can replace such parts if they are defective. Replacement instructions are included with part supplied.
  - Door Gasket p/n 36956S, Product Containers and Lids (p/n 37068S, 37069S, 37070S and 811-006S), Drip Tray p/n 37281S and cup guides p/n 37436S are considered wear items and are not included under the warranty.

PRINCE CASTLE SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSSES, OR EXPENSES. PRINCE CASTLE MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED. ALL IMPLIED WARRANTIES OF MECHANTABILITY AND/OR FITNESS FOR ANY PARTICULAR PURPOSE ARE HEREBY DISCLAIMED AND EXCLUDED.

Silver King Serial Number Matrix

The manufacture date (year and month) is encoded in the serial number's 2nd, 3rd and 4th letters. The service bench installation date (used to determine warranty coverage) is considered to be the end of the following month.

The refrigerant used in the unit appears as the serial number's last letter.

For example:
Serial Number: SAIE53264A
Manufacture Date: April 2008
Service Bench Installation Date: May 31, 2008
Refrigerant Used: R-134a

Manufacture Date

		2000 AA	2001 AB	2002 AC	2003 AD	2004 AE	2005 AF	2006 AG	2007 AH	2008 AI	2009 AJ	2010 BA	2011 BB	2012 BC
January	B	AAB	ABB	ACB	ADB	AEB	AFB	AGB	AHB	AIB	AJB	BAB	BBB	BCB
February	C	AAC	ABC	ACC	ADC	AEC	AFC	AGC	AHC	AIC	AJC	BAC	BBC	BCC
March	D	AAD	ABD	ACD	ADD	AED	AFD	AGD	AHD	AID	AJD	BAD	BBD	BCD
April	E	AAE	ABE	ACE	ADE	AEE	AFE	AGE	AHE	AIE	AJE	BAE	BBE	BCE
May	F	AAF	ABF	ACF	ADF	AEF	AFF	AGF	AHF	AIF	AJF	BAF	BBF	BCF
June	G	AAG	ABG	ACG	ADG	AEG	AFG	AGG	AHG	AIG	AJG	BAG	BBG	BCG
July	H	AAH	ABH	ACH	ADH	AEH	AFH	AGH	AHH	AIH	AJH	BAH	BBH	BCH
August	I	AAI	ABI	ACI	ADI	AEI	AFI	AGI	AHI	AII	AJI	BAI	BBI	BCI
September	J	AAJ	ABJ	ACJ	ADJ	AEJ	AFJ	AGJ	AHJ	AIJ	AJJ	BAJ	BBJ	BCJ
October	K	AAK	ABK	ACK	ADK	AEK	AFK	AGK	AHK	AIK	AJK	BAK	BBK	BCK
November	L	AAL	ABL	ACL	ADL	AEL	AFL	AGL	AHL	AIL	AJL	BAL	BBL	BCL
December	M	AAM	ABM	ACM	ADM	AEM	AFM	AGM	AHM	AIM	AJM	BAM	BBM	BCM

Refrigerant Used

A	B	M	R
R-134a	R-404a (MP-39)	R401a	R-22

Safety Information

⚠ **WARNING**

Indicates information important to the proper operation of the unit. Failure to observe may result in damage to the equipment and/or severe bodily injury or death.

⚠ **CAUTION**

Indicates information important to the operation of the unit. Failure to observe may result in damage to the equipment.

General Precautions

⚠ **WARNING**

Risk of Electric Shock.
• Always unplug the power cord before servicing the unit to avoid electric shock.
• Unit MUST be plugged into a 3-prong plug for grounding. Cutting off the grounding spike on the power cord could result in electric shock to the operator during operation.
• Unit must be plugged into a 15 or 20 ampere fuse- or breaker-protected circuit. Use of a larger fuse or breaker could result in damage to the unit and electric shock to the operator.

⚠ **WARNING**

Moving or Handling Hot Parts.
• Some parts may remain hot even after being unplugged. Always use caution when servicing.

⚠ **WARNING**

Possible Back Injury.
• Assistance in moving this piece of equipment is strongly recommended to avoid injury.
• Always lift with your legs and not your back when lifting this unit.

General

The 3-Product Dairy Dispenser is designed to house, refrigerate and dispense three dairy products (2% or whole milk, cream, and skim milk). The unit has been set to maintain product within a temperature range of 33 to 41°F.

Important

Be sure to have 3 clamps available to manually close the tubes for any service activity that may require opening the product valves while the tanks contain product. Office supply binder clips work well.

Electrical Specifications
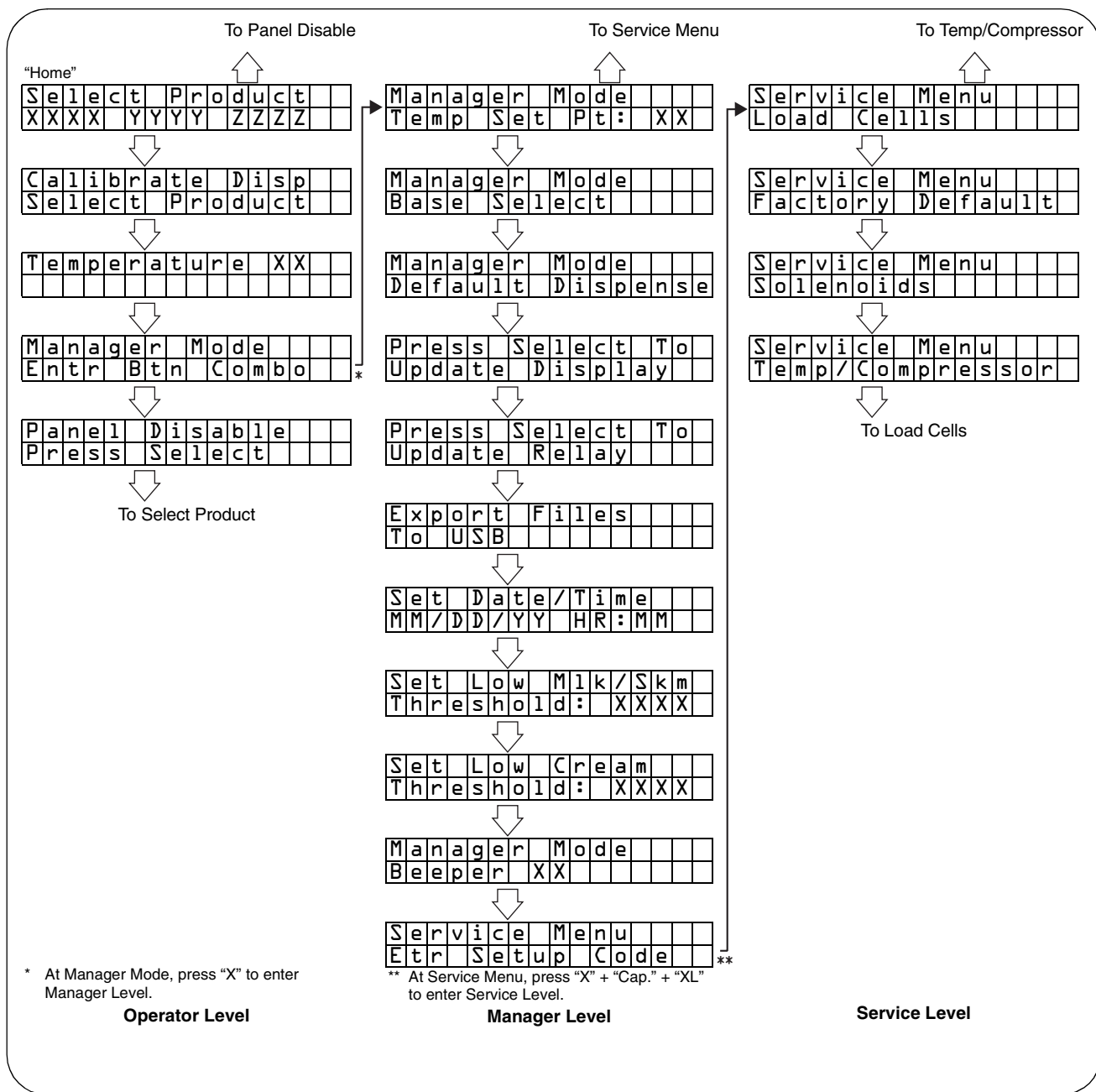
115V 60 Hz 1 Phase

Safe Service Practices

NOTE: This service manual is intended for use by persons having electrical and mechanical training and a level of knowledge of these subjects considered acceptable in the service trade. Prince Castle cannot be responsible, or assume any liability, for injury or damage arising from the use of this manual.

To avoid personal injury and /or property damage, it is important that Safe Service Practices be observed, including the following limited examples:
• Do not service the unit without first reading this manual.
• Do not attempt a repair if you have any doubt as to your ability to complete it in a safe manner.
• Do not attempt to repair or replace any component unless all power has been disconnected.
• Prior to returning the unit to service, ensure that:
 – All electrical connections are correct and secure.
 – All safety grounds are correctly and securely connected.
 – All components are properly re-assembled.

3-Product Dairy Dispenser
Model SKBD3LS

PRINCE CASTLE LLC
WORLDWIDE
MARMON
A Marmon Group / Berkshire Hathaway Company

Display Menu Overview

To Panel Disable | To Service Menu | To Temp/Compressor

Operator Level

"Home"

```
Select Product
XXXX  YYYY  ZZZZ
```

```
Calibrate Disp
Select Product
```

```
Temperature XX
```

```
Manager Mode
Entr Btn Combo      *
```

```
Panel Disable
Press Select
```

To Select Product

Manager Level

```
Manager Mode
Temp Set Pt: XX
```

```
Manager Mode
Base Select
```

```
Manager Mode
Default Dispense
```

```
Press Select To
Update Display
```

```
Press Select To
Update Relay
```

```
Export Files
To USB
```

```
Set Date/Time
MM/DD/YY  HR:MM
```

```
Set Low Mlk/Skm
Threshold:  XXXX
```

```
Set Low Cream
Threshold:  XXXX
```

```
Manager Mode
Beeper XX
```

```
Service Menu
Etr Setup Code      **
```

Service Level

```
Service Menu
Load Cells
```

```
Service Menu
Factory Default
```

```
Service Menu
Solenoids
```

```
Service Menu
Temp/Compressor
```

To Load Cells

* At Manager Mode, press "X" to enter Manager Level.

** At Service Menu, press "X" + "Cap." + "XL" to enter Service Level.

Display Menu Overview (continued)

Error Messages

Message on Display	Description	Message on Display	Description
Check Temp Sense	Temperature probe error, open or short.	No USB Detected	Error during updating/exporting files, no connection.
Check Skim LC	Skim tank's load cell connection open.	USB Error Please Check USB	Error during updating/exporting files, problems initializing.
Check Cream LC	Cream tank's load cell connection open.		
Check Milk LC	Milk tank's load cell connection open.	No File Detected On USB	Error during updating files, no file detected on the flash drive.
Board Comm Error	Display-to-relay communication error.		
Replace Battery	Replace the battery (on control board).	Bad File Detected On USB	Error during updating files, a bad file detected on the flash drive.
RTC Comm Error	Real Time Clock communication error.		

NOTE: Error messages replace the Home screen: Non-fatal errors will blink 2 seconds on and 2 seconds off. Fatal errors will stay on until the error is fixed.

Resetting Factory Defaults

⚠ **CAUTION**

All data and adjustments will be reset to from-the-factory status.

3 **Reset to factory defaults.**

```
S e r v i c e   M e n u
F a c t o r y   D e f a u l t
```

Press the Down arrow to the Factory Default screen and press Select.

1 **Enter the Manager Level.**

```
M a n a g e r   M o d e
E n t r   B t n   C o m b o
```

On the display panel, press the Up or Down arrow until Manager Mode is displayed. Press the "X" button in the Size row.

2 **Enter the Service Level.**

```
S e r v i c e   M e n u
E t r   S e t u p   C o d e
```

Press the Up or Down arrow until Service Menu is displayed. Press the Setup Code, which is "X" + "Cap." + "XL".

NOTE: If the code is not entered correctly, press the Up arrow once and then the Down arrow once and re-enter the code.
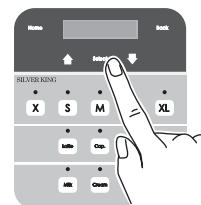
3-Product Dairy Dispenser
Model SKBD3LS

PRINCE CASTLE LLC
WORLDWIDE
MARMON
A Marmon Group/Berkshire Hathaway Company

Setting Time and Date

1 **Navigate to the Manager Level.** On the display panel, press the Down arrow until Manager Mode is displayed.

2 **Press the "X" button.** The "Manager Button Combination" is the "X" button in the Size row.

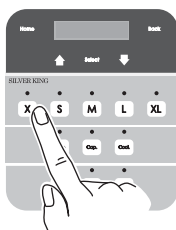**3** **Navigate to the screen.** Press the Down arrow until the Set Date/Time screen is displayed.

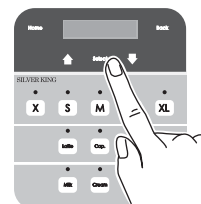**4** **Adjust the date and time.** Press Select to begin the adjustment, then use display panel buttons to make changes:
- Use the Home button to tab right.
- Use the Back button to tab left.
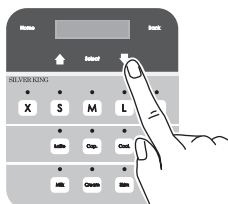- Use the Up and Down arrows to change the values.

5 **Press Select to accept the changes.**

6 **Return to normal operation.** Press the Home button to return to the main menu.

PRINCE CASTLE LLC
**WORLDWIDE**
A Marmon Group/Berkshire Hathaway Company

Calibrating the Unit / Adjusting Shot Size

*NOTE: Unit **must** be calibrated before the unit is put into operation and as needed thereafter to ensure that the unit is dispensing within the required specifications.*

1 **Exercise the tubes.** If unit has been idle (no shots taken for over a half hour) take one shot of size Medium (coffee) for each product to exercise the tubes.

**2** **Place a cup on the external scale and press tare.**

3 **Dispense a shot.** Press the button of the product to be dispensed, place the cup under the proper product tube, and then press the "M" button to dispense product amount for a medium coffee.
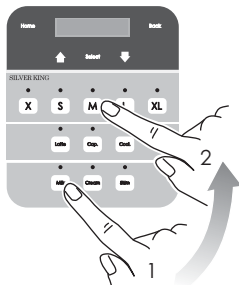

4 **Weigh the product on the external scale.** If the shot weight is within the specified range listed in the Shot Size Targets (41 - 51 g), then you can move on to the next product. If the shot weight is outside of the specified range, then a simple calibration is required. To calibrate the unit, follow Steps 5 to 9.

5 **Repeat Step 2.**

6 **Go to the Calibration menu.** Press the Down arrow once.
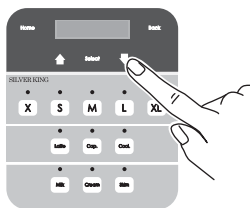
7 **Dispense a shot.** *NOTE: Make sure the cup is under the valve at this time, because a medium sized shot is dispensed.* The display now reads "Calibrate Disp Select Product". Press the button of the product you wish to calibrate (Milk, Cream or Skim) and then press the "M" button.
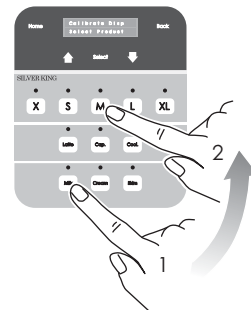
8 **Weigh the cup on the external scale.**

9 **Enter the weight.** The display now reads "Enter Weight 46 Grams". Press the Up or Down arrow until the value on the display matches the weight that you measured using the external scale and then press Select.
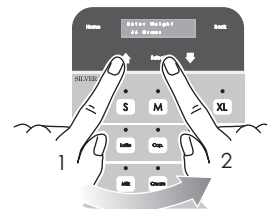
10 **Calibrate the next product.** The display again reads "Calibrate Disp Select Product". You may now select the next product to calibrate or press the Home button to return to normal operation.

or

3-Product Dairy Dispenser
Model SKBD3LS

PRINCE CASTLE LLC
WORLDWIDE

MARMON
A Marmon Group/Berkshire Hathaway Company
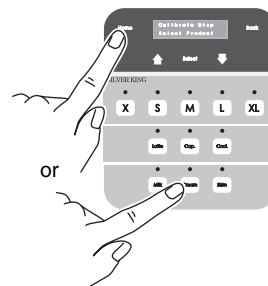
Shot Size Targets

With machine set to COFFEE Base
ALL SHOTS ARE LISTED AND MEASURED IN GRAMS

		MIN	TARGET	MAX
COFFEE	**XS**	13	15	17
	SM	27	31	34
	MED	41	46	51
	LG	54	61	67
	XLG	68	76	84
LATTE	**SM**	164	183	202
	MED	247	275	303
	LG	329	367	404
CAPPUCCINO	**SM**	109	122	135
	MED	164	183	202
	LG	219	244	269
COOLATTA	**XS**	54	61	67
	SM	109	122	135
	MED	163	183	202
	LG	217	243	269

With machine set to NEUTRAL Base
ALL SHOTS ARE LISTED AND MEASURED IN GRAMS

		MIN	TARGET	MAX
COFFEE	**XS**	13	15	17
	SM	27	31	34
	MED	41	46	51
	LG	54	61	67
	XLG	68	76	84
LATTE	**SM**	164	183	202
	MED	247	275	303
	LG	329	367	404
CAPPUCCINO	**SM**	109	122	135
	MED	164	183	202
	LG	219	244	269
COOLATTA	**XS**	41	46	50
	SM	82	91	100
	MED	123	137	150
	LG	164	182	200

Updating and Exporting Files

1 **Remove the plug covering the USB port and attach a Flash drive.**

2 **Enter the Manager Level.**

M	a	n	a	g	e	r		M	o	d	e			
E	n	t	r		B	t	n		C	o	m	b	o	

On the display panel, press the Up or Down arrow until Manager Mode is displayed. Press the "X" button in the Size row.

3 **Navigate to the screen.** Press the Up or Down arrow until the appropriate screen appears. Choose:

P	r	e	s	s		S	e	l	e	c	t		T	o
U	p	d	a	t	e		D	i	s	p	l	a	y	

• **Press Select To Update Display** to download an updated display file from a Flash drive.

P	r	e	s	s		S	e	l	e	c	t		T	o
U	p	d	a	t	e		R	e	l	a	y			

• **Press Select To Update Relay** to download an updated relay file from a Flash drive.

E	x	p	o	r	t		F	i	l	e	s			
T	o		U	S	B									

• **Export Files To USB** to upload files from the unit to a Flash drive.

4 **Press Select to initiate the download/upload.** A status message will appear in the display. (If an error code appears, see Error Messages on page 5.)

• When a download is complete, the screen will automatically return to the main menu.

• When an upload is complete, the screen will automatically return to the main menu.

5 **Remove the Flash drive and insert the USB port plug.**

3-Product Dairy Dispenser
Model SKBD3LS

P RINCE C ASTLE LLC
WORLDWIDE
MARMON
A Marmon Group / Berkshire Hathaway Company

Changing Set Point, Base, Low Product Thresholds, Beeper Status

1 **Enter the Manager Level.**

M	a	n	a	g	e	r		M	o	d	e			
E	n	t	r		B	t	n		C	o	m	b	o	

On the display panel, press the Up or Down arrow until Manager Mode is displayed. Press the "X" button in the Size row.

3 **Press the Home button to return to the main menu** or choose another setting to change.

2 **Navigate to the screen and change settings.** Press the Up or Down arrow until the appropriate screen appears. Choose:

M	a	n	a	g	e	r		M	o	d	e			
T	e	m	p		S	e	t		P	t	:		X	X

A. **Manager Mode Temp Set Pt: XX** to change the unit's set point.

1. Press Select to initiate the change.

2. Press the Up or Down arrow to choose the desired temperature (between 35 and 40°F).

3. Press Select again to accept the change.

M	a	n	a	g	e	r		M	o	d	e			
B	a	s	e		S	e	l	e	c	t				

B. **Manager Mode Base Select** to change to "coffee" or "neutral" Coolatta base.

1. Press Select to initiate the change.

2. Press the Up or Down arrow to choose the correct term.

3. Press Select again to accept the change.

S	e	t		L	o	w		M	l	k	/	S	k	m
T	h	r	e	s	h	o	l	d	:		X	X	X	

C. **Set Low Mlk/Skm Threshold** or **Set Low Cream Threshold** to change the amount at which the unit goes into lockout (will not dispense).

1. Press Select to initiate the change.

2. Press the Up or Down arrow to change the amount in increments of 50 g. Default Milk and Skim levels are 600 g and the default Cream level is 850 g.

3. Press Select again to accept the change.

M	a	n	a	g	e	r		M	o	d	e			
B	e	e	p	e	r		X	X						

D **Manager Mode Beeper On (or Off)** to enable/ disable the audible alarm.

1. Press Select to initiate the change.

2. Press the Up or Down arrow to toggle between On and Off.

3. Press Select again to accept the change.

Zeroing Out the Load Cells

IMPORTANT

When replacing a control board (p/n 36992S) or load cell (p/n 37168S) it will be necessary to zero out the load cells. Please carefully follow each step of the load cell calibration instructions listed below.

1 **Power up the unit.** Connect the power cord to a 115 VAC outlet. Turn the unit on and wait while the controller initiates.

2 **Remove all product tanks from the unit.** Make sure nothing is on any of the load cells.

3 **Press Home on the display panel.**

4 **Enter the Manager Menu.**

M	a	n	a	g	e	r		M	o	d	e				
E	n	t	r		B	t	n		C	o	m	b	o		

Press the Up or Down arrow until Manager Mode is displayed. Press the "X" button in the Size row.

5 **Enter the Service Menu.**

S	e	r	v	i	c	e		M	e	n	u	e			
E	t	r		S	e	t	u	p		C	o	d	e		

Press the Up or Down arrow until Service Menu is displayed. Press the Setup Code, which is "X" + "Cap." + "XL".

NOTE: If the code is not entered correctly, press the Up arrow once and then the Down arrow once and re-enter the code.

6 **Press Select 3 times.** A "Calibration Done" message will appear on the display.

7 **Press the Home button to return to the main menu.**

8 **Load the tanks and product back into the machine.**

9 **Follow the instructions under Calibrating the Unit / Adjusting Shot Size.**

Viewing Other Load Cell Data

1 **Enter the Manager Menu.**

| M | a | n | a | g | e | r | | M | o | d | e | | | | |
| E | n | t | r | | B | t | n | | C | o | m | b | o | | |

Press the Up or Down arrow until Manager Mode is displayed. Press the "X" button in the Size row.

2 **Enter the Service Menu.**

| S | e | r | v | i | c | e | | M | e | n | u | | | | |
| E | t | r | | S | e | t | u | p | | C | o | d | e | | |

Press the Up or Down arrow until Service Menu is displayed. Press the Setup Code, which is "X" + "Cap." + "XL".

NOTE: If the code is not entered correctly, press the Up arrow once and then the Down arrow once and re-enter the code.

| S | e | r | v | i | c | e | | M | e | n | u | | | | |
| L | o | a | d | | C | e | l | l | s | | | | | | |

3 **Press Select.**

4 **Navigate to the screen and view data.** Press the Up or Down arrow until the appropriate screen appears. Choose:

A. **Load Cell Counts** to view the activation count.

B. **Calibration Zero** to view Load Cell 1 zero, Load Cell 2 zero and Load Cell 3 zero.

C. **Calibration Span** to view Load Cell 1 span, Load Cell 2 span and Load Cell 3 span.

5 **Press the Home button to return to the main menu.**

Solenoids – Test Cycling/Viewing Status

1 **Enter the Manager Menu.**

| M | a | n | a | g | e | r | | M | o | d | e | | | | |
| E | n | t | r | | B | t | n | | C | o | m | b | o | | |

Press the Up or Down arrow until Manager Mode is displayed. Press the "X" button in the Size row.

2 **Enter the Service Menu.**

| S | e | r | v | i | c | e | | M | e | n | u | | | | |
| E | t | r | | S | e | t | u | p | | C | o | d | e | | |

Press the Up or Down arrow until Service Menu is displayed. Press the Setup Code, which is "X" + "Cap." + "XL".

NOTE: If the code is not entered correctly, press the Up arrow once and then the Down arrow once and re-enter the code.

| S | e | r | v | i | c | e | | M | e | n | u | | | | |
| L | o | a | d | | C | e | l | l | s | | | | | | |

3 **Navigate to the Service Menu Solenoids screen.**

| S | e | r | v | i | c | e | | M | e | n | u | | | | |
| S | o | l | e | n | o | i | d | s | | | | | | | |

Press the Up or Down arrow until the screen appears.

4 **Press Select.**

5 **Navigate to the desired screen (Milk Solenoid, Cream Solenoid, Skim Solenoid).**

| M | i | l | k | | S | o | l | e | n | o | i | d | | | |
| S | = | O | N | | L | = | O | F | F | | | | | | |

Press the Down arrow until the appropriate screen appears.

6 **Cycle the solenoid.**

A. Use the "S" button on the display to turn on the solenoid.

B. Use the "L" button on the display to turn off the solenoid.

C. Use the Down arrow to move on to the next screen.

NOTE: After the Skim Solenoid screen are lifetime cycle counts for the three solenoids.

| M | i | l | k | | S | o | l | . | | C | y | l | . | | |
| X | X | X | X | | | | | | | | | | | | |

7 **Press the Home button to return to the main menu.**

Compressor – Test Cycling/Setting Up

1 **Enter the Manager Menu.**

| M | a | n | a | g | e | r | | M | o | d | e | | | |
| E | n | t | r | | B | t | n | | C | o | m | b | o | |

Press the Up or Down arrow until Manager Mode is displayed. Press the "X" button in the Size row.

2 **Enter the Service Menu.**

| S | e | r | v | i | c | e | | M | e | n | u | | | |
| E | t | r | | S | e | t | u | p | | C | o | d | e | |

Press the Up or Down arrow until Service Menu is displayed. Press the Setup Code, which is "X" + "Cap." + "XL".

NOTE: If the code is not entered correctly, press the Up arrow once and then the Down arrow once and re-enter the code.

| S | e | r | v | i | c | e | | M | e | n | u | | | |
| L | o | a | d | | C | e | l | l | s | | | | | |

3 **Navigate to the Service Menu Temp/Compressor screen.** Press the Up or Down arrow until the screen appears.

| S | e | r | v | i | c | e | | M | e | n | u | | | |
| T | e | m | p | / | C | o | m | p | r | e | s | s | o | r |

4 **Press Select.**

5 **Navigate to the screen and change settings.** Press the Up or Down arrow until the appropriate screen appears. Choose:

| T | e | m | p | / | C | o | m | p | r | e | s | s | o | r |
| S | c | y | c | l | e | | T | i | m | e | r | : | | X | X |

A. **Temp/Compressor/Short Cycle Timer** to change the compressor's timer.
  1. Press Select to initiate the change.
  2. Press the Up or Down arrow to choose the desired time in minutes.
  3. Press Select again to accept the change.

| T | e | m | p | / | C | o | m | p | r | e | s | s | o | r |
| T | e | m | p | | O | f | f | s | e | t | | X | X | |

B. **Temp/Compressor/Temp Offset** to change the temperature offset between probe and display.
  1. Press Select to initiate the change.
  2. Press the Up or Down arrow to choose the offset.
  3. Press Select again to accept the change.

| T | e | m | p | / | C | o | m | p | r | e | s | s | o | r |
| T | e | m | p | | D | i | f | f | : | | X | X | | |

C. **Temp/Compressor/Temp Diff** to change the compressors' temperature differential between set point and cutout.
  1. Press Select to initiate the change.
  2. Press the Up or Down arrow to change the differential.
  3. Press Select again to accept the change.

| C | o | m | p | r | e | s | s | o | r | | | | | |
| S | = | O | N | | L | = | O | F | F | | | | | |

D. **Compressor S = ON L = OFF** to force the compressor ON/OFF.
  1. Press Select to initiate the change.
  2. Press the "S" on the display to turn the compressor on or press the "L" on the display to turn the compressor off.
  3. Press Select again to accept the change.

6 **Press the Home button to return to the main menu** or choose another setting to change.

Troubleshooting Guide

PROBLEM	PROBABLE CAUSE	SOLUTION
Not dispensing accurately	Containers not in correct position	Check container position (L,C,R).
	Wrong tubes being used	Use Silver King tubes only (Part No. 37222).
	Unit out of calibration	Run daily calibration (See *Calibrating the Unit*).
	Valve hanging up	Replace valve.
Not dispensing	Container empty	Fill container.
	Bad relay	Replace relay.
	Bad solenoid	Replace solenoid.
	Poor connect to solenoid	Check connection.
	Broken valve	Replace valve.
	Buttons not responding	Replace door.
"CHECK (Product name) LC" is displayed	Bad connection	Replace load cell.
	Bad terminal board	Replace terminal board.
"EMPT" is displayed when container is full	Unit needs to be zeroed	See *Zeroing Out the Load Cells.*
	Bad load cell	Replace load cell.
Display is blank	Unit not receiving power	Check that service cord is firmly connected to the wall socket and the unit, and the power switch is in the "ON" position.
	Door cable	Check door cable to make sure it is secure. If secure, replace cable.
	Bad power supply	Replace power supply.
	Bad display	Replace door.
Unit will not stop dispensing	Bad relay	Replace relay.
	Bad valve	Replace valve.
	Bad solenoid	Replace solenoid.
Ice buildup	Door not sealing	Check that door is properly closed. Close the tank covers, the top access door, and then the front door of the unit. *NOTE: Closing front door before top access can create a gap which may lead to increased ice buildup and/or warm dairy product.*
	Bad gasket	Replace gasket.
	Bad temperature probe	Replace probe.

Accessing/Servicing Components from the Front

Door-Display Connector Cable • Door Assembly, Door Gasket • Temperature Probe
• Valve Plunger Assemblies • Solenoids, Solenoid Rack Assembly • Control Board
• Relays • Terminal Board • Power Supply • Load Cell Assemblies

⚠ **WARNING**

Risk of Electric Shock.

**Always unplug the power cord before servicing the unit to avoid electric shock.**

IMPORTANT

Silver King tubes (Part No. 37222) must be on order for this unit. Be sure to have 3 clamps available to manually close the tubes for any service activity that may require opening the product valves while the tanks contain product. Office supply binder clips work well.

1 **Turn off the power switch and unplug the unit.** The power switch is on the left side of the unit near the front.
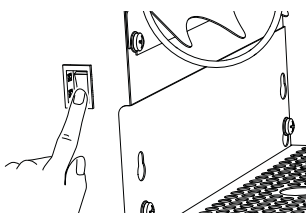
2 **Uninstall the cup guide and the drip tray.**

Cup Guide

Drip Tray Mount

Drip Tray Mount
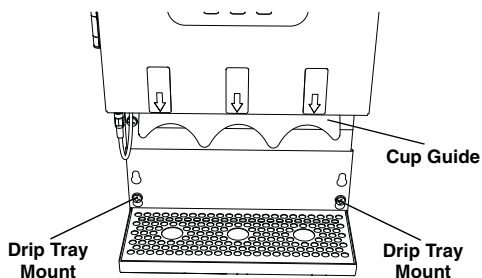
3 **Remove the panel.** Remove the 4 screws and remove the lower front panel.
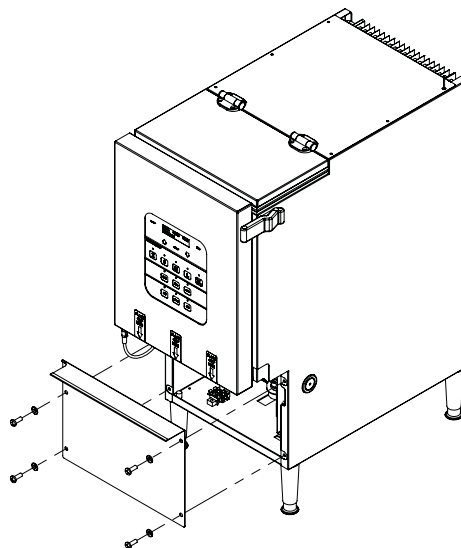
Accessing/Servicing Components from the Front (continued)
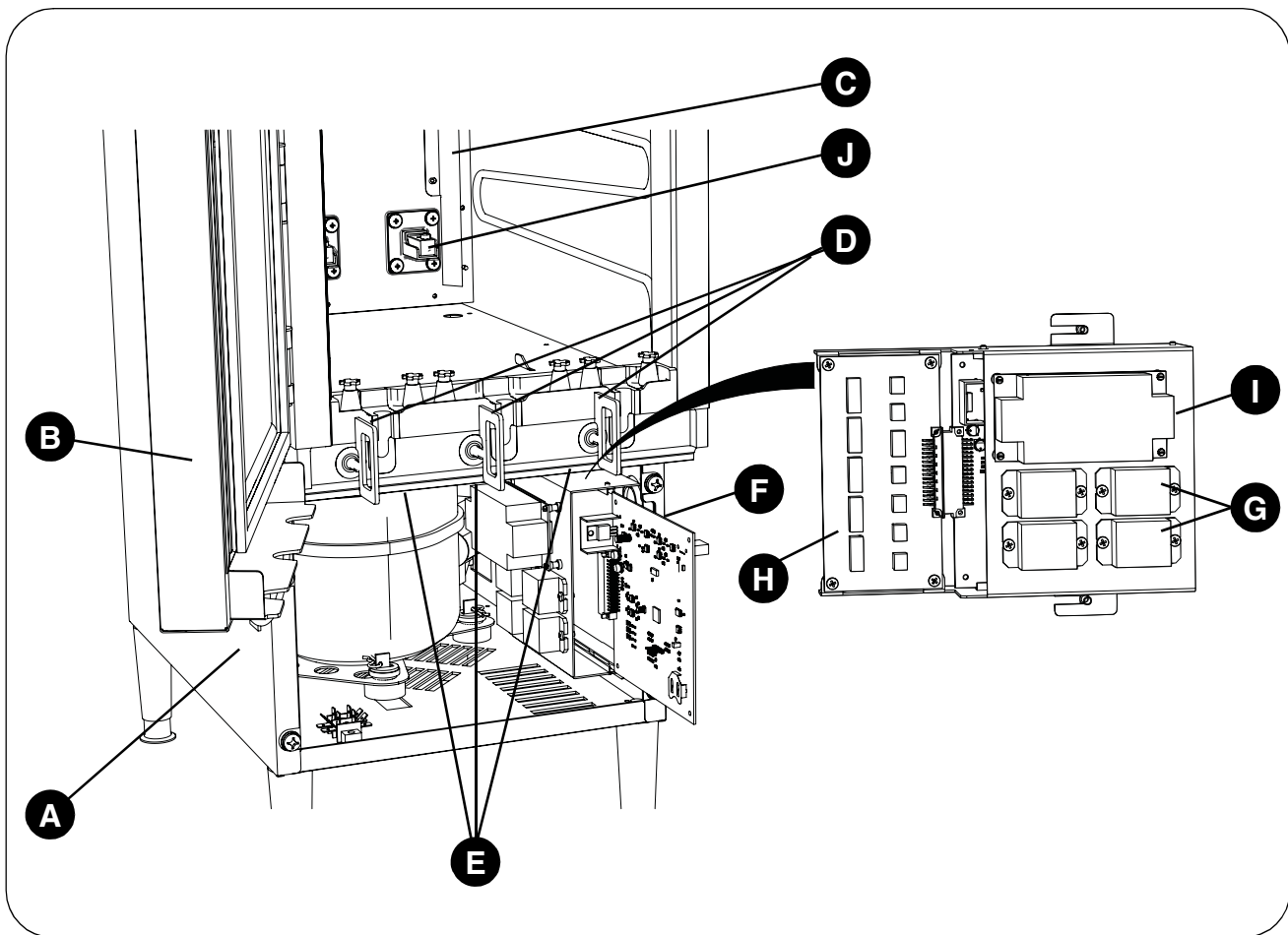
A **Door-Display Connector Cable.**

Always ensure the connections are secure.

Replace by hand-tightening the threaded connectors.
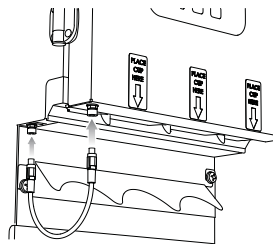
**B** **Door Assembly, Door Gasket.**
The display is part of the door assembly.

C **Temperature Probe.**

The temperature probe is behind a shield in the right rear of the tank cavity.

D **Valve Plunger Assemblies.**
If a valve is not working, take an ohm reading at the clip disconnect.

PRINCE CASTLE LLC
WORLDWIDE
MARMON
A Marmon Group/Berkshire Hathaway Company

3-Product Dairy Dispenser
Model SKBD3LS

Accessing/Servicing Components from the Front (continued)

E **Solenoids, Solenoid Rack Assembly.**

Solenoids can be replaced individually. To remove the solenoid rack assembly, loosen the two captured screws and pull the rack down.
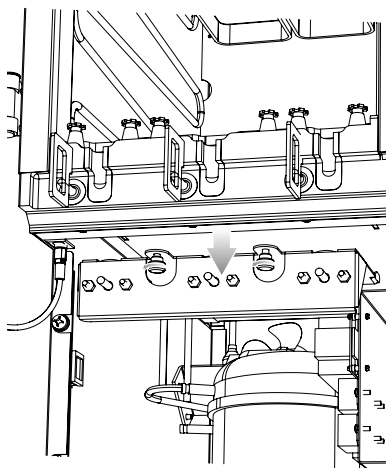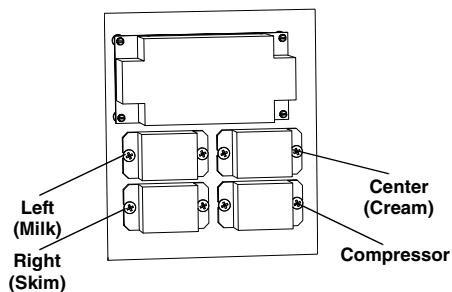

F **Control Board.**

The control board simply slides out from the control assembly.

After replacing the control board, it will be necessary to zero out the load cells for proper operation. Follow the instructions, *Zeroing Out the Load Cells.*

G **Relays.**

To better access the relays, loosen the 2 nuts that attach the control assembly to the unit and remove the whole control assembly.

Left (Milk)
Right (Skim)
Center (Cream)
Compressor

H **Terminal Board.**

To better access the terminal board, loosen the 2 nuts that attach the control assembly to the unit and remove the whole control assembly.

The terminal board is labeled for each connection.

I **Power Supply.**

To better access the power supply, loosen the 2 nuts that attach the control assembly to the unit and remove the whole control assembly.
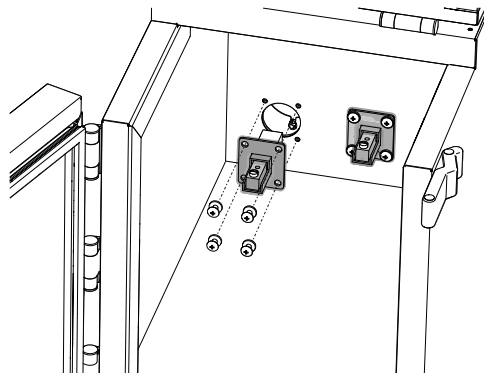
J **Load Cell Assemblies.**

To remove a load cell:

1. Access the unit from both the front and rear.
2. At the front, disconnect the load cell connector from the terminal board.
3. Cut the wire tie.
4. Remove the 4 screws that hold the assembly.
5. Pull the load cell through the load cell mounting hole, making sure to guide the cable through carefully from the rear to prevent cutting the load cell cable insulation.

To install a load cell, reverse the removal process.

After replacing a load cell, it will be necessary to zero out the load cells for proper operation. Follow the instructions, *Zeroing Out the Load Cells.*

3-Product Dairy Dispenser
Model SKBD3LS

PRINCE CASTLE LLC
WORLDWIDE
MARMON
A Marmon Group/Berkshire Hathaway Company

Accessing/Servicing Components from the Rear

Fan Assembly • Compressor Start Components • Compressor • Load Cell Assemblies

⚠ **WARNING**

Risk of Electric Shock.

Always unplug the power cord before servicing the unit to avoid electric shock.

IMPORTANT

Silver King tubes (Part No. 37222/DCP SKU 711490) must be used for this unit. Be sure to have 3 clamps available to manually close the tubes for any service activity that may require opening the product valves while the tanks contain product. Office supply binder clips work well.
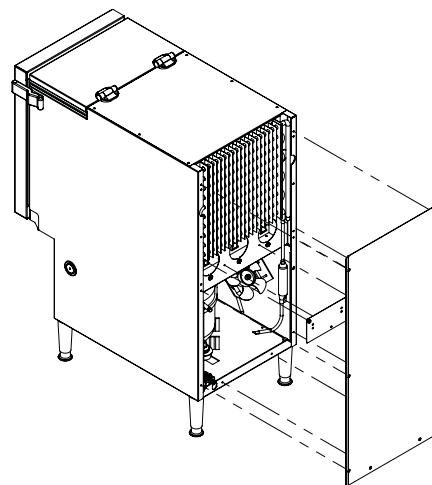
1 **Turn off the power switch and unplug the unit.** The power switch is on the left side of the unit near the front.
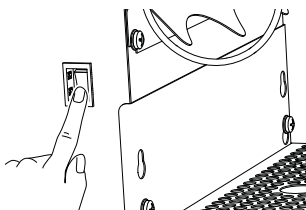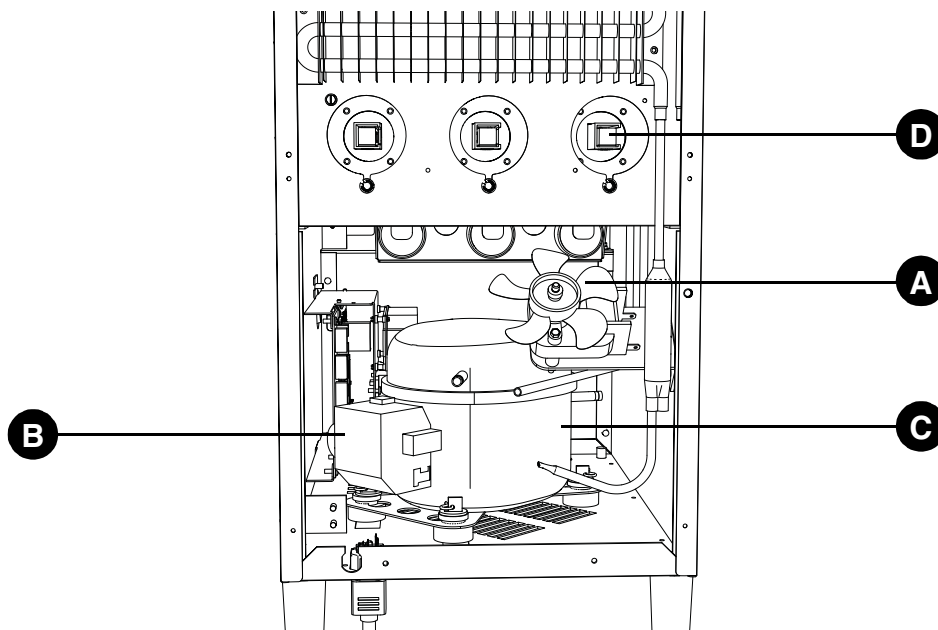

2 **Remove the panel(s).** Remove the 8 screws and remove the main rear panel. To access the load cell assemblies, remove the 4 screws and remove the load cell access panel.
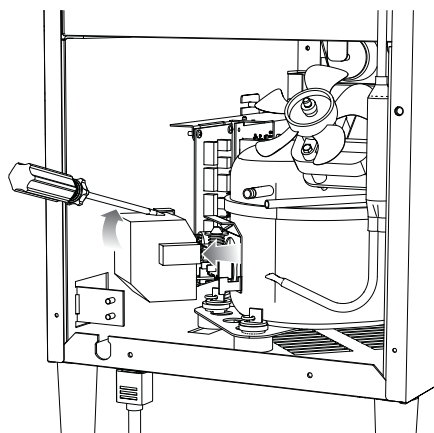
PRINCE CASTLE LLC
WORLDWIDE
A Marmon Group/Berkshire Hathaway Company

Accessing/Servicing Components from the Rear (continued)

A **Fan Assembly.**
Without accessing, a non-working fan is evident when no air is flowing out of the top rear of the unit.

C **Compressor.**
The compressor is a closed system. To service the compressor, a service valve must be provided.

B **Compressor Start Components.**
To access the overload and start relay, pop off the gray cover.

D **Load Cell Assemblies.**
To remove a load cell:
1. Access the unit from both the front and rear.
2. At the front, disconnect the load cell connector from the terminal board.
3. Cut the wire tie.
4. Remove the 4 screws that hold the assembly.
5. Pull the load cell through the load cell mounting hole, making sure to guide the cable through carefully from the rear to prevent cutting the load cell cable insulation.

To install a load cell, reverse the removal process..

After replacing a load cell, it will be necessary to zero out the load cells for proper operation. Follow the instructions, *Zeroing Out the Load Cells.*
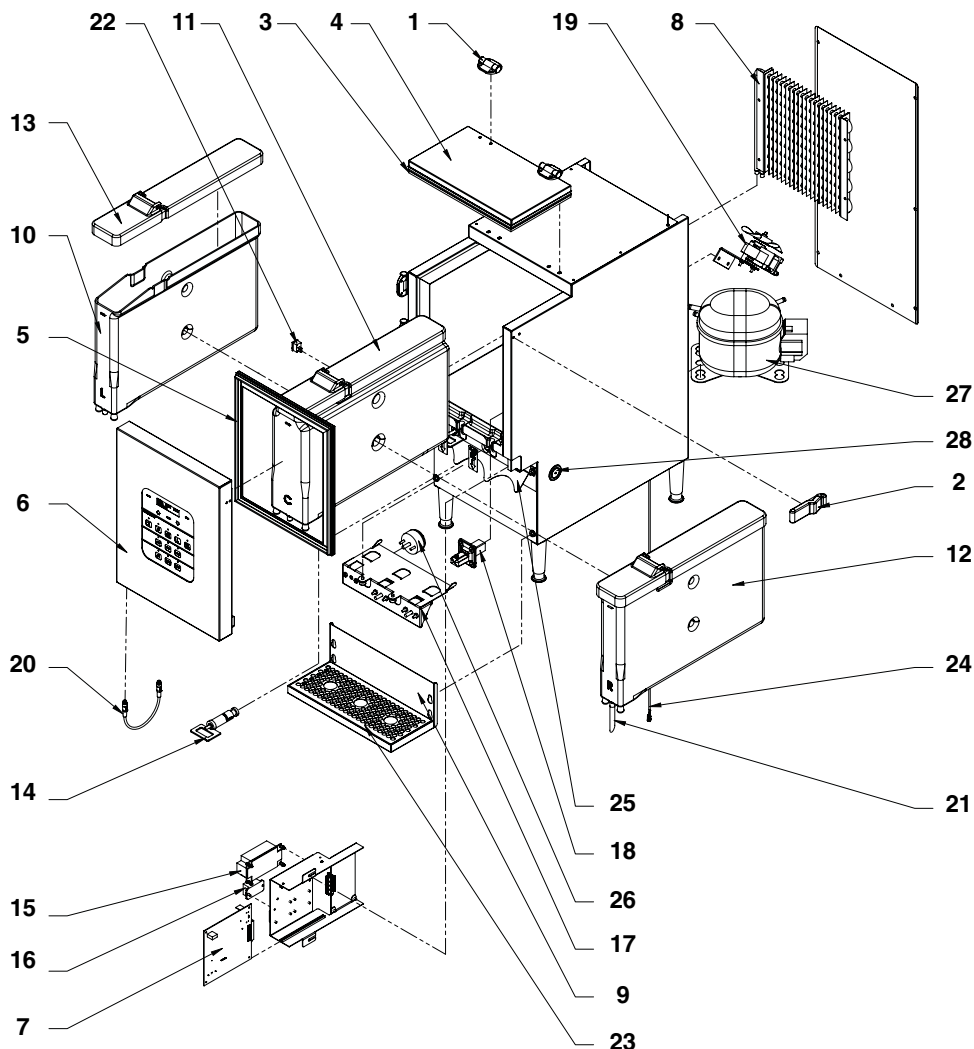
3-Product Dairy Dispenser
Model SKBD3LS

PRINCE CASTLE LLC WORLDWIDE

A Marmon Group/Berkshire Hathaway Company

Parts List and Exploded View

NOTE: To order Parts/Service, Contact Silver King Refrigeration at 800-328-3329 for technical assistance.

Item No	Part No	Description
1	25226S	Hinge w/Screws & Covers
2	25227S	Latch
3	36954S	Lid Gasket SKBD3LS
4	36955S	Lid Assembly SKBD3LS
5	36956S	Door Gasket SKBD3LS
6	36957S	Door Assembly SKBD3LS
7	36992S	Control Board
8	37016S	Condenser Coil SKBD3LS
9	37052S	Platform for Drip Tray
10	37068S	Container Assembly Left
11	37069S	Container Assembly Center
12	37070S	Container Assembly Right
13	811-006S	Lid, Container SKBD3LS
14	37133S	Valve Plunger Assembly
15	37146S	Power Supply

Item No	Part No	Description
16	37147S	Relay
17	37461S	Solenoid Rack Assembly
18	37168S	Load Cell Assembly SKBD3LS
19	37202S	Fan Assembly SKBD3LS
20	37210S	Connector, Door-Display SKBD3LS
21	37222	3" Tubes (Carton of 300)
22	37239S	Rocker Switch SKBD3LS
23	37281S	Drip Tray SKBD3LS
24	37364S	Probe Temp SKBD3LS
25	37436S	Upper Cup Guide
26	37485S	Solenoid
27	10343-02	Compressor 115V/60HZ EMI30HER
	10344-02	Electricals - Compressor
28	37358S	USB Hole Plug - 1" Dia

Wiring Diagram