General Instructions

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This Booklet Contains Information on:

FMSS - Remote

The FMSS is a single-deck, refrigerated, self-service merchandiser, which offers additional related display when positioned in front of a “Parent” service case.

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.
**Installation**

**Location**
The refrigerated 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.

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.

**Uncrating the Stand**
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!**

**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 case that the FMSS connects to (the parent case) through the rear of the case must be leveled and set prior to installing the FMSS. 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 case line to cosmetically “mask” the sectional joints.

**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.

All cases were leveled 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.

1. 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.

3. Set second case as close as possible to the first case carefully guiding its electrical, refrigeration and drain lines through the parent case, and level case to the first using the instructions in step one.

4. Apply masking tape 1/8" in from end of case on inside and outside rear mullion on both cases to be joined.

5. Apply liberal bead of case joint sealant (butyl) to (dotted area shown in figure) first case. Apply heavy amount to cover entire shaded area.

DO NOT USE PERMAGUM!

6. Slide second case up to first case snugly. Then level second case to the first case so glass front, bumper and top are flush.

CAUTION

Do not use the top bracket on the rear mullion to pull the cases together.

7. To compress silicone at joint, use two Jurgenson wood clamps. Make sure case is level from front to back and side to side on inside bulkheads at joint.

8. Attach sections together with the two 3/8" bolts provided, below the deck at the mullion towards the rear of the FMSS. Remove clamps.

9. Apply bead of silicone to top of bulkheads and slip on stainless steel bulkhead cap. Also apply silicone to seam between overhead light tubes.

10. VERY IMPORTANT! Apply liberal amounts of black silicone to fill all voids down to bulkhead.

11. Use finger to smooth silicone as thin as possible at masking tape on inside and outside of rear mullion (apply additional silicone if necessary). Remove tape applied on line #3.

Joint Trim

After cases have been leveled and joined, and refrigeration, electrical, and wasted piping work completed, install the splashguards. Fasten along the top edge, or center, with #10 X 3/3" sheet metal screws.

DO NOT SEAL JOINT TRIM TO FLOOR!
Bumper Installation Instructions

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

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

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 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.
Boston Series 2000

NOTE: Flexible top: Over cut vinyl 1/8" for every 4' section for the flexible top to ensure a proper fit.

NOTE: Rigid Top: Do not over cut.

1. Attach the base and end/corner cap to the desired surface by inserting #8 pan head screws through the pre-slotted holes in both the end cap and the base. Insert screws through the two holes of end cap and tighten.

2a. Flexible Top: Butt end of the vinyl top against end/corner cap. While applying pressure, bend back vinyl top so that vinyl legs are positioned within the base grooves. Roll vinyl top over full length of base, then tap with rubber mallet to ensure vinyl is securely locked into the base.

2b. Rigid Top: Snap the Rigid Top over the Rigid Base.

3. If necessary wipe clean with any household cleaning product.

Helpful Hints:
- For best results, before cutting, install a scrap piece of base into vinyl top to achieve a clean cut.
- Set the uncoiled flexible vinyl at room temperature 24 hours prior to installation.
- Lubricate the inside of the vinyl with soapy water or silicone before installing.
- Over cut the flexible vinyl and compression fit. Adding the additional materials will compensate for stretching which occurs during installation.

Boston 2000 Eco Series

1. Attach the base and end/corner cap to the desired surface by inserting #8 pan head screws through the pre-slotted holes in both the end cap and the base. Insert screws through the two holes of end cap and tighten.

2a. Flexible Top: Butt end of the vinyl top against end/corner cap. While applying pressure, bend back vinyl top so that vinyl legs are positioned within the base grooves. Roll vinyl top over full length of base, then tap with rubber mallet to ensure vinyl is securely locked into the base.

2b. Rigid Top: Snap the Rigid Top over the Rigid Base.

3. If necessary wipe clean with any household cleaning product.

Helpful Hints:
- For best results, before cutting, install a scrap piece of base into vinyl top to achieve a clean cut.
- Set the uncoiled flexible vinyl at room temperature 24 hours prior to installation.
- Lubricate the inside of the vinyl with soapy water or silicone before installing.
- Over cut the flexible vinyl and compression fit. Adding the additional materials will compensate for stretching which occurs during installation.
NOTE: Flexible top: Over cut vinyl 1/8" for every 4' section for the flexible top to ensure a proper fit.

NOTE: Rigid Top: Do not over cut.

Installation

1. Attach the base and end/corner cap to the desired surface by inserting #8 pan head screws through the pre-slotted holes in both the end cap and the base. Insert screws through the two holes of end cap and tighten.

2a. Flexible Top: Butt end of the vinyl top against end/corner cap. While applying pressure, bend back vinyl top so that vinyl legs are positioned within the base grooves. Roll vinyl top over full length of base, then tap with rubber mallet to ensure vinyl is securely locked into the base.

2b. Rigid Top: Snap the Rigid Top over the Rigid Base.

3. If necessary wipe clean with any household cleaning product.

Helpful Hints:
- For best results, before cutting, install a scrap piece of base into vinyl top to achieve a clean cut.
- Set the uncoiled flexible vinyl at room temperature 24 hours prior to installation.
- Lubricate the inside of the vinyl with soapy water or silicone before installing.
- Over cut the flexible vinyl and compression fit. Adding the additional materials will compensate for stretching which occurs during installation.
**Plumbing**

**Waste Outlet and P-TRAP**
The waste outlet is located at the left hand end of these fixtures allowing drip piping to be run under the fixture lengthwise.

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 refrigerator, and result in costly maintenance and product losses. Please follow the recommendations listed below when installing condensate drains to insure a 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.

**Refrigeration**

**Refrigerant Type**
The standard refrigerant will be R-404 unless otherwise specified on the customer order. Check the serial plate on the case for information.

Piping for more than one case on a condensing unit is run underground with either common suction and liquid lines from the machine room or individual suction and liquid lines joined together in the machine room.

**Refrigeration Lines**

<table>
<thead>
<tr>
<th>Liquid</th>
<th>Suction</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8” O.D.</td>
<td>5/8” O.D.</td>
</tr>
</tbody>
</table>

**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 1¼”. 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.

**For refrigerators with KOOLGAS defrost, suction, and liquid lines should not contact each other and should be insulated for a minimum of 30’ from the refrigerator. Additional insulation for the balance of liquid and suction lines is recommended and required whenever condensation and dripping would be objectionable.**

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 such as Armstrong’s Armalflex.
   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.

**Control Settings-Remote**
See FMSS technical data sheet for the appropriate settings for your merchandiser. Maintain these parameters to achieve near constant product temperatures. Product temperature should be measured first thing in the morning, after having been refrigerated overnight. Defrost times should be as directed in the FMSS technical data sheet. The number of defrosts per day should never change. The duration of the defrost cycle may be adjusted to meet conditions present at your location.

**Control Settings-Self Contained**
On Self Contained cases all functions, defrost, fans, temperature are controlled by Pagon ERC-2 controller. See case specs for proper temperature and defrost settings.

**Access to TX Valves and Drain Lines**

**Mechanical** - Remove product from end of case. Remove product racks. Remove refrigeration and drain access panels (labeled). TX valve (mechanical only) and drain are located under each access panel at end of the case.

**Electronic** - The Electronic Expansion valve master and slave cylinder(s) are located within the electrical access panel(s).

**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). Case controllers will be located in the electrical raceway or under the case.
Thermostatic Expansion Valve Location
This device is located on the same side as the refrigeration stub. A balanced port expansion valve model is furnished as standard equipment.

Expansion Valve 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. 2 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
Thermostats are located within the electrical raceway. The raceway location is dependent on the style of the front panel and whether the case is going to be pushed up against a wall.

LED Driver Location
Driver and T-STAT are located in the front left hand area of the case, viewed from customer angle.

In all cases, the thermostat is located on the same side of the case. If you are looking at the case from the front, it is the right-hand side. If you are looking at the case from the back, it is the left-hand side.

Refrigeration Data
Note: This data is based on store temperature and humidity that does not exceed 75°F and 55% R.H.

Discharge Air (F) 32
Evaporator (F) 18

Note: Not recommended to control temp by regulating coil temp allow T-STAT to cycle and control temp.

Btu/hr/ft*
Parallel 520
Conventional 598

*For all refrigeration equipment other than Hussmann use conventional Btu values.

Defrost Data
Frequency Hrs 8
OFFTIME
Temp Term °F 54
Failsafe Minutes 45

ELECTRIC or GAS Not Recommended

Physical Data
Merchandiser Drip Pipe (in.) 1½*
Merchandiser Liquid Line (in.) 3/8*
Merchandiser Suction Line (in.) 5/8*
Estimated Charge (lb)**
4ft 1.2
5ft 1.5
6ft 1.8

*Dependent on case length and refrigerant type.

**This is an average for all refrigerants types. Actual refrigerant charge may vary by approximately half a pound.

Glycol Requirements

<table>
<thead>
<tr>
<th>Length</th>
<th>GPM</th>
<th>PSI</th>
</tr>
</thead>
<tbody>
<tr>
<td>3'</td>
<td>0.5</td>
<td>0.6</td>
</tr>
<tr>
<td>4'</td>
<td>0.7</td>
<td>1.1</td>
</tr>
<tr>
<td>5'</td>
<td>0.9</td>
<td>1.8</td>
</tr>
<tr>
<td>6'</td>
<td>1.1</td>
<td>2.6</td>
</tr>
<tr>
<td>8'</td>
<td>1.5</td>
<td>4.8</td>
</tr>
<tr>
<td>10'</td>
<td>1.8</td>
<td>7.7</td>
</tr>
<tr>
<td>12'</td>
<td>??</td>
<td>??</td>
</tr>
</tbody>
</table>
# Electrical

## Wiring Color Code

<table>
<thead>
<tr>
<th>Color Description</th>
<th>Description</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground</td>
<td>Tierra Masa</td>
<td>Masse</td>
</tr>
<tr>
<td>Anti-Sweat</td>
<td>Anticondensación</td>
<td>Anti-Salpicaduras</td>
</tr>
<tr>
<td>Lights</td>
<td>Luces</td>
<td>Éclairage</td>
</tr>
<tr>
<td>Receptacles</td>
<td>Enchufes</td>
<td>Prise de courant</td>
</tr>
<tr>
<td>T-Stat/Solenoid 220VAC</td>
<td>Termostato/solenoide (220VAC)</td>
<td>Soufflet électrique (220VAC)</td>
</tr>
<tr>
<td>T-Stat/Solenoid 115VAC</td>
<td>Termostato/solenoide (115VAC)</td>
<td>Soufflet électrique (115VAC)</td>
</tr>
<tr>
<td>Fan Motors</td>
<td>Ventiladores</td>
<td>Ventilateur</td>
</tr>
<tr>
<td>Blue Condensing Unit</td>
<td>Unidad de condensación</td>
<td>Unité de condensation</td>
</tr>
</tbody>
</table>

**Use Copper Conductors Only**

**Utilisez les conducteurs de cuivre seulement**

**Utilice los conductores de cobre solamente**

430-01-0338 R101003

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**CASE MUST BE GROUNDED**

**NOTE:** Refer to label affixed to case to determine the actual configuration as checked in the “TYPE INSTALLED” boxes.

## Electrical Circuit Identification

Standard lighting for all models will be full length LED lamps located on the front of the parent case. The switch controlling the lights is located on the parent case.

---

**DANGER**

**BEFORE SERVICING**

**ALWAYS DISCONNECT ELECTRICAL POWER AT THE MAIN DISCONNECT WHEN SERVICING OR REPLACING ANY ELECTRICAL COMPONENT.**

This includes (but not limited to) Fans, Heaters, Thermostats, and Lights.

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## 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.

## LED Driver Location

Drivers are located within the access panel that runs the length of the rear of the case.

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## User Information

### Stocking

Improper temperature and lighting will cause serious product loss. Discoloration, 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 flow must be unobstructed at all times to provide proper refrigeration.

6. There are vents located at the base of the front of the glass, just above the front rail. These vents supply a continuous, gentle flow of air across the front glass which inhibits condensation. **Do not place any signs or other restrictive objects on the front of the refrigerator that will block these vents.**

7. Keep the service doors closed (when applicable). Refrigeration performance will be seriously affected if left open for a prolonged period of time.

8. 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 LED lights will shorten the shelf life of the product.

**Important Steps**

1. Do not set temperature too cold, as this causes product dehydration. **Product Temperature:** 33°-35°F!
   

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.

**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 minimum maintenance costs, the refrigerator should be thoroughly cleaned frequently. **SHUT OFF FAN DURING CLEANING PROCESS.** It can be unplugged within the case, or shut off case at the source. The interior bottom may be cleaned with any domestic soap or detergent based cleaners. Sanitizing solutions will not harm the interior bottom, however, these solutions should always be used according to the manufacturer’s directions. It is essential to establish and regulate cleaning procedures. This will minimize bacteria causing discoloration which leads to degraded product appearance and significantly shortening product shelf life.

**CLEANING PRECAUTIONS**

- 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 EVAPORATOR PAN
- NEVER USE A CLEANING OR SANITIZING SOLUTION THAT HAS AN OIL BASE (these will dissolve the butyl sealants) or an AMMONIA 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 CHLORANITIZED CLEANER ON ANY SURFACE
  - DO NOT USE ABRASIVES OR STEEL WOOL SCOURING PADS (these will mar the finish)

Soap and hot water are not enough to kill this bacteria. A sanitizing solution must be included with each cleaning process to eliminate this bacteria.

1. Scrub thoroughly, cleaning all surfaces, with soap and hot water.
2. Rinse with hot water, but do not flood.
3. Apply the sanitizing solution according to Hussmann’s directions.
4. Rinse thoroughly.
5. Dry completely before resuming operation.

**Cleaning Glass and Mirrors**

Only use a soft cloth and water 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.

**Plexiglass and Acrylic Care**

Improper cleaning not only accelerates the cleaning cycle but also degrades the quality of this surface. Normal daily buffing motions can generate 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 with 210® Plastic Cleaner and Polish available by calling Sumner Labs at 1-800-542-8656. Hard, rough cloths or paper towels will scratch the acrylic and should not be used.

**Antistatic Coatings**

The 210® has proven to be very effective in not only cleaning and polishing the Plexiglass surface, but also providing anti-static and anti-fog capabilities. This product also seals pores and provides a protective coating.
Evaporator Fans
The evaporator fans are located at the center front of these merchandisers directly beneath the display pans.

Copper Coils
The copper coils used in Hussmann merchandisers may be repaired in the field. Materials are available from local refrigeration wholesalers.

Hussmann recommends using #15 Sil-Fos for repairs.

Tips and Troubleshooting
Before calling for service, check the following:
1. Check electrical power supply to the equipment for connection.
2. Check fixture loading. Overstocking case will affect its proper operation.
3. If frost is collecting on fixture and/or product, check that Humidity Control is working properly, and that no outside doors or windows are open - allowing moisture to enter store.

FOR PROMPT SERVICE
When contacting the factory, be sure to have the Case Model and Serial Number handy. This information is on a plate located on the case itself.

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

1. Mechanical Abrasion
   Mechanical Abrasion means those things that will scratch the steel's surface. Steel Pads, wire Brushes, 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. Stainless steel pads can also be used but the scrubbing motion must be in the same direction of the manufacturer's polishing marks.

2. Clean With the Polish Lines
   Some stainless steels 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.

3. Use Alkaline, Alkaline Chlorinated 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. Salts in a properly maintained water softener are your friends. If you are not sure of the proper water treatment, call a treatment specialist.

5. Keep your Food Equipment Clean
Use alkaline, alkaline chlorinated 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**

8. **Regularly Restore/Passivate Stainless Steel**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Size</th>
<th>Diagram</th>
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</thead>
<tbody>
<tr>
<td>FMSS</td>
<td>FMSS-3-R</td>
<td>3'</td>
<td>3011629</td>
</tr>
<tr>
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<tr>
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<td>7'</td>
<td>3012997</td>
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<td>FMSS-7.5-R</td>
<td>7'6&quot;</td>
<td>3012998</td>
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<td>FMSS-12-R</td>
<td>12'</td>
<td>3011634</td>
</tr>
</tbody>
</table>

**Wiring Diagrams**
NOTES: CASE MUST BE GROUNDED
WHEN PASSING WIRES THROUGH METAL HOLES A GROMMET MUST BE USED

CIRCUIT #1

LOADING

- 120V
- 0.23A
- 120VAC - 60 Hz.

LIGHT CIRCUIT 6.6W 0.06A
- BLACK #14
- WHITE #14
- 3' LED LIGHT

LIGHT SWITCH 125-01-0307

FANS 0522207
- BUNDLE ORANGE
- BUNDLE BROWN
- 120 VAC - 60 Hz
- MCA = 0.15A
- 15A

MCA = 0.19A
MOP = 15A

OPTIONAL TEMPERATURE CONTROLLER

T-STAT

SUCTION SOLENOID VALVE (OPTIONAL TEMPERATURE CONTROL)

MCA = 0.18A
MOP = 15A

- 115 VAC - 50/60 Hz.

3' L.E.D. LIGHT RED + BLUE -

LIGHT SWITCH 125-01-0307

LIGHTS

BUNDLE C OLO
BLACK / WHITE T-STAT

REV ECN DATE REVISION DESCRIPTION REV BY CHKD BY APPL BY
A ECN-CAP-0003086 2016/07/20 RELEASED TO PRODUCTION CB CB C B

REVISION HISTORY

ECN-CAP-0003086 2016/07/20

3011629
CIRCUIT #1
LOADING

| 20V | 120V | 3pin |

LIGHT CIRCUIT 8020 0.03A

LIGHTS

LIGHT SWITCH 125-01-2367

BUNDLE ORANGE

BUNDLE BROWN

L1 N L1 N

~120 VAC - 60 Hz.

MCA = 0.10A MOP = 15A

MCA = 0.38A MOP = 15A

BLK #14

WHITE #14

4' L.E.D. LIGHT

RED +

BLUE -

LIGHT SWITCH 125-01-0307

T-STAT

SUCTION SOLENOID VALVE (OPTIONAL TEMPERATURE CONTROL)

MCA = 0.18A MOP = 15A

NOTES:
CASE MUST BE GROUNDED
WHEN PASSING WIRES THROUGH METAL HOLES A GROMMET MUST BE USED

DIAGRAM - FMSS-4-R

REV ECN DATE REVISION DESCRIPTION REV BY CHKD BY APPR BY
A ECN-CAP-0003086 2016/07/20 RELEASED TO PRODUCTION CB CB CB CB

REV HISTORY

NOTES:
CASE MUST BE GROUNDED
WHEN PASSING WIRES THROUGH METAL HOLES A GROMMET MUST BE USED
16

CIRCUIT #1
LOADING

<table>
<thead>
<tr>
<th>120V</th>
<th>0.40</th>
</tr>
</thead>
</table>

120 VAC - 60 Hz.

LIGHTS

LED DRIVER

BUNDLE ORANGE

BUNDLE BROWN

~120 VAC - 60 Hz.

2 FANS (2) 0522287

MCA= 0.15A
MOP= 15A

MCA= 0.38A
MOP= 15A

BLK #14
WHITE #14

5' L.E.D. LIGHT

RED +
BLUE -

LIGHT SWITCH 11.1W 0.10A

BLACK #14
WHITE #14

5' L.E.D. LIGHT

RED +
BLUE -

LIGHT SWITCH 125-01-0307

OPTIONAL TEMPERATURE CONTROLLER

SUCTION COILED VALVE

BUNDLE COLOR BLACK / WHITE

LI N - 120 VAC - 50/60 Hz.

MCA= 0.18A
MOP= 15A

DIAGRAM-FMSS-5-R

NOTE:
CASE MUST BE GROUNDED
WHEN PASSING WIRES THROUGH METAL HOLES A GROMMET MUST BE USED.
CIRCUIT #1
LOADING

L1
LOADING
0.42
120V
~120 VAC - 60 Hz.

LIGHTS
LED DRIVER
BUNDLE ORANGE
BUNDLE BROWN
~120 VAC - 60 Hz.

FANS (2)
0522287
.15A 4.4W @ 120VAC
MCA= .38A MOP= 15A

BLK #14
WHITE #14
L1 N
LIGHT CIRCUIT 13.2W 0.12A

3' L.E.D. LIGHT
RED +
BLUE -
LIGHT SWITCH 125-01-0307
~ 115 VAC - 50/60 Hz.

SUCTION SOLENOID VALVE
(THEME TEMPERATURE CONTROL)
MCA= 0.18A MOP= 15A

MCA= 0.15A MOP= 15A

NOTES:
CASE MUST BE GROUNDED
WHEN PASSING WIRES THROUGH METAL HOLES A GROMMET MUST BE USED

Wiring Diagrams (Cont'd)
NOTES:
- CASE MUST BE GROUNDED WHEN PASSING WIRES THROUGH METAL HOLES.
- A GROMMET MUST BE USED.

SHEET 1 OF 1

CIRCUIT #1

LOADING
- 0.44 A @ 120V

~120 VAC - 60 Hz.

LIGHTS
- LED DRIVER BUNDLE ORANGE
- LED DRIVER BUNDLE BROWN

~120 VAC - 60 Hz.

FANS (2) 0522287 .15A 4.4W @ 120VAC

MCA= 0.18A MOP= 15A

BLK #14 WHITE #14

L1 N L1 N

Light Circuit 15.4W 0.14A

3' L.E.D. LIGHT RED + BLUE -

LIGHT SWITCH 125-01-0307

~ 115 VAC - 50/60 Hz.

BUNDLE COLOR BLACK / WHITE

T-STAT SUCTION SOLENOID VALVE

(OPTIONAL TEMPERATURE CONTROL)

MCA= 0.18A MOP= 15A

4' L.E.D. LIGHT
CIRCUIT #1
LOADING

<table>
<thead>
<tr>
<th>LOAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>20V</td>
</tr>
<tr>
<td>120V</td>
</tr>
</tbody>
</table>

LIGHT CIRCUIT IS 4W @ 4-4mA

LIGHTS

L1 N

MATERIAL - N/A
THIRD ANGLE PROJECTION
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.
DRAWN BY - CRAIG BOOREY
APPROVED BY - CRAIG BOOREY
TOLERANCES ARE:

DECIMALS .XX
.001, .XXX
.010
ANGLES

DATE DRAWN - 8-9-16

NOTES:
CASE MUST BE GROUNDED
WHEN PASSING WIRES THROUGH METAL HOLES A GROMMET MUST BE USED

REV. ECN DATE REVISION DESCRIPTION REV BY CHK'D BY APPR BY
A ECN-CAP-0003086 2016/08/08 RELEASED TO PRODUCTION CB CB C B

DIAGRAM-FMSS-7.5-R

CIRCUIT #1
L1 LOADING
0.44 120V

~120 VAC - 60 Hz.

LIGHTS

LED DRIVER

BUNDLE ORANGE
BUNDLE BROWN

~120 VAC - 60 Hz.

M FANS (2) 0522287 .15A 4.4W @ 120VAC

MCA = .18A MOP = 15A
MCA = .38A MOP = 15A

BLK #14
WHITE #14

3' L.E.D. LIGHT
RED +
BLUE -

LIGHT SWITCH 125-01-0307

BUNDLE COLOR BLACK / WHITE

T-STAT
SUCTION SOLENOID VALVE

OPTIONAL TEMPERATURE CONTROL

~ 115 VAC - 50/60 Hz.

L1 N

BUNDLE COLOR BLACK / WHITE

MCA = .08A
MOP = 15A

4' L.E.D. LIGHT
NOTES:
CASE MUST BE GROUNDED WHEN PASSING WIRES THROUGH METAL HOLES A GROMMET MUST BE USED.
Wiring Diagrams (Cont'd)

**CIRCUIT #1**

<table>
<thead>
<tr>
<th>LOAD</th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>20V</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100V</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:**

- CASE MUST BE GROUNDED.
- WHEN PASSING WIRES THROUGH METAL HOLES A GROMMET MUST BE USED.

**LIGHT CIRCUIT 220V/230V**

- **LIGHTS**
  - MCA = 0.26A
  - MOP = 15A

**BLK #14**

- **WHITE #14**
- **L1 N L1 N**

**5' L.E.D. LIGHT**

- **RED +**
- **BLUE -**

**LIGHT SWITCH**

- T-STAT
- SOLENOID VALVE
- **SUCTION**

**Optional Temperature Control**

- **MCA = 0.18A**
- **MOP = 15A**

**T-TSTAT**

- **BUNDLE COLOR**
- **BLACK / WHITE**

**SUCTION TUBE**

- **BUNDLE**
- **BROWN**

**BOARD**

- **DIAGRAM-FMSS-10-R**
- **REV ECN DATE**
- **REVISION DESCRIPTION**
- **REV BY CHKD BY APPR BY**

**REV ECN DATE**

- **A ECN-CAP-0003086 2016/07/21 RELEASED TO PRODUCTION CB CB C B**

**REVISION HISTORY**

- **NOTES:**
  - CASE MUST BE GROUNDED.
  - WHEN PASSING WIRES THROUGH METAL HOLES A GROMMET MUST BE USED.

**Wiring Diagrams (Cont'd)**
NOTES:
CASE MUST BE GROUNDED.
WHEN PASSING WIRES THROUGH METAL HOLES A GROMMET MUST BE USED.

CIRCUIT #1
LOADING

20V
120V

LIGHT CIRCUIT 24 VDC

LIGHT CIRCUIT 24 VDC

LIGHT SWITCH
125-01-0307

FUSES
SOLID FUSE
3A 250V @ 240VAC

OPTIONAL TEMPERATURE CONTROL

T-STAT

Suction

Valve

BUNDLE COLOR

BLACK / WHITE

BUNDLE

ORANGE

BROWN

NOTE:
DECIMALS XX.X, XXX.X
ANGLES ± 2 °
**NOTES:**
- CASE MUST BE GROUNDED
- WHEN PASSING WIRES THROUGH METAL HOLES A GROMMET MUST BE USED

---

**CIRCUIT #1**

**LOADING**

- 20V
- 12V

**LIGHT CIRCUIT 24V 0.22A**

- LIGHTS
- LIGHT SWITCH 125-01-0307
- LIGHT BUNDLE ORANGE
- LIGHT BUNDLE BROWN
- ~120 VAC - 60 Hz.
- MCA = 0.15A
- MOP = 15A

**LIGHT CIRCUIT 24V 0.22A**

- LIGHT SWITCH 125-01-0307
- LIGHT BUNDLE ORANGE
- LIGHT BUNDLE BROWN
- ~120 VAC - 60 Hz.
- MCA = 0.15A
- MOP = 15A

---

**CIRCUIT #2**

**LOADING**

- 20V
- 12V

**LIGHTS**

- LED DRIVER BUNDLE ORANGE
- LED DRIVER BUNDLE BROWN
- ~120 VAC - 60 Hz.
- MCA = 0.15A
- MOP = 15A

**FANS**

- (3) 0522287 .15A 4.4W @ 120VAC
- MCA = 0.28A
- MOP = 15A

**BLK #14**

- WHITE #14
- L1 N L1 N
- 5' L.E.D. LIGHT
- RED +
- BLUE -

**WHITE #14**

- RED +
- BLUE -

**5' L.E.D. LIGHT**

- RED +
- BLUE -

---

**CIRCUIT #3**

**LOADING**

- 20V
- 12V

**LIGHTS**

- LIGHT SWITCH 125-01-0307
- LIGHT BUNDLE ORANGE
- LIGHT BUNDLE BROWN
- ~120 VAC - 60 Hz.
- MCA = 0.15A
- MOP = 15A

**FANS**

- (3) 0522287 .15A 4.4W @ 120VAC
- MCA = 0.28A
- MOP = 15A

**BLK #14**

- WHITE #14
- L1 N L1 N
- 6' L.E.D. LIGHT
- RED +
- BLUE -

**WHITE #14**

- RED +
- BLUE -

**6' L.E.D. LIGHT**

- RED +
- BLUE -

---

**THERMISTORS**

- 127-01-0307
- MCA = 0.15A
- MOP = 15A

**THERMISTORS**

- 127-01-0307
- MCA = 0.15A
- MOP = 15A

---

**DIAGRAM-FMSS-11.5-R**

**HUSSMANN**

**MATERIAL - MA**

- CIRCUIT #1
- 1/2-16

---

**NOTES:**
- CASE MUST BE GROUNDED
- WHEN PASSING WIRES THROUGH METAL HOLES A GROMMET MUST BE USED
CASE MUST BE GROUNDED
WHEN PASSING WIRES THROUGH METAL HOLES A GROMMET MUST BE USED.
### Specification Sheet

**SELF-SERVICE CASE REMOTE**

**HUSMANN - FMSS (CHIZO)**

**DOE 2017 Energy Efficiency Compliance**

**FMSS**

**Notes:**
Contact your sales representative for information on possible availability of additional case lengths.

### REFRIGERATION DATA:

<table>
<thead>
<tr>
<th>CASE LENGTHS</th>
<th>CASE USAGE</th>
<th>CAPACITY *** (BTU/H)</th>
<th>TEMPERATURE (°F)</th>
<th>VELOCITY (FT/MIN)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>RATING CONDITION</td>
<td>EVAPORATOR</td>
<td>DISCHARGE AIR ** (°F)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NSF 7</td>
<td>AHRI</td>
<td>NSF 7</td>
</tr>
<tr>
<td>3, 4, 6, 7, 8, 9, 10, 11, 12, 13</td>
<td>SS DELI</td>
<td>330</td>
<td>280</td>
<td>20</td>
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</tbody>
</table>

**FRONT DISCHARGE AIR MEASURED INSIDE AIR CURTAIN HONEYCOMB**

**REFRIGERATION NOTES:**
1. SS DELI INCLUDE 1 ROW CANOPY LED LIGHTS AND NO SHELF LIGHTS.
2. AHRI 1200 RATING POINT FOR ENERGY CONSUMPTION COMPARISON ONLY.
3. USE DEW POINT FOR HIGH GLIDE REFRIGERANTS. CARE SHOULD BE TAKEN TO USE THE DEW POINT IN PITS TABLES.
4. MEASURING AND ADJUSTING SUPERHEAT, ADJUST EVAPORATOR PRESSURE AS NEEDED TO MAINTAIN THE
   DISCHARGE AIR TEMPERATURE SHOWN.
5. RATING CONDITION IS NSF TYPE 1, 70°F/55% RH

### REFRIGERATION DATA CONTINUED:

<table>
<thead>
<tr>
<th>ELECTRIC THERMOSTAT/ AIR SETTINGS</th>
<th>USAGE</th>
<th>CUT IN (°F)</th>
<th>CUT OUT (°F)</th>
<th>DEFROST TYPE</th>
<th>TIME (MIN)</th>
<th>DEFROST FREQUENCY (#/DAY)</th>
<th>TERM TEMP (°F)</th>
<th>COL. ONLY</th>
<th>DRIP TIME</th>
<th>DEFROST WATER (LBS/DAY/FT)</th>
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### ELECTRICAL DATA:

#### STANDARD FANS, HEATERS, LED LIGHTS (115 VOLT)

<table>
<thead>
<tr>
<th>CASE LENGTH</th>
<th>EVAPORATOR FANS (3° AXIAL FAN)</th>
<th>CANOPY LIGHTS LED</th>
<th>OPTIONAL LED SHELF LIGHTS</th>
<th>MAX. LED LOAD (IN ALL OPTIONS)</th>
<th>ANTI-SWEAT HEATERS (ON FAN CIRCUIT)</th>
<th>CONVENIENCE OUTLETS (OPTIONAL)</th>
<th># OF OUTLETS</th>
<th>VOLTS</th>
<th>AMPS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># OF FANS</td>
<td>AMPS</td>
<td>WATTS</td>
<td>AMPS</td>
<td>WATTS</td>
<td>AMPS</td>
<td>WATTS</td>
<td>AMPS</td>
<td>WATTS</td>
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<td>3</td>
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<td>0.5</td>
<td>14</td>
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<td>31</td>
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<td>31</td>
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</table>

### OPTIONAL HIGH OUTPUT LED LIGHTS (115 VOLT)

<table>
<thead>
<tr>
<th>CASE LENGTH</th>
<th>CANOPY LIGHTS H.O. LED</th>
<th>OPTIONAL SHELF</th>
<th>MAX. H.O. LED LOAD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AMPS</td>
<td>WATTS</td>
<td>AMPS</td>
</tr>
<tr>
<td>3</td>
<td>0.1</td>
<td>12</td>
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<td>4</td>
<td>0.1</td>
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<td>N/A</td>
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<tr>
<td>8</td>
<td>0.3</td>
<td>30</td>
<td>N/A</td>
</tr>
<tr>
<td>10</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>12</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### NOTES:

1. SS DELI INCLUDE 1 ROW CANOPY LED LIGHTS AND NO SHELF LIGHTS.
2. AHRI 1200 RATING POINT FOR ENERGY CONSUMPTION COMPARISON ONLY.
3. USE DEW POINT FOR HIGH GLIDE REFRIGERANTS. CARE SHOULD BE TAKEN TO USE THE DEW POINT IN PITS TABLES.
4. MEASURING AND ADJUSTING SUPERHEAT, ADJUST EVAPORATOR PRESSURE AS NEEDED TO MAINTAIN THE
   DISCHARGE AIR TEMPERATURE SHOWN.
5. RATING CONDITION IS NSF TYPE 1, 70°F/55% RH
1.1 The following recommendations are made for the purpose of arriving at easily taken and understood data which, coupled with other observations, may be used to determine whether a display refrigerator is working as intended:

a) INSTRUMENT - A stainless steel stem-type thermometer is recommended and it should have a dial a minimum of 1 inch internal diameter. A test thermometer scaled only in Celsius or dually scaled in Celsius and Fahrenheit shall be accurate to 1°C (1.8°F). Temperature measuring devices that are scaled only in Fahrenheit shall be accurate to 2°F. The thermometer should be checked for proper calibration. (It should read 32°F when the stem is immersed in an ice water bath).

b) LOCATION - The probe or sensing element of the thermometer should be located in the airstream where the air first enters the display or storage area, and not more than 1 inch away from the surface and in the center of the discharge opening.

c) READING - It should first be determined that the refrigerator is refrigerating and has operated at least one hour since the end of the last defrost period. The thermometer reading should be made only after it has been allowed to stabilize, i.e., maintain a constant reading.

d) OTHER OBSERVATIONS - Other observations should be made which may indicate operating problems, such as unsatisfactory product, feel/appearance.

e) CONCLUSIONS - In the absence of any apparent undesirable conditions, the refrigerator should be judged to be operating properly. If it is determined that such condition is undesirable, i.e., the product is above proper temperature, checks should be made for the following:

1. Has the refrigerator been loaded with warm product?
2. Is the product loaded beyond the “Safe Load Line” markers?
3. Are the return air ducts blocked?
4. Are the entering air ducts blocked?
5. Is a dumped display causing turbulent airflow and mixing with room air?
6. Are spotlights or other high intensity lighting directed onto the product?

7. Are there unusual draft conditions (from heating/air-conditioning ducts, open doors, etc.)?
8. Is there exposure to direct sunlight?
9. Are display signs blocking or diverting airflow?
10. Are the coils of the refrigerator iced up?
11. Is the store ambient over 75°F, 55% RH as set forth in ASHRAE Standard 72 and ASHRAE Standard 117?
12. Are the shelf positions, number, and size other than recommended by Hussmann?
13. Is there an improper application or control system?
14. Is the evaporator fan motor/blade inoperative?
15. Is the defrost time excessive?
16. Is the defrost termination, thermostat (if used) set too high?
17. Are the refrigerator controls incorrectly adjusted?
18. Is the air entering the condenser above design conditions? Are the condenser fins clear of dirt, dust, etc.?
19. Is there a shortage of refrigerant?
20. Has the equipment been modified to use replacements for CFC-12, CFC-502 or other refrigerant? If so, have the modifications been made in accordance with the recommendations of the equipment manufacturer? Is the refrigerator charged with the proper refrigerant and lubricant? Does the system use the recommended compressor?

Appendix D. - Recommendations to User

1.0 Hussmann Corporation provides instructions and recommendations for proper periodic cleaning. The user will be responsible for such cleaning, including the cleaning of low temperature equipment within the compartment and the cooling coil area(s). Cleaning practices, particularly with respect to proper refrigerator unloading and warm-up, must be in accordance with applicable recommendations.
1.1 Cleaning of non frozen food equipment should include a weekly cleaning of the food compartment as a minimum to prevent bacteria growth from accumulating. Actual use and products may dictate more frequent cleaning. Circumstances of use and equipment design must also dictate the frequency of cleaning the display areas. Weekly washing down of the storage compartment is also recommended, especially for equipment subject to drippage of milk or other liquids, or the collection of vegetable, meat, crumbs, etc. or other debris or litter. Daily cleaning of the external areas surrounding the storage or display compartments with detergent and water will keep the equipment presentable and prevent grime buildup.

1.2 Load levels as defined by the manufacturer must be observed.

1.3 The best preservation is achieved by following these rules:
   a) Buy quality products.
   b) Receive perishables from transit equipment at the ideal temperature for the particular product.
   c) Expedite perishables to the store’s storage equipment to avoid unnecessary warm-up and prolonged temperature recovery. Food store refrigerators are not food chillers nor can they reclaim quality lost through previous mishandling.
   d) Care must be taken when cross merchandising products to ensure that potentially hazardous vegetable products are not placed in non refrigerated areas.
   e) Display and storage equipment doors should be kept closed during periods of inactivity.
   f) Minimize the transfer time of perishables from storage to display.
   g) Keep meat under refrigeration in meat cutting and processing area except for the few moments it is being handled in processing. When a cut or tray of meat is not to be worked on immediately, the procedure should call for returning it to refrigeration.
   h) Keep tools clean and sanitized. Since mechanical equipment is used for fresh meat processing, all such equipment should be cleaned at least daily and each time a different kind of meat product comes in contact with the tool or equipment.
   i) Make sure that all refrigeration equipment is installed and adjusted in strict accordance with the manufacturer’s recommendations.
   j) See that all storage and refrigeration equipment is kept in proper working order by routine maintenance.

For further technical information, please log on to http://www.hussmann.com/products/FMSS.htm
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: |  |