

Installation & Service Manual



RCCG shown with Riser Option 2

RCCG

REFRIGERATED CHEESE ISLAND MERCHANDISERS Medium Temperature Self-Serve Display Cases

**This manual has been designed to be used in conjunction with the
General (UL/NSF) Installation & Service Manual.**

Save the Instructions in Both Manuals for Future Reference!!

This merchandiser conforms to the American National Standard Institute & NSF International Health and Sanitation standard ANSI/NSF 7 - 2003.

| | | | | | | | | | |
|-------------------|--|------------------|------|------------|-------|----------|---------|------|---|
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|-------------------|--|------------------|------|------------|-------|----------|---------|------|---|

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The following Medium Temperature Cheese Island Merchandiser models are covered in this manual:

| MODEL | DESCRIPTION |
|---------------------------------|---|
| RCCG | 8', 12' AND 16' CHEESE ISLAND MERCHANDISER WITH ONE NON-REFRIGERATED CENTER SHELF |
| RCCG (w/riser opt.1) | 8', 12' AND 16' CHEESE ISLAND MERCHANDISER WITH ONE NON-REFRIGERATED CENTER SHELF AND ONE REFRIGERATED WRAP-AROUND SHELF |
| RCCG (w/riser opt.2) | 8', 12' AND 16' CHEESE ISLAND MERCHANDISER WITH ONE NON-REFRIGERATED CENTER SHELF AND TWO REFRIGERATED WRAP-AROUND SHELVES |

SPECIFICATIONS

RCCG Refrigerated Cheese & Deli Island Merchandisers

Refrigeration Data:

| MODEL | CASE LENGTH | CASE USAGE | CAPACITY (BTUH / FT) | | EVAPORATOR (°F) | UNIT SIZING (°F) | DISCHARGE AIR | | AVG. REF. CHARGE (LBS/FT) |
|----------------------|-------------|------------|----------------------|--------------|-----------------|------------------|------------------|----------------|---------------------------|
| | | | PARALLEL | CONVENTIONAL | | | TEMPERATURE (°F) | VELOCITY (FPM) | |
| RCCG w/ STD. RISER | 8/12/16' | MED TEMP | 1,054* | 1,160* | +15** | +13 | +28 | 209*** | 7.0 |
| RCCG w/ RISER OPT. 1 | 8/12/16' | MED TEMP | 1,458* | 1,605* | +15** | +13 | +28 | 195*** | 7.6 |
| RCCG w/ RISER OPT. 2 | 8/12/16' | MED TEMP | 1,861* | 2,012* | +12** | +10 | +28 | 182*** | 8.1 |

* Capacity data listed for cases with T-8 lighting under each side of center top shelf and shelf lighting (where applicable). For sizing all refrigeration equipment other than TYLER, use conventional BTUH values.

** Evaporator temperature is based on the saturated pressure leaving the case.

*** Air velocity measured 1 hour after defrost at the top discharge air grid.

FOR SPECIFIC COMPRESSOR SIZING INFORMATION, REFER TO TYLER APPLICATIONS FOR RACK SYSTEM COMPRESSORS AND/OR THE COMPRESSOR MANUFACTURERS FOR SINGLE COMPRESSORS. FOR LINE SIZING INFORMATION, REFER TO THE MISCELLANEOUS SECTION "BUFF" IN THE TYLER SPECIFICATION GUIDE.

Electrical Data:

Fans & Heaters (120 Volt)

| MODEL | CASE LENGTH | FANS / CASE | TOTAL FOR STANDARD FANS | | TOTAL FOR ECM FANS | | TOTAL FOR ANTI-SWEATS | |
|-------|-------------|-------------|-------------------------|-------|--------------------|-------|-----------------------|-------|
| | | | AMPS | WATTS | AMPS | WATTS | AMPS | WATTS |
| RCCG | 8' | 6 | 2.04 | 181.2 | 1.32 | 66.0 | 0.50 | 60.6 |
| RCCG | 12' | 8 | 2.72 | 241.6 | 1.76 | 88.0 | 0.83 | 99.1 |
| RCCG | 16' | 16 | 5.44 | 483.2 | 3.20 | 176.0 | 1.15 | 137.8 |

T8 Lighting with Electronic Ballasts (120 volt)

| CASE LENGTH | TOP SHELF LIGHTS | | SHELF LIGHTS 1 DECK | | SHELF LIGHTS 2 DECKS | | MAXIMUM LIGHTING* | |
|-------------|------------------|-------|---------------------|-------|----------------------|-------|-------------------|-----------------|
| | AMPS | WATTS | AMPS | WATTS | AMPS | WATTS | AMPS (3 TIERS) | WATTS (3 TIERS) |
| 8' | 0.49 | 57.0 | 0.98 | 114.0 | 1.94 | 226.0 | 2.43 | 283.0 |
| 12' | 0.97 | 113.0 | 1.47 | 171.0 | 2.91 | 339.0 | 3.88 | 452.0 |
| 16' | 1.46 | 170.0 | 1.96 | 228.0 | 3.88 | 452.0 | 5.34 | 622.0 |

* For cases with one tier of center top shelf lights and two tiers of shelf lights.

Defrost Data:

| DEFROST TYPE | DEFROSTS PER DAY | DURATION TIME (MIN) | TERMINATION TEMP. (°F) | EPR SETTINGS * | | DEFROST WATER (LB / FT / DAY) RCCG |
|---|------------------|---------------------|------------------------|----------------|--------------|------------------------------------|
| | | | | R22 (PSIG) | R404A (PSIG) | |
| TIME OFF - (RCCG w/ STD or RISER OPT 1) | 6 | 22 | ---- | 37.7 | 49.5 | 6.0 |
| TIME OFF - (RCCG w/ RISER OPT 2) | 6 | 18 | ---- | 34.7 | 46.0 | 11.0 |

* Set EPR to give this pressure at the case.

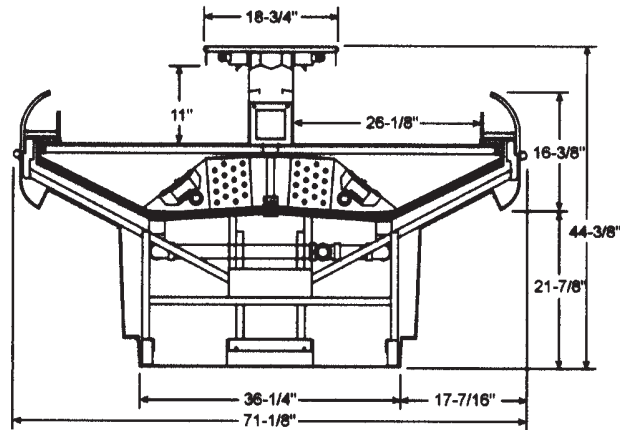
CASE CIRCUITS: This case requires a separate 120V circuit for fans, lights and anti-sweats. The RCCG with standard riser has an 18" top center shelf. The RCCG with riser option 1 has an 18" center top shelf and a single tier of 12" shelves. The RCCG with riser option 2 has an 18" center top shelf and two tiers of 12" shelves. All shelving has Lights.

UL SANITATION approved in accordance with ANSI/NSF - 7.

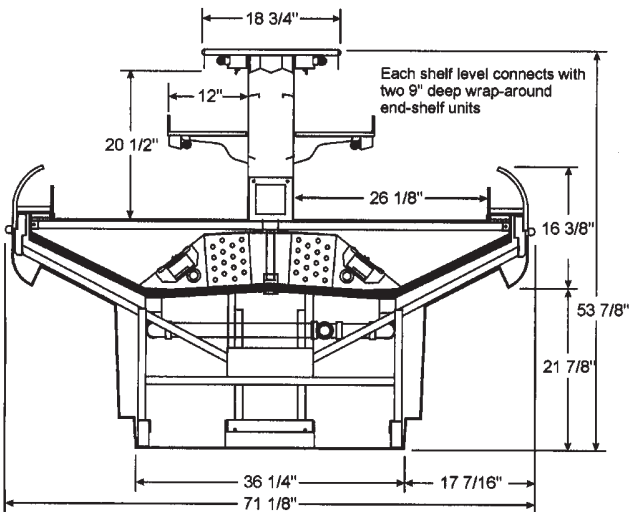
CASE BTUH REQUIREMENTS are calculated to produce approximately the indicated entering-air temperature with absolute maximum operating ambient limits of 75°F & 55RH.

The information contained herein is based on technical data and tests that we believe are reliable, and is intended for use by persons having technical skill at their own discretion and risk. Since conditions of use are outside of Tyler's control, we cannot assume any liability for results obtained or damages incurred through the applications of the data presented. SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

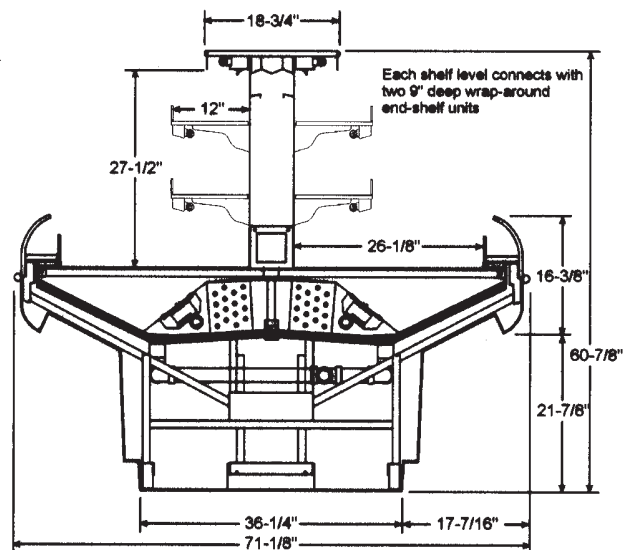
RCCG WITH STANDARD RISER CROSS SECTION



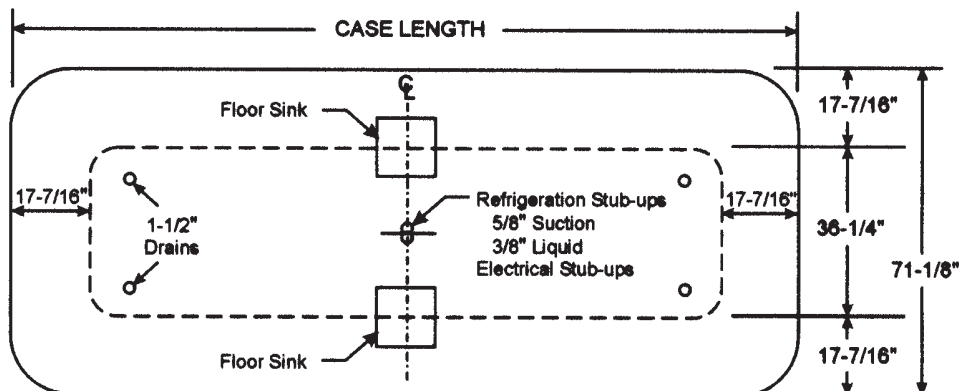
RCCG WITH RISER OPTION 1 CROSS SECTION



RCCG WITH RISER OPTION 2 CROSS SECTION



RCCG FLOOR PLAN



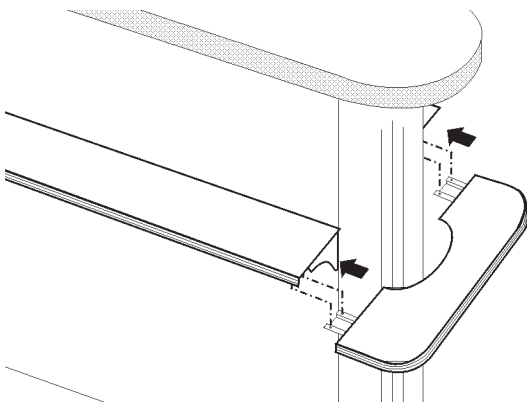
INSTALLATION PROCEDURES

Carpentry Procedures

The RCCG models do not have any open ends, therefore no pull-ups are required.

After all island cases have been positioned, install the bottom trays and the case screens.

End Shelf Installation (RCCG w/Riser Option 1 or 2)



End shelf assemblies may be shipped separately. If they are not already installed, remove end shelf assemblies from shipping packaging. Align end shelf assemblies with side shelves and attach two support brackets to the reinforcement areas under each side shelf. Secure the support brackets with screws. After the end shelf support brackets have been secured, the end shelves will be supported by the side shelves.

Electrical Procedures

Electrical Considerations

CAUTION

Make sure all electrical connections at components and terminal blocks are tight. This prevents burning of electrical terminals and/or premature component failure.

Case Fan Circuit

This circuit is to be supplied by an uninterrupted, protected 120V circuit. The case fan circuit is not cycled on any of these models.

Fluorescent Lamp Circuit

All RCCG cases are supplied with T-8 lights under both sides of the center riser top shelf. The RCCG with riser option 1 comes with one additional row of wrap-around T-8 shelf lighting. The RCCG with riser option 2 comes with two additional rows of wrap-around T-8 shelf lighting. All electronic ballasts are remotely located under the center riser top shelf. The lights are controlled by a light switch under the center riser top shelf.

Anti-Sweat Circuit

RCCG cases have one or two anti-sweat heaters running around the inside edge of the top shelf molding. These anti-sweat heaters are wired directly to the main power supply so they can operate at all times.

Defrost Information

See “General-UL/NSF I&S Manual” for operational descriptions for each type of defrost control.

Defrost Control Chart

| Defrost Type | Defrosts Per Day | Defrost | |
|---|------------------|----------------|-------------|
| | | Duration (Min) | Term. Temp. |
| RCCG w/ std riser or riser opt 1 | | | |
| Off Time | 6 | 22 | ----- |
| RCCG w/ riser opt 2 | | | |
| Off Time | 6 | 18 | ----- |

WIRING DIAGRAMS

ELECTRICIAN NOTE - OVERCURRENT PROTECTION

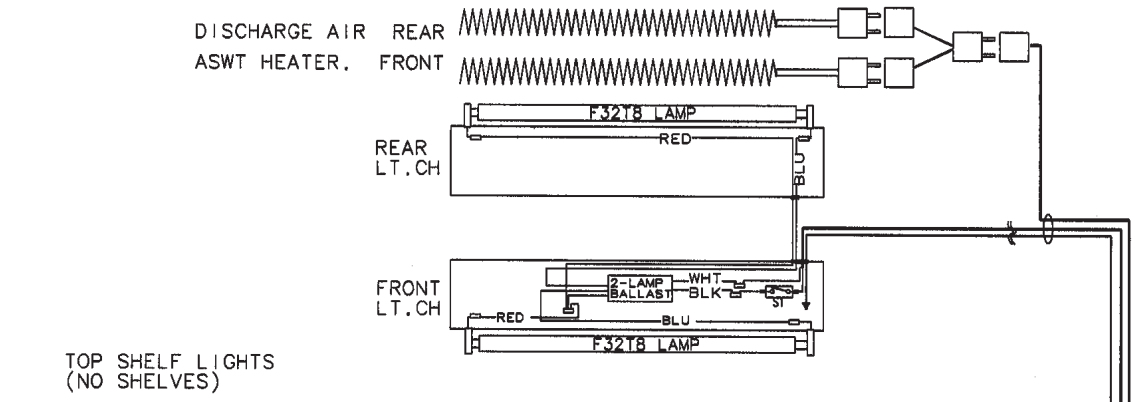
120V circuits should be protected by 15 or 20 Amp devices per the requirements noted on the cabinet nameplate or the National Electrical Code, Canadian Electrical Code - Part 1, Section 28. 208V defrost circuits employ No. 12 AWG field wire leads for field connections. On remote cases intended for end to end line-ups, bonding for ground may rely upon the pull-up bolts.

The following wiring diagrams on pages 7 thru 9 will cover the RCCG case electrical circuits, including optional configurations, fans, lights and anti-sweats.

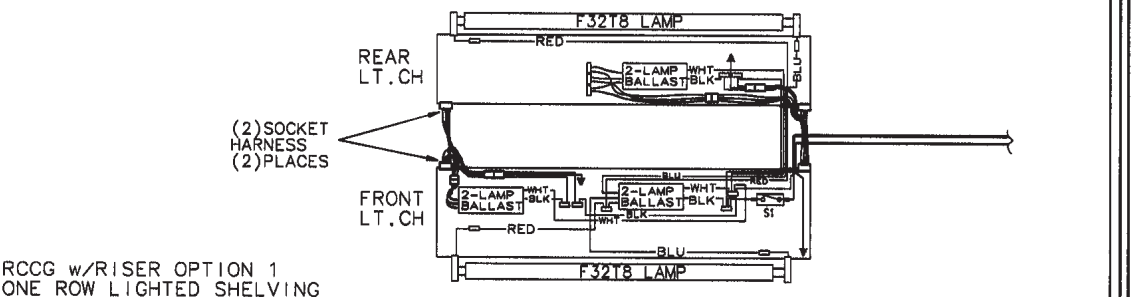
RCCG Domestic & Export (50 Hz) Case Circuits (8' Case)



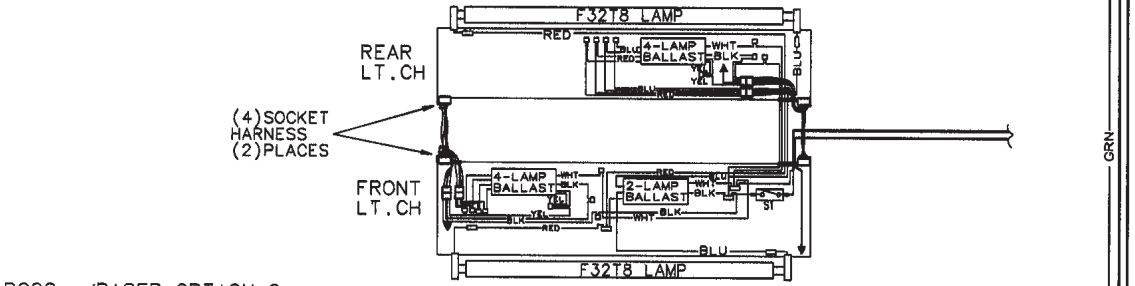
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2. ALL DIMENSIONS ARE IN INCHES UNLESS SPECIFIED OTHERWISE.
3. ANY TREATMENT OF FINISHED PART AFTER SHIPMENT IS NOT ALLOWED.
4. NO DIMENSIONAL REVISIONS ALLOWED.



TOP SHELF LIGHTS
(NO SHELVES)

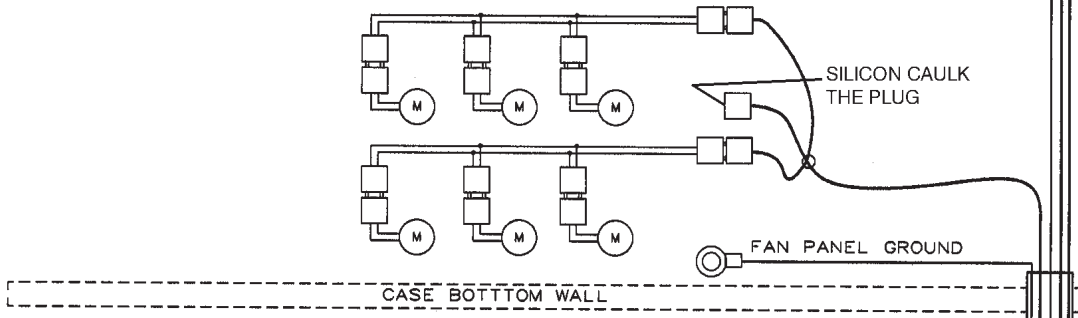


RCCG w/riser OPTION 1
ONE ROW LIGHTED SHELVING

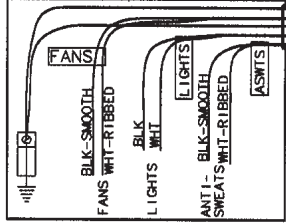


RCCG w/riser OPTION 2
TWO ROW LIGHTED SHELVING

FAN MOTORS : (6) PER 8' CASES



120VAC 60HZ SUPPLY OR 220VAC 50HZ INTERNATIONAL



| | | | | | | | |
|-----------------------|-------------|---------|-------|----|-----|------|----|
| REV | DESCRIPTION | RELEASE | DATE | BY | CHK | DATE | BY |
| 30MAR07 | LC | GE | 44905 | | | | |
| DIAGRAM WRG RCCG 6008 | | | | | | | |
| PART NO 9039746 | | | | | | | |

NOTE : ALL CASES MUST BE GROUNDED

CLEANING AND SANITATION

Component Removal and Installation Instructions for Cleaning

Shelves and Shelf Brackets (RCCG with Riser Option 1 or 2)

1. Remove product from shelves.
2. Unplug the light cords from the sockets in the center riser duct panels.
3. Remove both end shelf assemblies. While supporting end shelf assembly, remove screws from end shelf support brackets and side shelves. After screws are removed, carefully pull out end shelf assembly until support brackets clear the ends of the side shelves. Remove the end shelf assembly.
4. Push side shelves back and then lift up and out to remove them from the shelf brackets,
5. Remove side shelf brackets for slots in the center riser uprights.
6. After cleaning, replace in reverse order.

Screens

1. Remove product from screens.
2. Push screens up until bottom screen tabs clear the holes in the front duct.
3. Remove screens from holes in rear duct panels and from case.
4. After cleaning, replace in reverse order.

Bottom Trays

1. Remove product and screens from case. See this page.
2. Grasp and lift out each of the bottom trays from the case interior.
3. After cleaning, replace in reverse order.

Perimeter Air Ducts

Perimeter air ducts do not require removal for cleaning. They are hinged and can be flipped up for cleaning.

Center Riser and End Discharge Duct Panels

1. Remove product, screens and bottom trays, see this page.
2. Remove all mounting screws and center riser and end discharge duct panels from case.
3. After cleaning, replace in reverse order.

Curved Plexiglas Care

Cleaning

CAUTION

DO NOT use paper towels, soft clothes, sponges or chamois to clean plexiglas. These materials will scratch the acrylic surface.

Clean with lukewarm water and plenty of nonabrasive soap, or detergent. Use only bare hand to dislodge any caked-on dirt. Lightly dry with a clean damp chamois or clean soft cloth.

Waxing

Wax should be applied in a thin even coat, and brought to a high polish by rubbing lightly with a dry clean soft cloth. Excessive rubbing may cause scratching and/or buildup an electrostatic charge, which attracts dust and dirt to the surface. Electrostatic charge can be removed by blotting acrylic surface with a clean damp cloth.

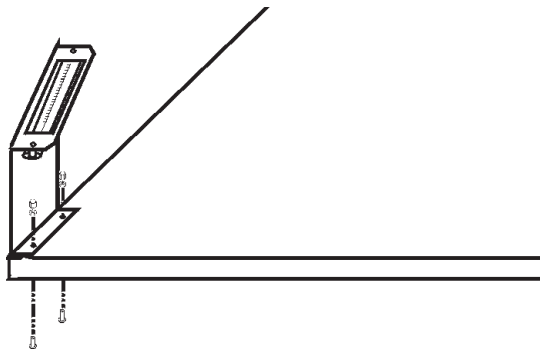
GENERAL INFORMATION

NSF Product Thermometer Installation

1. Unwrap the thermometer and bracket assembly shipped loose with the case.
2. Position bracket in front left corner of the left-most bottom tray on one of the two case sides. Making sure the bracket is flush with the left edge, use the bracket holes as a template for where to drill the holes.
3. Drill two .196" holes in the bottom tray.

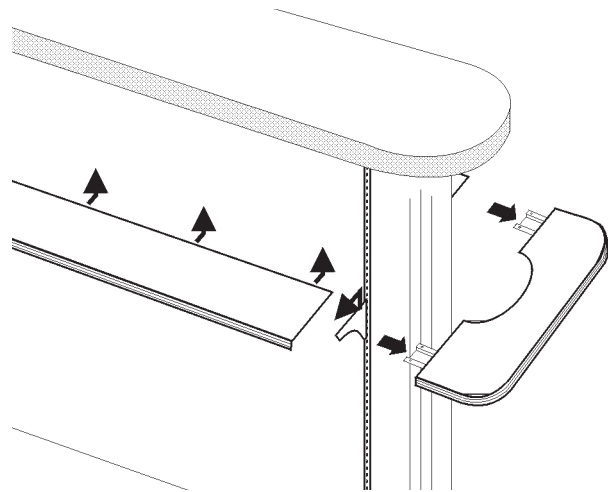
NOTE

For ease of installation, position the washers and capnuts on the top side of the bracket and bottom tray.



4. Mount the bracket to the bottom tray with two screws, washers and capnuts.

Shelf and Shelf Bracket Adjustment



1. Remove product from entire wrap-around shelf that needs to be repositioned.
2. Unplug all shelf light cords that the shelf light power.
3. Remove end shelf bracket support screws from bottom end of side shelves.
4. Pull out end shelf assemblies until the bracket supports clear the ends of the side shelves. Remove the end shelf assemblies.
5. Push side shelves back and then lift up and out to remove them from the shelf brackets.
6. Remove and reposition all the side shelf brackets in the slots in the center riser uprights.
7. Reassemble the wrap-around shelf in the new position in the reverse order.

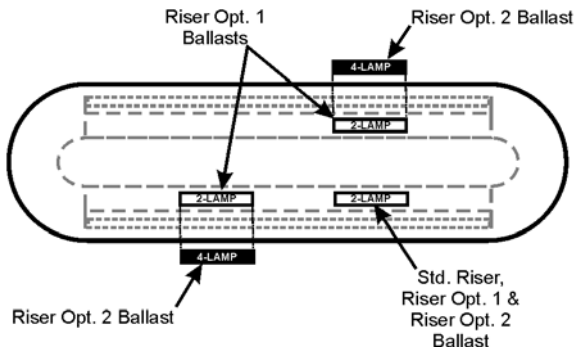
SERVICE INSTRUCTIONS

See “General-UL/NSF I&S Manual” for T-8 lamp and fan blade and motor replacement instructions.

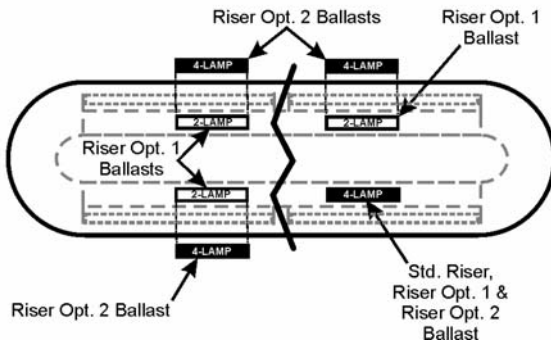
Ballast Replacement

All ballasts for the center riser top shelf lighting and the wrap-around shelf lighting in riser options 1 & 2 are located under the center riser top shelf behind the light fixtures. See the diagrams below for ballast locations:

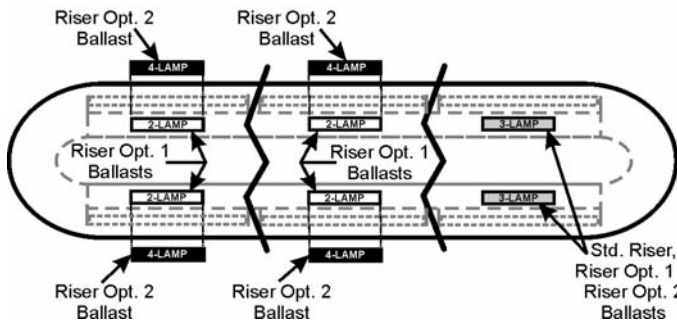
BALLAST LOCATIONS UNDER 8' CENTER RISER TOP SHELF



BALLAST LOCATIONS UNDER 12' CENTER RISER TOP SHELF



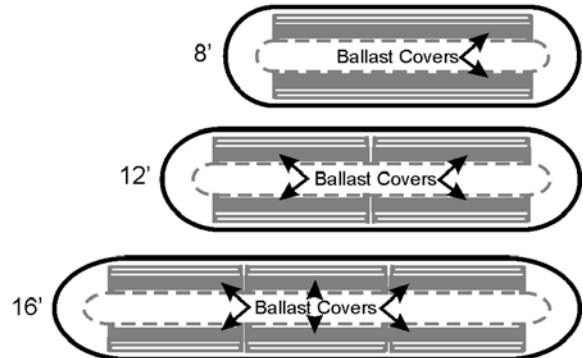
BALLAST LOCATIONS UNDER 16' CENTER RISER TOP SHELF



WARNING

Shut off or disconnect power supply to case before changing a ballast. 600V electrical power from wire ends could damage other components and/or cause personal injury or death.

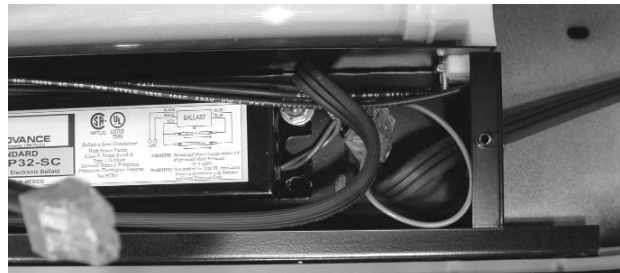
BALLAST COVERS UNDER CENTER RISER TOP SHELVES



1. Remove screws and ballast covers from behind the light fixtures under both sides of the center riser top shelf.

NOTE

Mark wires before removing to assure proper installation.



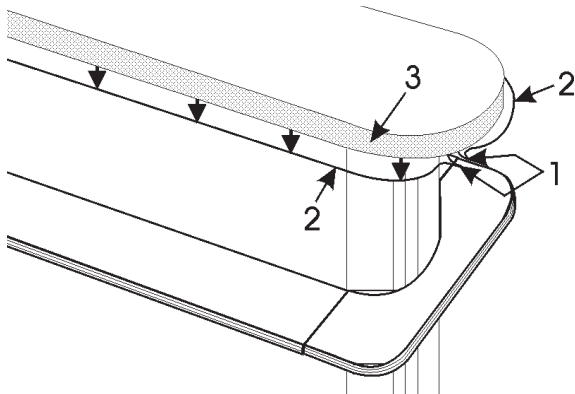
2. Disconnect wires from the faulty ballast. Make note where the wires came from so they can be reconnected the same way.
3. Remove mounting screws and the faulty ballast.
4. Install new ballast and secure with mounting screws.
5. Reconnect wires to new ballast as they were connected to the faulty ballast.
6. Install ballast covers under both sides of the center riser top shelf and secure with screws.
7. Reconnect power to the case and turn on the light switch.

Anti-Sweat Replacement

WARNING

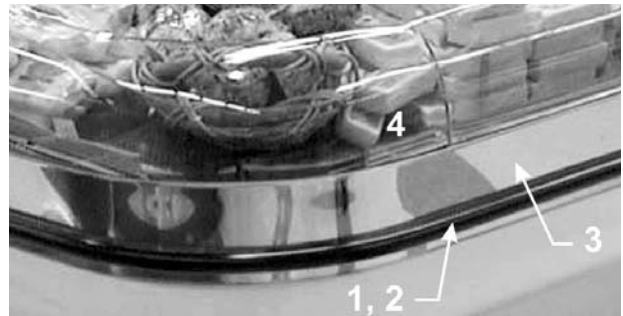
Shut off or disconnect power supply to case before changing an anti-sweat. Electrical power from wire ends could damage other components and/or cause personal injury or death.

Top Shelf Anti-Sweat

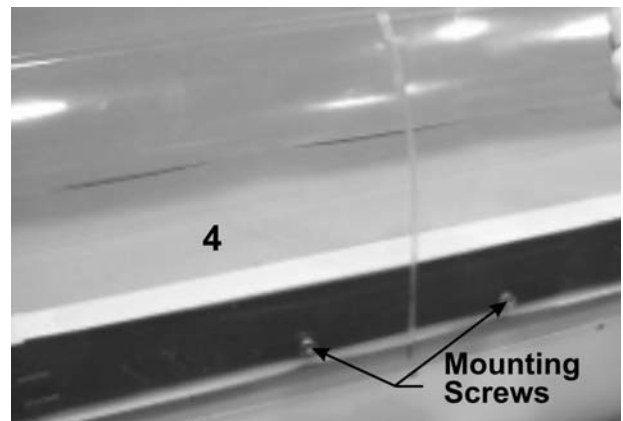


1. Disconnect faulty anti-sweat wire leads (1) from case wires (2).
2. Remove aluminum tape and faulty anti-sweat wire (1) from inside lip of top shelf (3).
3. Connect new anti-sweat wire leads (1) to case wires (2).
4. Carefully position the new anti-sweat wires (1) on inside lip of top shelf (3) and secure in place with aluminum tape.
5. Reconnect the power to the case.

Perimeter Curved Plexiglas Replacement



1. Remove the bumper (1), bumper retainer (2) and top trim cladding (3) to expose the bottom edge of the curved plexiglas (4) and the mounting screws.



2. Remove mounting screws from broken or damaged section of curved plexiglas (4). Carefully cut apart sections of curved plexiglas (4) at the joints. Remove broken or damaged curved plexiglas (4).



NOTE

Make sure ends of adjoining plexiglas are clean and dry.

3. Using a sanding block, sand all adjoining edges of plexiglas to ensure, smooth even edges.

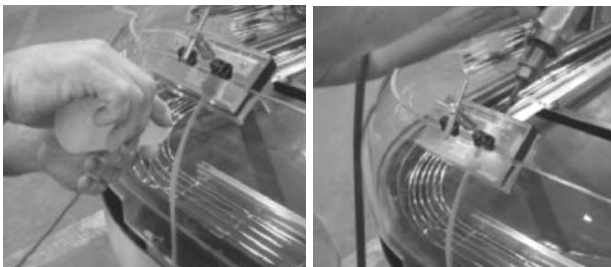
4. Measure and cut replacement section of curved plexiglas, if necessary, to approximately 1/4" longer than opening. Block sand edges to make sure they are even and smooth.



5. Position and align new section of curved plexiglas in the opening and carefully hold it in place with padded clamps.
6. Using a 1/4" to 3/4" Unibit (step drill), drill mounting holes in the same location as the previously drilled holes were. Secure new section with mounting screws.

CAUTION

Avoid cement touching clear plexiglas surfaces. If contact occurs, the surface will scar and the final appearance may be unsatisfactory.



7. Using a downling fixture, align the top edge of plexiglas joint seam. Carefully apply acrylic adhesive (Weldon #1802) to joint seam from the outside surface of the plexiglas. Let adhesive dry for 5 minutes.
8. Using the same downling fixture, drill a 1/4" hole through the top of the plexiglas joint seam. Remove the downling fixture.

9. Apply acrylic adhesive to 1/4" acrylic dowel pin and insert the pin in top hole. Let acrylic adhesive dry for 5 minutes, then cut off excess dowel pin and file smooth.



Plexiglas Finishing Procedure



1. If joint seam of plexiglas does not match perfectly, grind uneven seam with #36 grit disc until seam is even. The finish area should be approximately 4 inches wide.
2. Dry sand using #80 grit sand paper. Increase width of finish area approximately 1/4" on each side.
3. Repeat step 2 using #280 grit sand paper.
4. Repeat step 2 using #400 grit sand paper.
5. Wet sand finish area using #800 grit sand paper.
6. Repeat step 5 using #1000 grit sand paper.
7. Repeat step 5 using #1500 grit sand paper.
8. Using a buffer, apply Novus brand heavy scratch remover #3 until smooth.
9. Repeat step 8 using Novus brand fine scratch remover #2.
10. Polish the finish area using a clean soft cloth and Novus brand Plastic Clean and Shine #1.



PARTS INFORMATION

Operational Parts List

| Case Usage | RCCG (Std. Riser) Domestic | RCCG (Riser Opt 1) Domestic | RCCG (Riser Opt 2) Domestic |
|---------------------------------------|---|--|--|
| Electrical Circuit | 115 Volt 60 Hertz | 115 Volt 60 Hertz | 115 Volt 60 Hertz |
| Case Size | 8'/12'/16' Island | 8'/12'/16' Island | 8'/12'/16' Island |
| Fan Motor | 5125532 5 Watt | 5125532 5 Watt | 5125532 5 Watt |
| Fan Motor Brackets | 5213132 | 5213132 | 5213132 |
| Fan Blades | | | |
| (6.00" 20° 5B)(8'/12'/16' Islands) | 1657004 | 1657004 | ----- |
| (6.00" 35° 5B)(8'/12'/16' Islands) | ----- | ----- | 9450091 |
| Opt. ECM Fan Motor | 9025002 8 Watt | 9025002 8 Watt | 9025002 8 Watt |
| Opt. ECM Fan Motor Brackets | 5205279 | 5205279 | 5205279 |
| Opt. ECM Fan Blades | | | |
| (6.00" 15° 5B)(8'/12'/16' Islands) | 9408191 | 9408191 | ----- |
| (6.00" 30° 5B)(8'/12'/16' Islands) | ----- | ----- | 9023766 |
| Anti-Sweat Heater (center top shelf) | | | |
| 8' Island | 9039652 | 9039652 | 9039652 |
| 12' Island | 9039650 | 9039650 | 9039650 |
| 16' Island | 9039636 | 9039636 | 9039636 |
| T-8 Ballast (Center Riser Top Shelf) | | | |
| 8' Islands (2-Lamp Ballast) | 5991029 | 5991029 | 5991029 |
| 12' Islands (4-Lamp Ballast) | 5966635 | 5966635 | 5933365 |
| 16' Island (3-Lamp Ballast) | 5991030 (2) | 5991030 (2) | 5991030 (2) |
| T-8 Ballast (Riser Opt. Shelf Lights) | | | |
| 8' Island (2-Lamp Ballast) | ----- | 5991029 (2) | ----- |
| (4-Lamp Ballast) | ----- | ----- | 5966635 (2) |
| 12' Island (2-Lamp Ballast) | ----- | 5991029 (3) | ----- |
| (4-Lamp Ballast) | ----- | ----- | 5966635 (3) |
| 16' Island (2-Lamp Ballast) | ----- | 5991029 (4) | ----- |
| (4-Lamp Ballast) | ----- | ----- | 5966635 (4) |
| T-8 Lampholder (All Lamps) | 9041897 | 9041897 | 9041897 |
| NSF Product Thermometer | 5967100 | 5967100 | 5967100 |

For information on operational parts not listed above contact the TYLER Service Parts Department.