SECTION 7

COMPONENT ACCESS AND REMOVAL

COMPONENT ACCESS AND REMOVAL

This section explains how to adjust, access and remove components. If different models have similar procedures, they are grouped together under the appropriate heading. The models covered in the procedures are listed between brackets after the heading.

This section is arranged as follows: ***Page:***

An attempt has been made to arrange these procedures in such a way as to simulate which components would need to be removed first in order to gain access to other components. When following a component removal procedure, it may be necessary to reference another component removal procedure earlier in this section.

NOTE: *Before continuing, please take note of the WARNINGS and CAUTIONS below.*

⚠ WARNING

- **IF IT IS NECESSARY TO REMOVE A UNIT FROM ITS INSTALLATION, REMEMBER THAT THE UNIT COULD TIP FORWARD WHEN PULLED FORWARD BEYOND THE ANTI-TIP COMPONENTS, RESULTING IN SERIOUS INJURY OR DEATH. PULLING A UNIT FROM ITS INSTALLATION SHOULD ONLY BE PERFORMED BY AN AUTHORIZED SERVICE TECHNICIAN OR INSTALLER.**
- **TO AVOID ELECTRIC SHOCK, POWER TO THE UNIT MUST BE DISCONNECTED WHENEVER ACCESSING AND/OR REMOVING COMPONENTS POWERED BY ELECTRICITY OR COMPONENTS NEAR OTHER ELECTRICAL COMPONENTS. IF THE UNIT IS PLUGGED IN, BUT HAS NOT BEEN SWITCHED ON BY PRESSING THE UNIT ON/OFF KEY, 115 VOLTS AC IS STILL PRESENT AT THE CONTROL BOARD.**
- **IF REMOVING A DOOR OR DRAWER FROM A UNIT, REMEMBER THAT DOORS AND DRAWERS ARE HEAVY. IF THEY WERE TO FALL, THEY COULD CAUSE SERIOUS PERSONAL INJURY.**

⚠ CAUTION

- **If removing or disconnecting door closer assemblies, remember they are spring loaded and could recoil quickly when released.**
- **If working in the compressor area, remember that compressor and tubing may be hot.**
- **If working on or around an evaporator or condenser, remember that evaporator and condenser fins are sharp.**

EXTERIOR COSMETIC / MECHANICAL (ALL MODELS)

Bottom Mount Standard Louvered Grille (601R-3, 601RG-3, 601F-3)

The bottom mount standard louvered grille consists of a lower and upper grille section.

Lower Grill Section Removal - To remove lower grille section (See Figure 7-1):

1. Extract screws at bottom left and right corners of lower grille section.
2. Pull bottom of lower grille section out and up to release it from upper grille section.

Upper Grill Section Removal - To remove upper grille section (See Figure 7-1):

⚠ WARNING

UPPER GRILLE SECTION HOLDS FAN AND LIGHT SWITCHES. DISCONNECT POWER TO UNIT BEFORE REMOVING UPPER GRILLE SECTION.

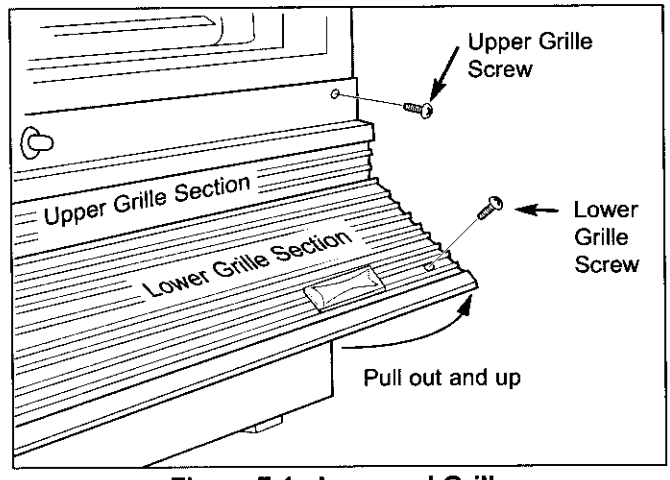

Figure 7-1. Louvered Grille

1. Remove lower grille section first.
2. Open cabinet door and extract screws at top left and right corners of upper grille section.
3. Pull upper grille section forward slightly and disconnect electrical leads from fan and light switches.

Bottom Mount Stainless Steel Grille (601R-3, 601RG-3, 601F-3)

The bottom mount stainless steel grille consists of a lower and upper grille section. The lower grill section uses a "catch and strike" retention system.

Lower Grill Section Removal - To remove lower grille section (See Figure 7-2):

1. Grasp bottom of grille and pull out and up to release strike from catch at bottom.
2. Continue to pull bottom out and up to release it from upper grille section.

Upper Grill Section Removal - To remove upper grille section (See Figure 7-2):

⚠ WARNING

UPPER GRILLE SECTION HOLDS FAN AND LIGHT SWITCHES. DISCONNECT POWER TO UNIT BEFORE REMOVING UPPER GRILLE SECTION.

1. Remove lower grille section first.
2. Open cabinet door and extract screws at top left and right corners of upper grille section.
3. Pull upper grille section forward slightly and disconnect electrical leads from fan and light switches.

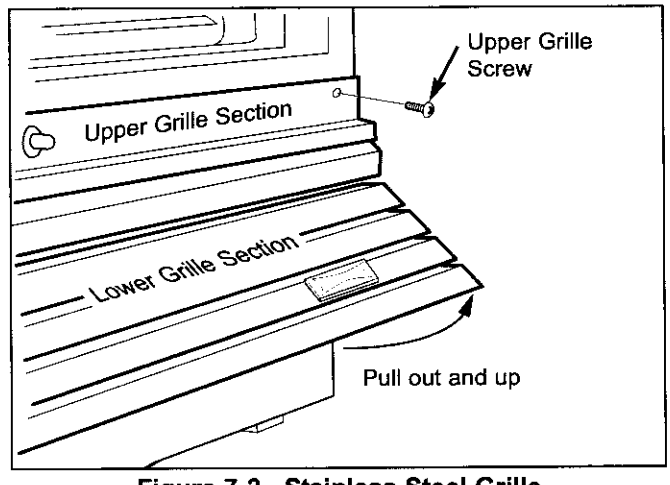

Figure 7-2. Stainless Steel Grille

Top Mount Standard & Stainless Steel Louvered Grille (All models except 601's)

To remove a top mount louvered grille assembly (See Figure 7-3):

1. Open door(s).
2. Extract grille screws which pass up through top mainframe extrusion into bottom extrusion of grille assembly.
3. Tilt top of grille forward and release grille springs from grille hooks at back side of grille, then lift grille assembly off.

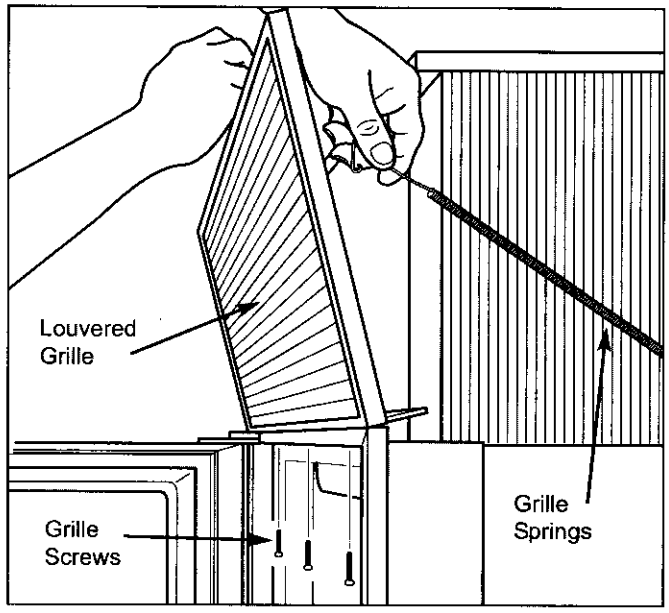

Figure 7-3. Louver Grille

Top Mount Panelized Grille Assembly (All models except 601's)

The panelized grille assembly consists of an outer and inner grille frame. The outer grille frame is attached to the unit with screws. Pegs on the back of the inner grille frame fit into keyhole slots in the outer grille frame.

Inner Grille Frame Removal - To remove the inner grille frame (See Figure 7-4):

1. Lift inner grille frame up.
2. Pull bottom of inner grille frame out of bottom keyhole slots.
3. Pull inner grille frame down and out of top keyhole slots.

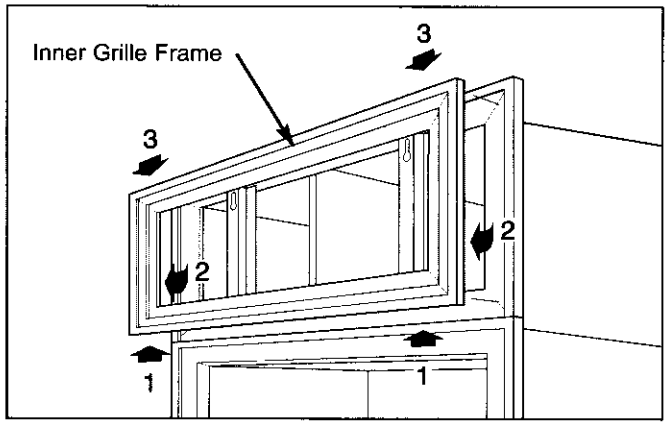

Figure 7-4. Inner Panelized Grille Frame

Outer Grille Frame Removal - To remove the outer grille frame (See Figure 7-5):

1. Remove inner grille frame first.
2. Open door(s).
3. Extract grille screws which pass up through top mainframe extrusion into bottom extrusion of outer grille frame.
4. Extract screws at top front of outer grille frame and lift frame off.

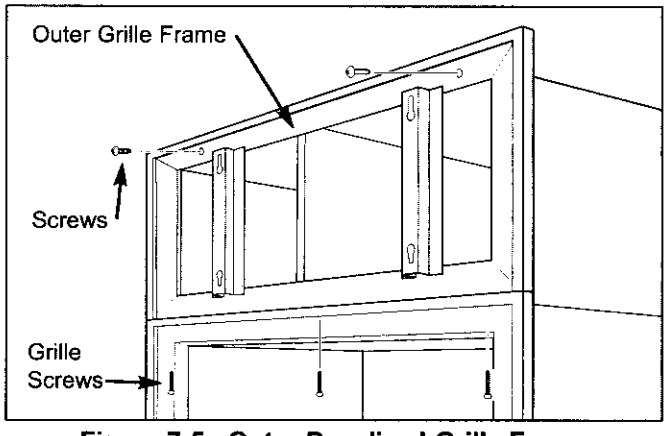

Figure 7-5. Outer Panelized Grille Frame

Kickplate (All Models)

Extract screws at bottom left and right corners of kickplate and pull kickplate forward (See Figure 7-6).

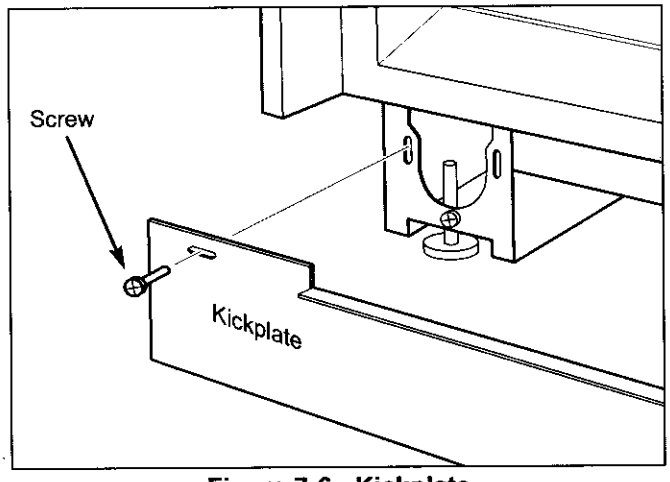

Figure 7-6. Kickplate

Drain Pan (601R-3, 601RG-3, 601F-3)

The side flanges at the top of the plastic drain pan rest on top of metal flanges behind the kickplate. Z-clamps are used to secure the drain pans top flange to the unit tray side flange.

To remove a drain pan (See Figure 7-7):

1. Remove lower grille section.
2. Remove kickplate.
3. Push drain pan up and out from underneath.

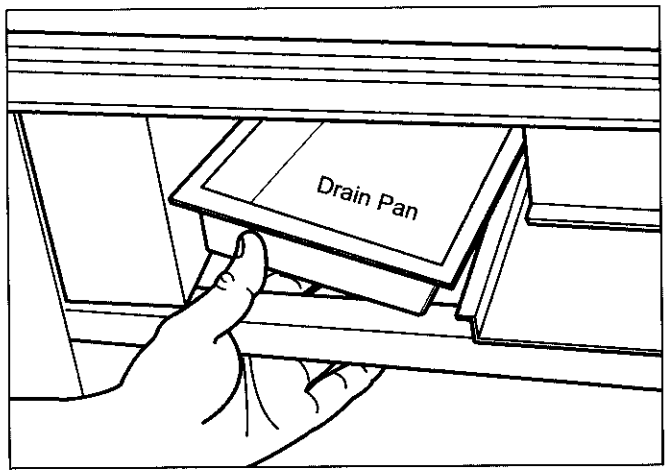

Figure 7-7. Drain Pan (601's)

Drain Pan (All models except 601's)

The drain pan slides in from the front of the unit on two side brackets, coming to rest on a rear bracket. A locking feature was built into the drain pan in the form of detentes at the bottom front that drop into notches at the front of the side brackets.

To remove a drain pan (See Figure 7-8):

1. Remove kickplate.
2. Push front of drain pan up slightly and pull forward.

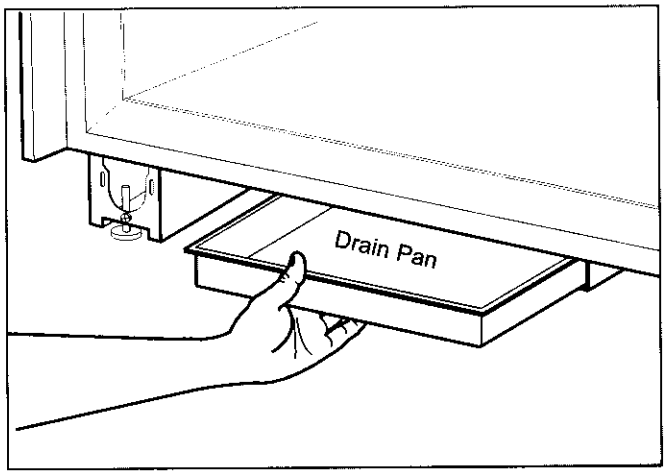

Figure 7-8. Drain Pan

Light and Fan Switch (601R-3, 601RG-3, 601F-3)

Light / fan switches are mounted in upper grille section.

To remove a switch, the lower and upper grille sections must be removed first, then (See Figure 7-9):

1. Disconnect wire leads from switch.
2. Depress tab on side of switch while pushing switch out of the opening in upper grille section.

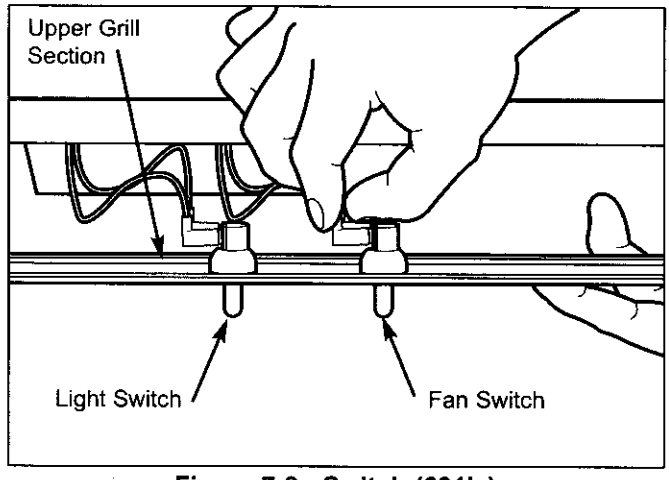

Figure 7-9. Switch (601's)

Light and Fan Switch (All models except 601's)

Light and fan switches are mounted in top mainframe.

To remove a switch, first remove the grille, then (See Figure 7-10):

1. Remove switch enclosure directly behind top mainframe extrusion.
2. Disconnect wire leads from switch.
3. Open refrigerator or freezer door below switch.
4. Depress tab on side of switch while pushing switch down, out of the opening in mainframe extrusion.

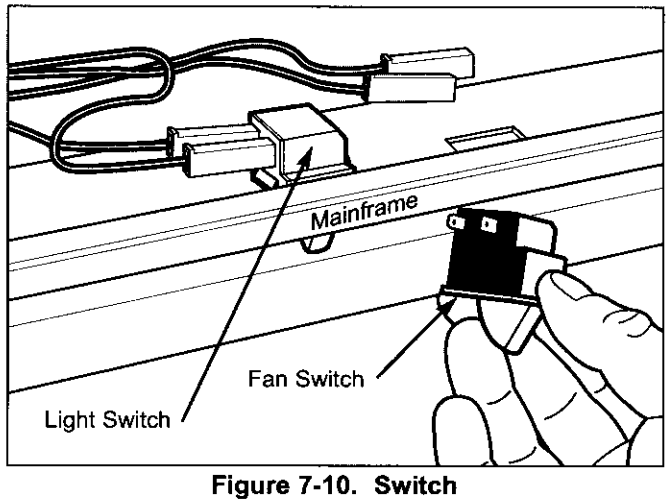

Figure 7-10. Switch

Water Valve
(611-3, 611G-3, 632-3, 642-3, 650-3, 650G-3, 661-3)

NOTE: *For **601F-3** water valve removal instructions see: "LOWER COMPRESSOR AREA MECHANICAL (Models 601R-3, 601RG-3, 601F-3)", later in this section.*

NOTES:

- *For **685-3 / 695-3**, dual water valve removal instructions, see below.*

The water valve is mounted to a bracket under the unit.

To remove a water valve, first remove the kickplate, then (See Figure 7-11):

1. Loosen mounting screw holding valve to bracket.
2. Lift valve until screw head aligns with large section of key-hole slot.
3. Push valve back until screw head clears bracket, then lower valve and pull forward.
4. Disconnect electrical leads from valve.
5. Disconnect water lines from valve.

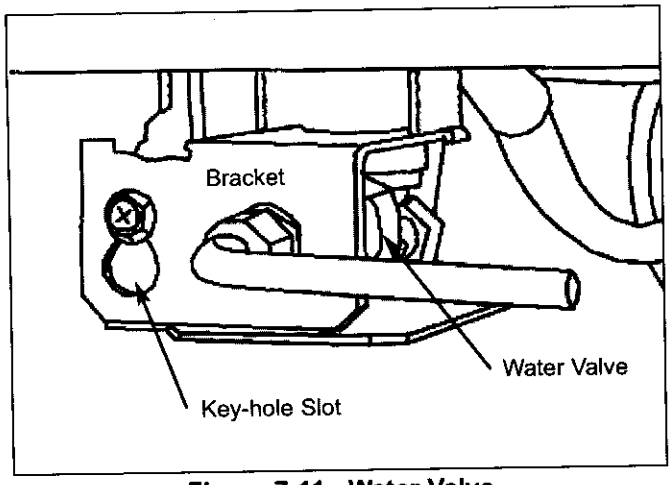

Figure 7-11. Water Valve

Dual Water Valve
(685-3 / 695-3)

The water valve is mounted to a bracket under the unit, toward the right hand side. The inlet water line uses a compression fitting. The water valve outlets are quick-connect fittings.

To remove a water valve, first remove the kickplate, then (See Figure 7-12):

1. Extract mounting screw holding valve to bracket.
2. Pull valve forward.
4. Disconnect electrical leads from valve.
5. Disconnect water lines from valve.

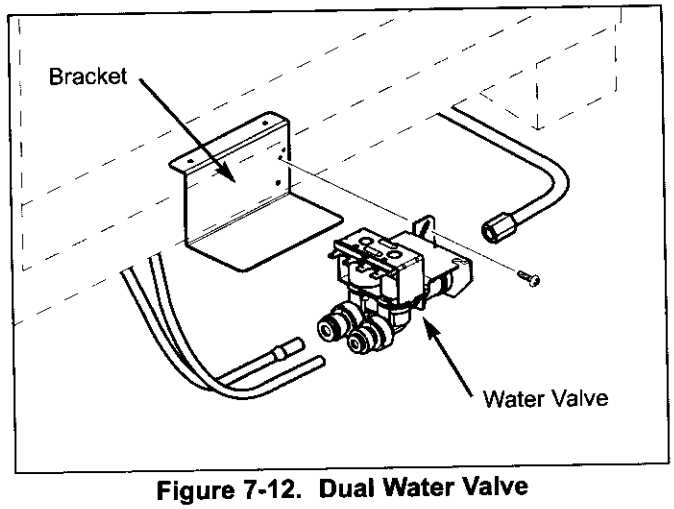

Figure 7-12. Dual Water Valve

Tubular Stainless Steel Door Handle Assembly (All Stainless Steel Models)

A screw inserted through the handle standoff into the handle secures the handle to the standoff. The standoff then slides over a threaded insert that is attached to the door shell, and a socket head set-screw inserted through the side of the standoff secures the standoff to the insert.

To remove a stainless steel handle assembly, use a 3/32" Allen-wrench to loosen the set-screw in each handle standoff and pull handle assembly off of the threaded insert. (See Figure 7-14)

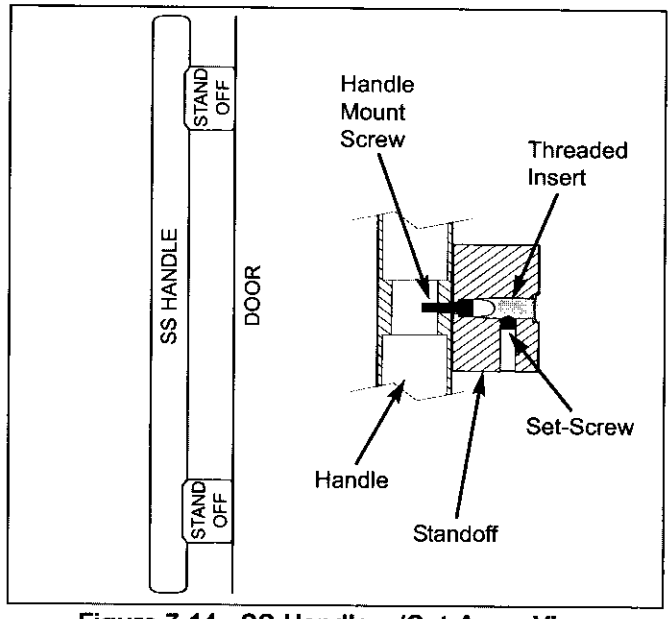

Figure 7-14. SS Handle w/Cut-Away View

Full Length Door Handle/Handle-Side Trim (All Models)

A Full length handle and/or handle-side trim is secured to the door with screws. The screw heads are then concealed by a magnetic trim strip.

To remove a full length handle or handle-side trim (See Figure 7-15):

1. Press a sticky piece of tape to center of magnetic trim strip.
2. Pull tape so that trim strip bows away from door, disengaging both ends of trim strip from the end-caps.
3. With mounting screws exposed, extract the screws, then pull handle (or handle-side trim) from door.

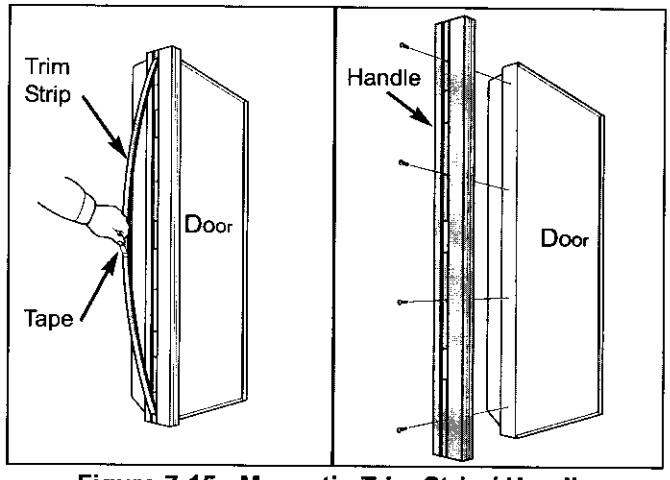

Figure 7-15. Magnetic Trim Strip / Handle

Hinge-Side Door Trim (All Models)

Hinge-side door trim is held to the door with screws.

To remove hinge-side door trim (See Figure 7-16):

1. Open Door fully.
2. Extract trim mounting screws.
3. Pull trim from door.

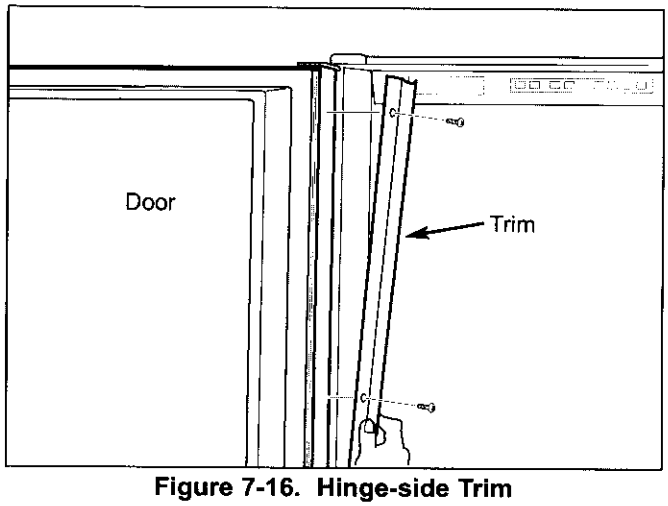

Figure 7-16. Hinge-side Trim

Dispenser Control Panel (685-3, 695-3)

The dispenser control panel is held in place over the bezel and in front of the dispenser assembly by plastic rivets passing up through its bottom flange and into the dispenser assembly.

To remove the control panel (See Figures 7-17 and 7-18):

1. Extract plastic rivet center posts using a fingernail, putty knife, or similar device, then pull rivets out.
2. Pull panel down and disconnect ribbon cable.

   NOTE: *When reassembling, make sure blue side of ribbon cable is up when connecting to dispenser control panel, and take care not to pinch or kink ribbon cable.*

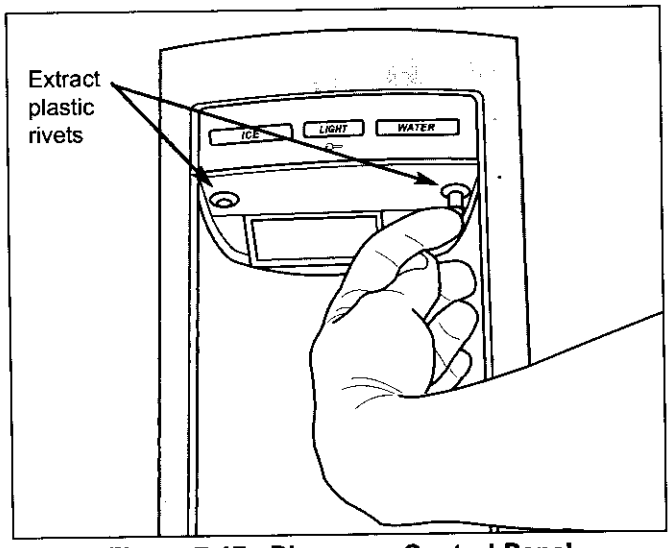

Figure 7-17. Dispenser Control Panel

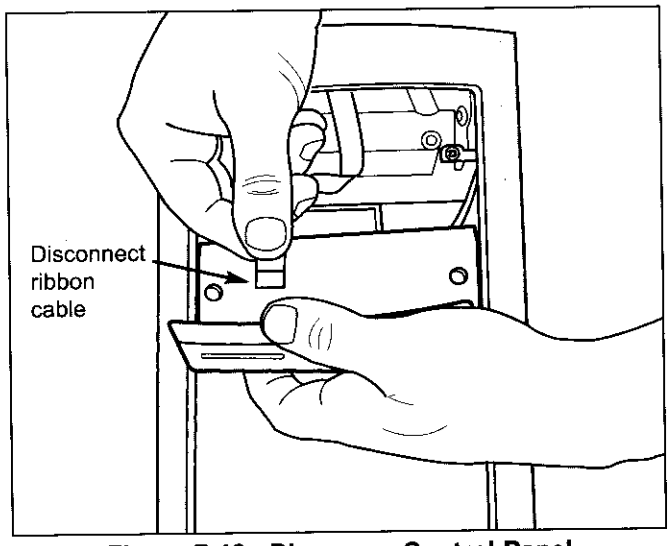

Figure 7-18. Dispenser Control Panel

Bezel (685-3, 695-3)

To remove a bezel, the control panel must be removed first, then (See Figure 7-19):

1. Lift out glasswell grille to access bottom screws.
2. Extract all screws at corners, then pull bezel forward.

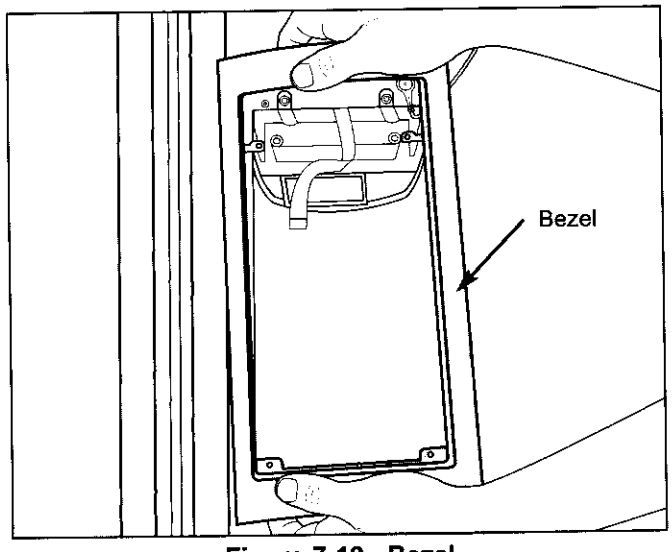

Figure 7-19. Bezel

Glasswell Liner/Sump (685-3, 695-3)

The glasswell liner sets into a groove in the sump. These two components are then installed as an assembly, with the top of the liner fitting up into a groove at the bottom of the dispenser assembly, and two plastic rivets hold the liner to the dispenser assembly.

To remove the glasswell liner/sump assembly, the control panel and bezel must be removed first, then (See Figures 7-20 and 7-21):

1. Extract plastic rivet center posts using a fingernail, putty knife, or similar device, then pull rivets out.
2. Detach ground wire from glasswell liner at top right.
3. Pull bottom of assembly out while lifting up.

   NOTE: *When reassembling, top edge of liner must fit into the groove at bottom of dispenser assembly.*

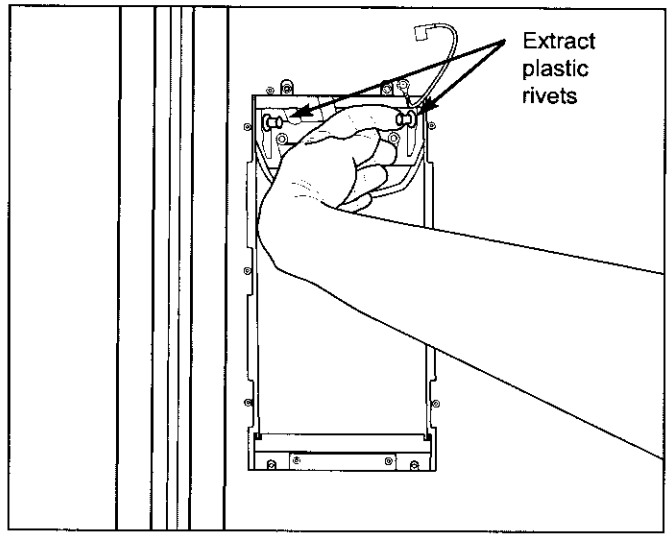

Figure 7-20. Glasswell Liner/Sump

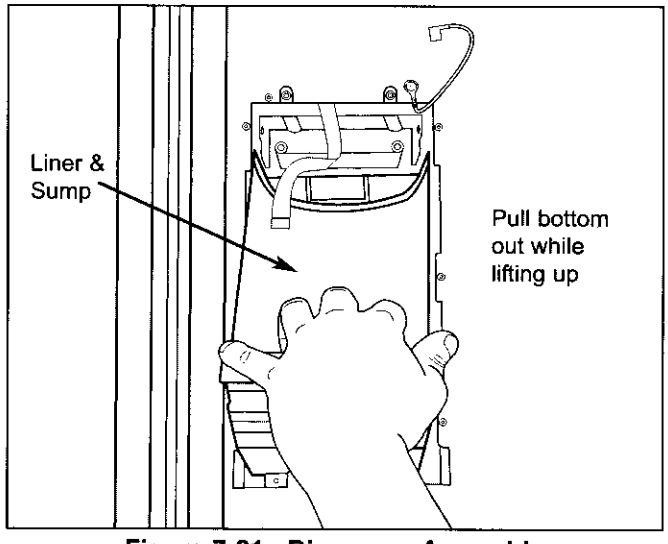

Figure 7-21. Dispenser Assembly

Dispenser Assembly (685-3, 695-3)

The dispenser assembly sits above the glasswell liner and is held in position with four screws.

To remove the dispenser assembly, the control panel, bezel and glasswell liner/sump assembly must be removed first, then (See Figures 7-22):

1. Extract front and back dispenser assembly mounting screws.
2. Pull assembly down and disconnect wires.

   NOTE: *When reassembling, take care not to pinch or kink ribbon cable, and be sure to test for proper control panel / dispenser assembly operation before leaving.*

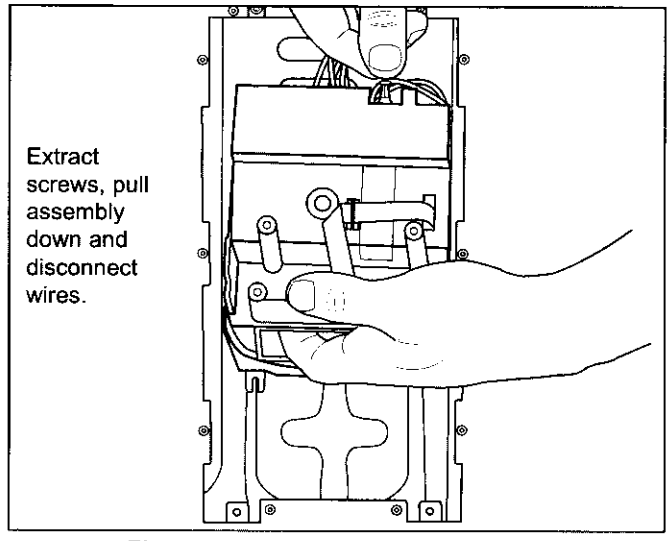

Figure 7-22. Dispenser Assembly

Door Closer Assembly
(All Models Except 611-3 & 650-3)

NOTE: *Door closer assembly removal and door closer disconnection procedures are different. If disconnecting a door closer in order to remove a door, see Door Removal instructions instead of these instructions.*

To remove a door closer assembly (See Figure 7-23):

1. With door closed, use a small straight-blade screwdriver to remove E-ring which holds door closer arm to bottom door hinge stud.
2. Pry door closer arm down off of door hinge stud.

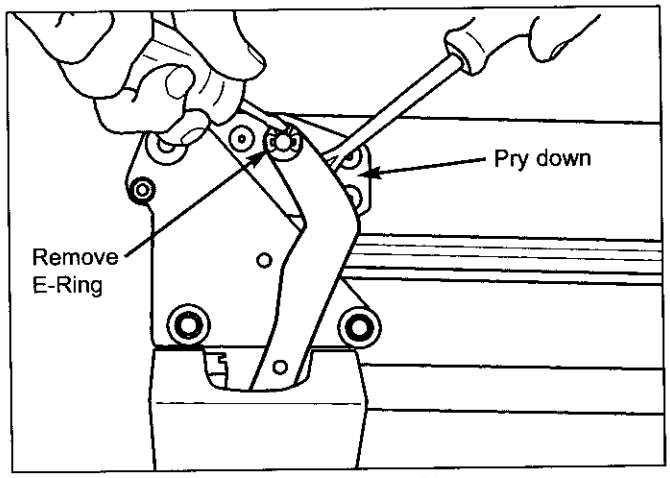

Figure 7-23. Door Closer

Door Assembly (601R-3, 601F-3, 632-3, 642-3, 611-3, 650-3, 661-3, 685-3 Fre, 695-3 Fre)

⚠ WARNING

REFRIGERATOR DOORS:

- **ON GLASS DOOR MODELS HAVE HEATER WIRES THAT PASS THROUGH TOP HINGE.**
- **ON DISPENSER MODELS HAVE DISPENSER WIRES THAT PASS THROUGH TOP HINGE.**

FAILURE TO DISCONNECT THESE WIRES DURING DOOR REMOVAL COULD CAUSE SERIOUS PERSONAL INJURY, AND/OR DAMAGE TO APPLIANCE. SEE APPROPRIATE DOOR REMOVAL PROCEDURES ON FOLLOWING PAGE.

To remove a door, the door closer assembly must be disconnected fist (excluding 611-3 and 650-3).

Door Closer Disconnection - To disconnect a door closer (See Figure 7-24):

1. Open door until hole in bottom cabinet hinge aligns with hole in door closer arm.
2. Insert short screwdriver up into the two holes.
   NOTE: *This screwdriver will be used to pry the door closer arm back onto the door hinge stud.*
3. Use a small straight-blade screwdriver to remove E-ring which holds door closer arm to bottom door hinge stud.
4. Pry door closer arm down off of door hinge stud.

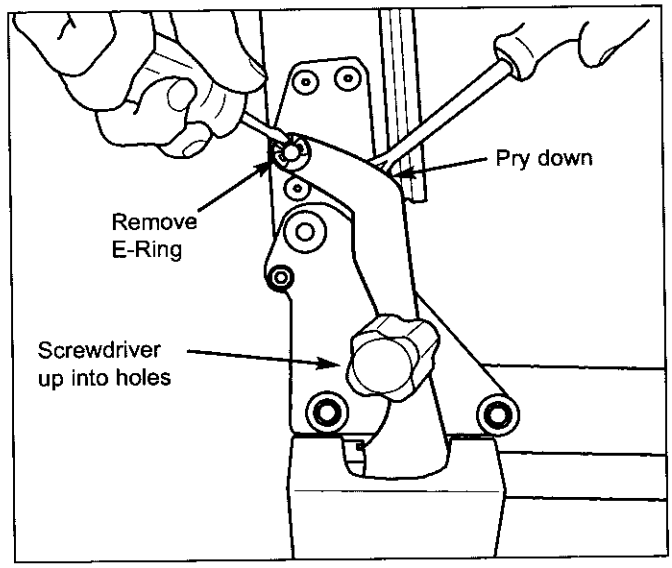

Figure 7-24. Door Closer Disconnect

Door Removal - To remove a door (See Figure 7-25):

1. Remove hinge-side door trim, if applicable.
2. With a 1/8" Allen-wrench and Phillips screwdriver, extract all screws from top door hinge.
3. Lean door away from unit and lift off of bottom cabinet hinge.
   NOTE: *When reinstalling door, use screwdriver in cabinet hinge hole and door closer arm hole to pry door closer arm back onto the door hinge stud.*

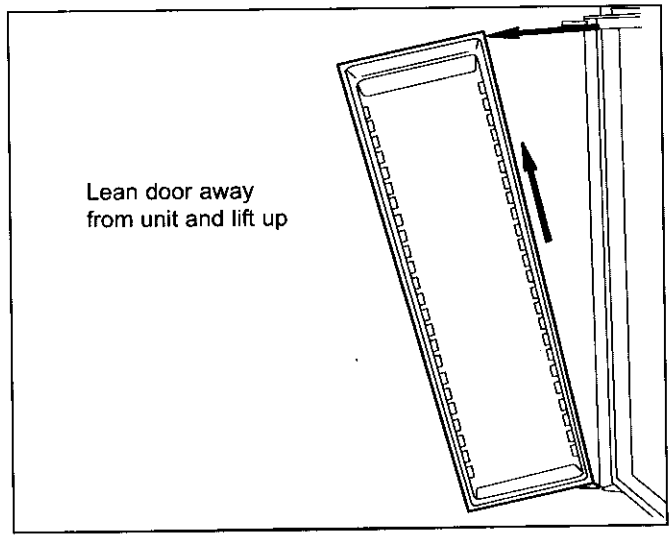

Figure 7-25. Door

Door Assembly (601RG-3, 611G-3, 650G-3, 685-3 Refrigerator, 695-3 Refrigerator)

⚠ WARNING

REFRIGERATOR DOORS:

- **ON GLASS DOOR MODELS HAVE HEATER WIRES THAT PASS THROUGH TOP HINGE.**
- **ON DISPENSER MODELS HAVE DISPENSER WIRES THAT PASS THROUGH TOP HINGE.**

FAILURE TO DISCONNECT THESE WIRES DURING DOOR REMOVAL COULD CAUSE SERIOUS PERSONAL INJURY, AND/OR DAMAGE TO THE APPLIANCE.

To remove a door, the door closer assembly must be disconnected fist (excluding 611G-3 and 650G-3).

Door Closer Disconnection - To disconnect a door closer (See Figure 7-26):

1. Open door until hole in bottom cabinet hinge aligns with hole in door closer arm.
2. Insert short screwdriver up into the two holes.
   NOTE: *This screwdriver will be used to pry the door closer arm back onto the door hinge stud.*
3. Use a small straight-blade screwdriver to remove E-ring which holds door closer arm to bottom door hinge stud.
4. Pry door closer arm down off of door hinge stud.

Door Removal - To remove a door (See Figures 7-27 and 7-28):

1. Disconnect electrical leads at top cabinet hinge.
2. Extract top cabinet hinge mounting bolts.
3. Lean door away from unit and lift off of bottom cabinet hinge.
   NOTE: *When reinstalling door, use screwdriver in cabinet hinge hole and door closer arm hole to pry door closer arm back onto the door hinge stud.*

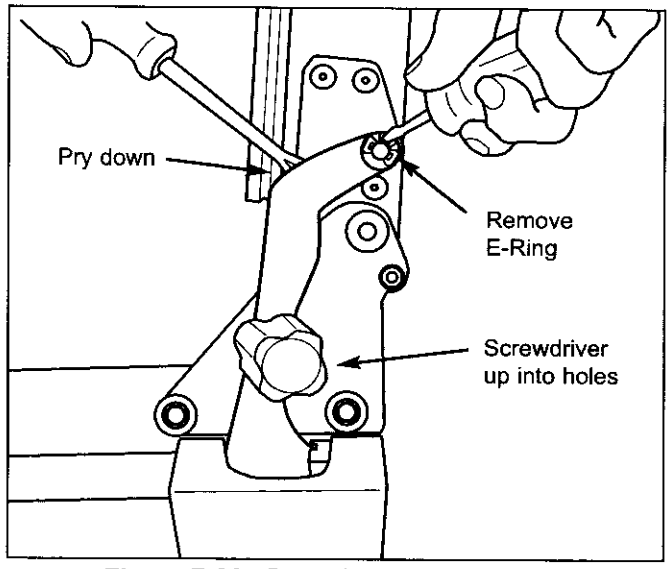

Figure 7-26. Door Closer Disconnect

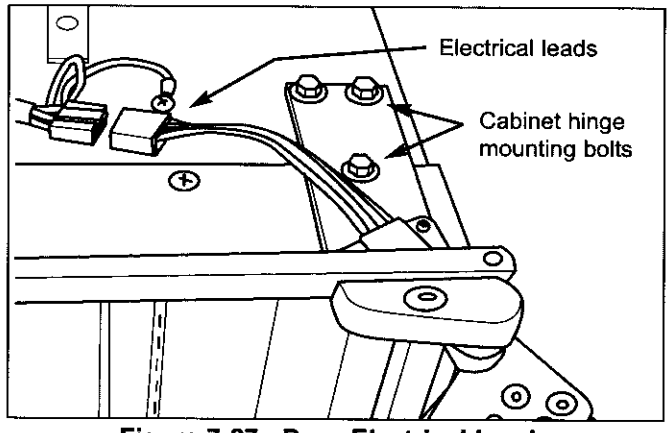

Figure 7-27. Door Electrical Leads

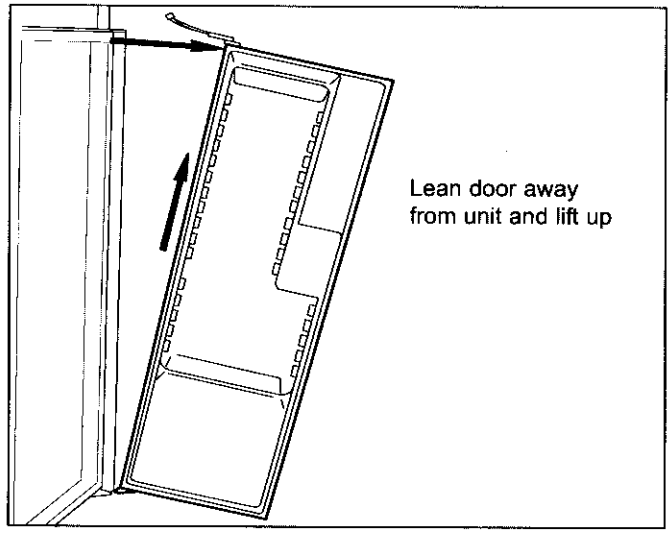

Figure 7-28. Door

Freezer Drawer Front Assembly (611-3, 611G-3, 650-3, 650G-3)

To remove a freezer drawer front assembly (See Figure 7-29):

1. Open freezer drawer fully.
2. Extract the Allen-head screws that pass through the drawer slide rail assemblies into the rear of the drawer front assembly.
3. Pull drawer front assembly from drawer slide rails.

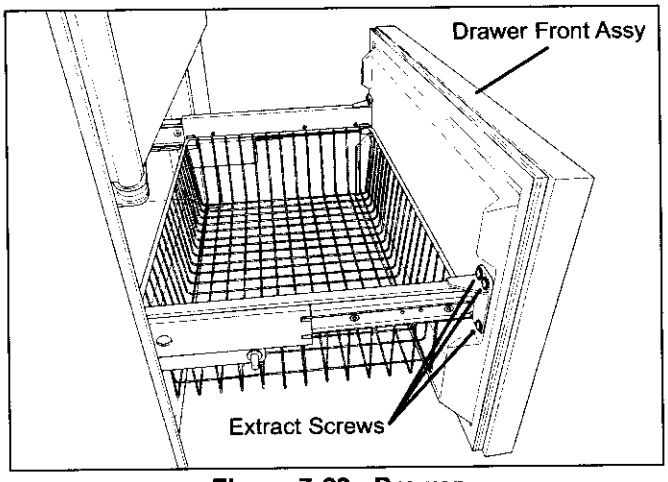

Figure 7-29. Drawer

Freezer Drawer Side Trim (611-3, 611G-3, 650-3, 650G-3)

The freezer drawer side trim slides down over trim clips that are riveted to the sides of the drawer.

To remove freezer drawer side trim (See Figure 7-30):

1. Remove Freezer drawer handle.
2. Slide side trim up off of trim clips.

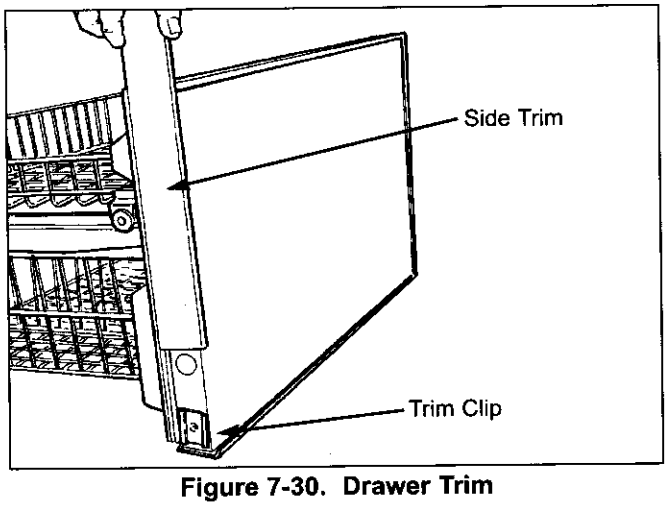

Figure 7-30. Drawer Trim

Mainframe Extrusion (All Models)

Mainframe extrusion is held to the sides of a unit with low-profile 6-lobe drive screws, and at the top with Phillips-head screws. Mainframe angles at the top corners strengthen and support mainframes at a 90° angle.

Side Mainframe Extrusion, (See Figure 7-31):

1. Pull unit from its installation approximately 4".
2. Remove grille.
3. Remove aluminum tape from top corner.
4. Remove nut from bottom hinge stud (if applicable).
5. With a T-20 6-lobe bit, extract mounting screws.
6. With a small Phillips-head bit, extract screw at top of mainframe angle and pull extrusion from unit.

Top Mainframe Extrusion, (See Figure 7-31):

1. Pull unit from its installation approximately 4".
2. Remove grille.
3. Remove aluminum tape from corners.
4. Remove door(s) and top cabinet hinge(s).
5. With a Phillips-head bit, extract mounting screws.
6. With small Phillips-head bit, extract screws at side of mainframe angles and pull extrusion from unit.

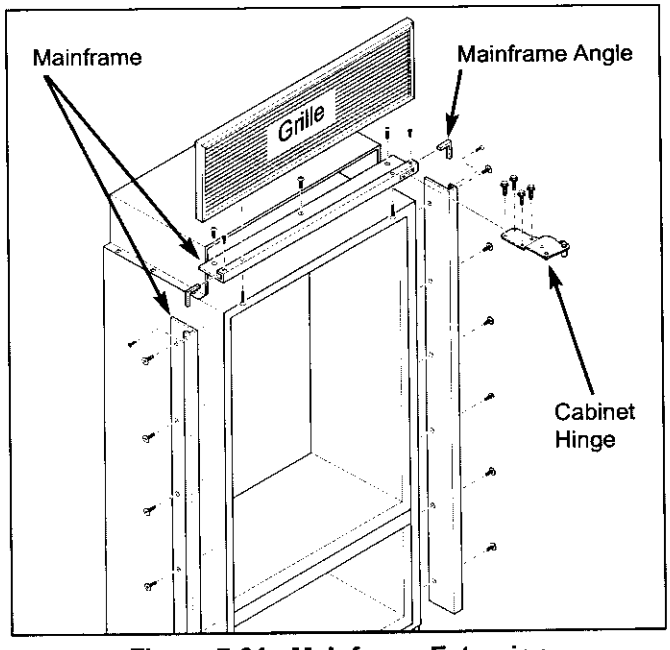

Figure 7-31. Mainframe Extrusion

REFRIGERATOR INTERIOR COSMETIC / MECHANICAL (ALL MODELS)

Door Shelf & Dairy Compartment Assembly Removal and Adjustment (All Models)

Removal and adjustment of door shelves and dairy compartment assemblies is achieved by sliding the grooves in the end caps over the molded retaining ribs of the door liner.

Lift up and out to remove, push in and down to install. (See Figure 7-32)

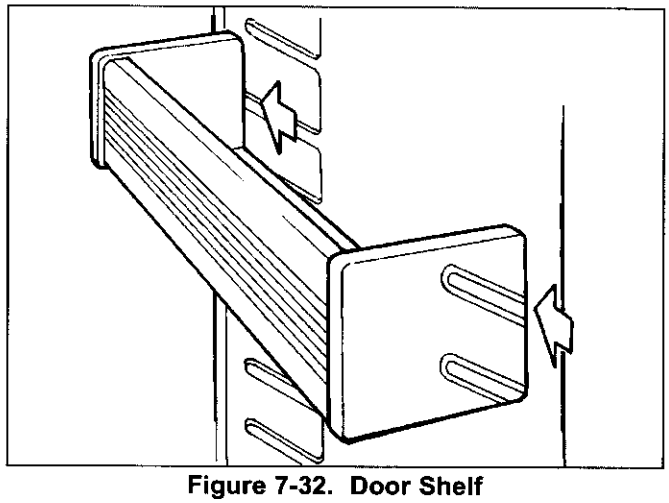

Figure 7-32. Door Shelf

Utility Basket (All Models)

Utility baskets ride on slides under one refrigerator compartment shelf.

Remove the utility basket from under the shelf assembly by pulling basket out and lifting at front (See Figure 7-33). Reverse to reinstall.

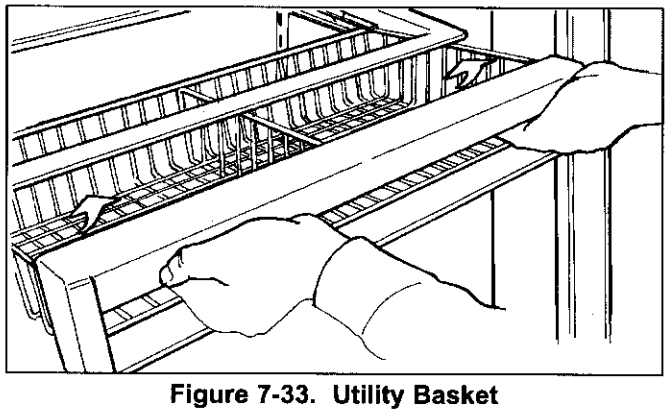

Figure 7-33. Utility Basket

Compartment Shelf Removal and Adjustment (All Models)

Remove and adjust shelf by tilting up at front while lifting the back up and out of the shelf ladders (See Figure 7-34).

To reinstall, tilt front of shelf up and align hooks at back corners with slots in shelf ladders, then insert hooks into slots and lower front of shelf.

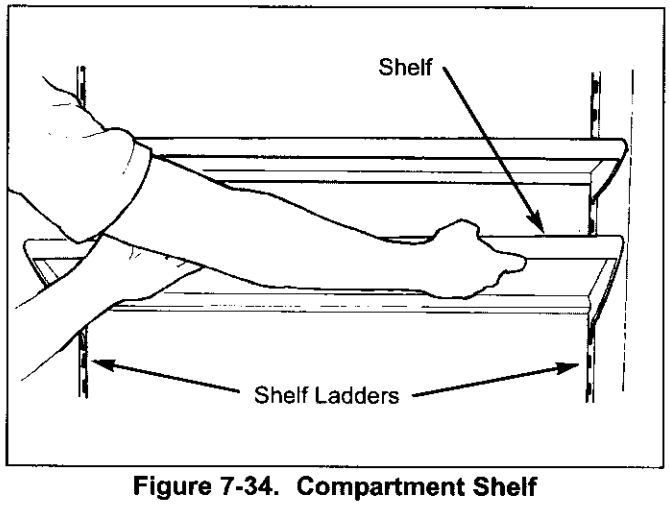

Figure 7-34. Compartment Shelf

Upper Light Diffuser (All Models)

The side frames of the light diffuser have four inverted "T" shaped slots (two each side) which slide up over pegs protruding from the side walls. For safety purposes, retaining clips by the rear slots secure the light diffuser to the rear studs.

To remove the light diffuser (See Figure 7-35):

1. Slide fingers over top of retaining clips and rotate down.
2. With clips open, lift diffuser up and slide toward rear of unit until center of "T" slots line up with the pegs.
3. Then lower light diffuser and remove from unit.

⚠ WARNING

IF BULB SHOULD SEPARATE FROM BASE, DISCONNECT POWER TO UNIT BEFORE ATTEMPTING TO REMOVE BASE.

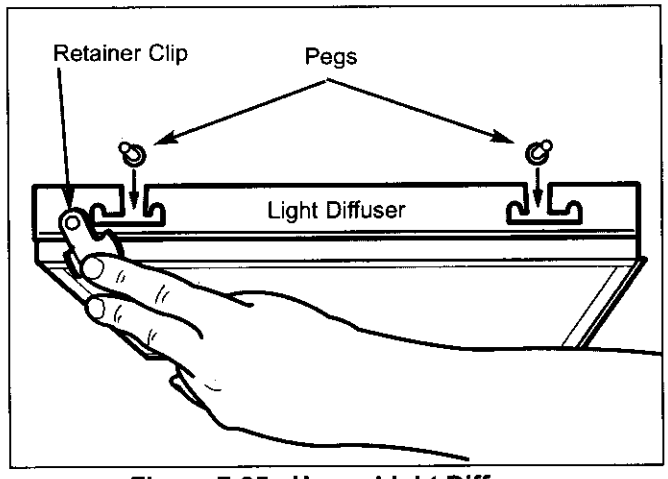

Figure 7-35. Upper Light Diffuser

Crisper Glass Shelf (All Models)

Remove crisper glass shelf assembly by opening top drawer and lifting assembly off of crisper glass supports (See Figure 7-36).

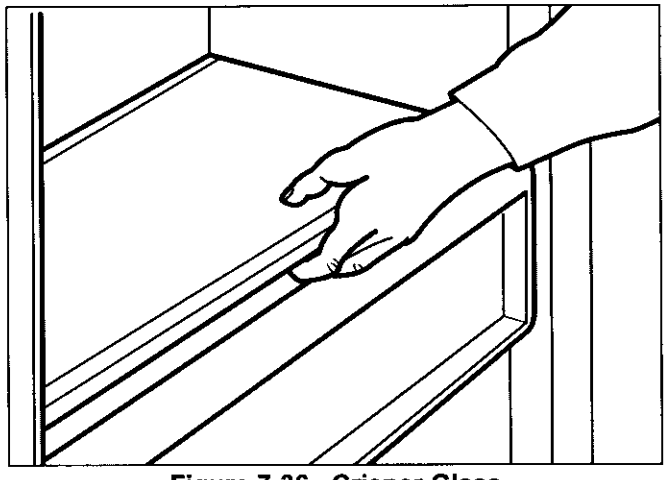

Figure 7-36. Crisper Glass

Large High Humidity Drawer (All Models)

Channels on each side of the large humidity drawer assembly rest on top of the drawer carriage assembly.

To remove the high humidity drawer assembly (See Figure 7-37):

1. Pulling drawer open until drawer stops.
2. Lift front of drawer up off of carriage assembly, then out of unit.

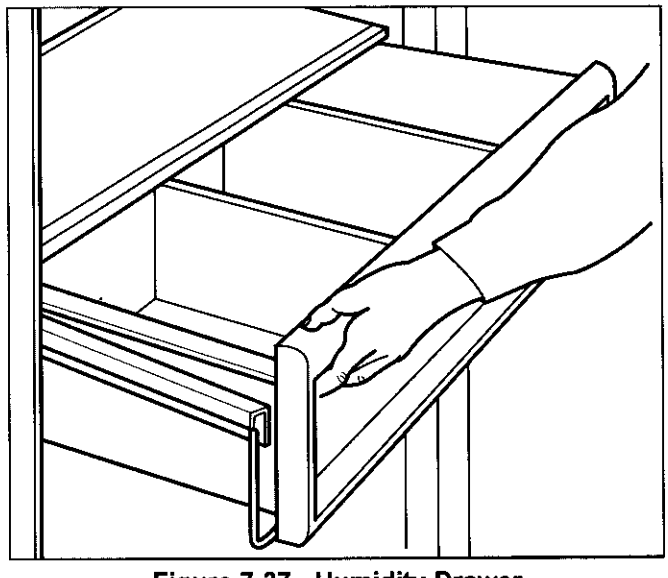

Figure 7-37. Humidity Drawer

Humidity Drawer Carriage Assembly (All Models)

Channels on each side of the carriage assembly rest on top of the two crisper slide assemblies. At the top rear and front sides of each channel are notches that fit over tabs on the crisper slide assemblies. These notches and tabs assure proper location of the carriage assembly on the slides. To hold the carriage assembly firmly in place, a small bead of silicone is applied to the top each crisper slide assembly.

To remove the humidity drawer carriage assembly (See Figure 7-38):

1. With a small flat-blade screwdriver, or similar tool, wedged between front of carriage assembly and front of crisper slide, pry carriage assembly up to break silicone seal.
2. Lift carriage assembly up at front to disengage notches from tabs at front of slide assemblies.
3. Pull carriage assembly forward to disengage notches from tabs at rear of slide assemblies.

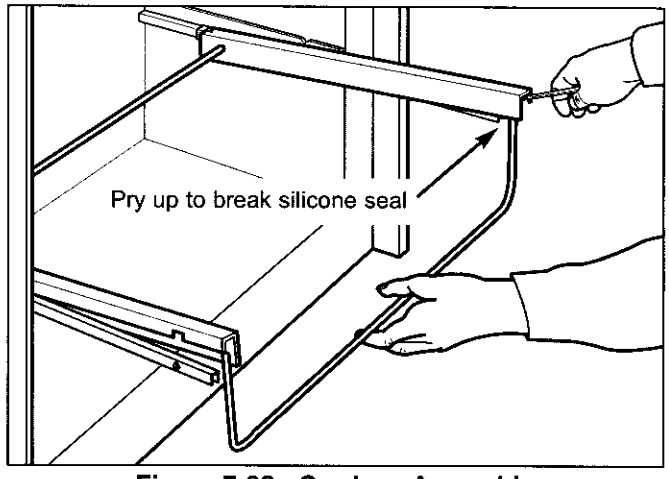

Figure 7-38. Carriage Assembly

Small Storage Drawer (632-3, 642-3, 661-3, 685-3, 695-3)

Small storage drawer assemblies ride on roller/slide assemblies.

To remove a small storage drawer assembly (See Figure 7-39):

1. Pull drawer open until it stops.
2. Lift front of drawer up.
3. Pull drawer out further to bypass stop.
4. Drop front of drawer down while lifting rear rollers out of the roller/slide assemblies.

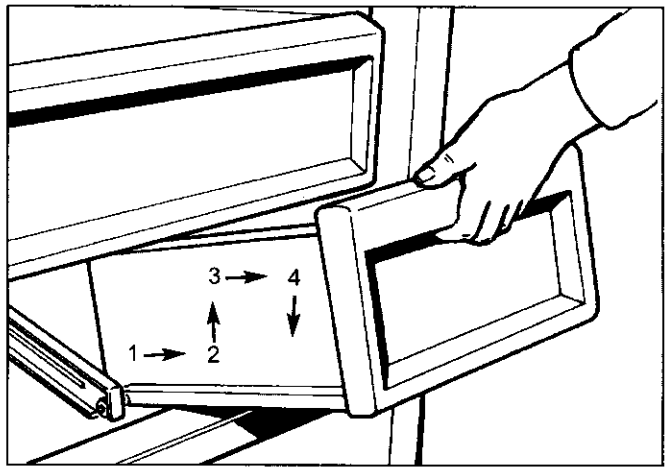

Figure 7-39. Small Storage Drawer

Control Board (All Models except 685-3, 695-3)

NOTE: *Model 685-3, 695-3 control board access and removal is covered later in this section.*

The control board is held in position by two sets of tabs behind the left side of the control panel assembly. The two forward tabs position the LCD in the control panel window, while the other two tabs secure the middle of the control board. The control board is then shielded by a control enclosure, and concealed by the light diffuser.

To remove the control board, the light diffuser must first be removed, then (See Figures 7-40 and 7-41):

1. Extract screws securing control enclosure to ceiling of compartment.
2. Lower back of enclosure while pulling it toward rear of unit.
3. Disconnect all electrical leads attached to control board.

   NOTE: *Observe orientation of membrane switch ribbon cable so it can be reconnected correctly.*
4. Expand the two tabs at middle of control board outward while pulling back of board down slightly.
5. Expand the two forward tabs outward that hold LCD in position
6. Pull control board down and toward rear of unit.

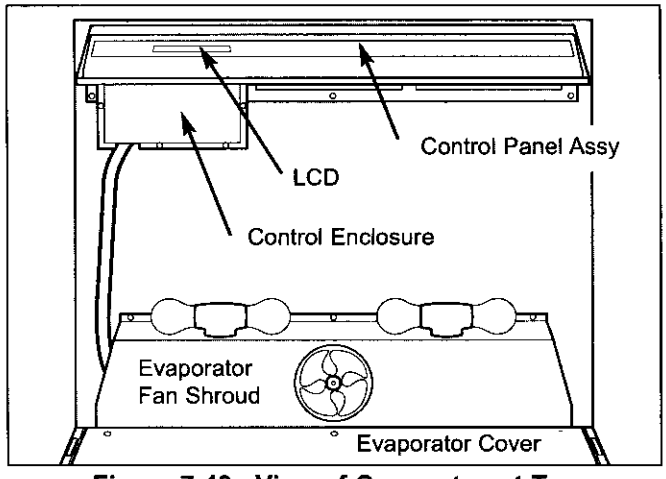

Figure 7-40. View of Compartment Top

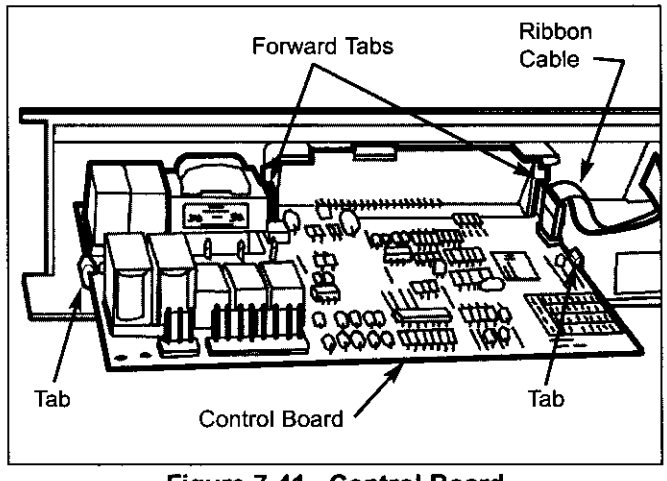

Figure 7-41. Control Board

Control Panel Assembly / Upper Front Panel Assembly (All Models)

NOTE: *Model 685-3, 695-3 vertical control panel access and removal is covered later in this section.*

Horizontal control panel assemblies and upper front panel assemblies are secured to the ceiling of a compartment by two rows of screws. The front row of screws (which are hidden) pass through spacers and fit into keyhole slots in the panel assembly. The back row of screws hold the assembly in place.

To remove a control panel assembly or upper front panel assembly, the light diffuser must be removed first, then (See Figure 7-42):

1. (If applicable), disconnect membrane switch ribbon cable from control board.
   NOTE: *Observe orientation of membrane switch ribbon cable so it can be reconnected correctly.*
2. (If applicable), disconnect control board from control panel assembly.
3. Extract back row of screws from panel assembly.
4. Push panel assembly back to line up front row of screws with keyhole slots.
5. Lower panel assembly down and pull out.

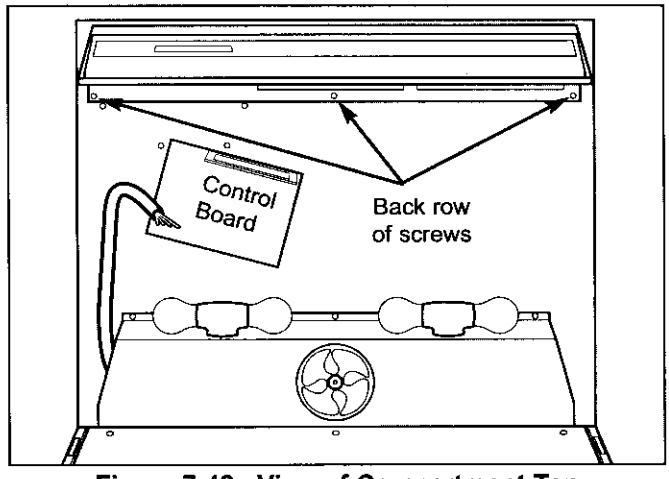

Figure 7-42. View of Compartment Top

Water Reservoir Tank Cover (685-3, 695-3)

The water reservoir is installed by sliding it back against retaining springs next to the shelf ladder. Two screws then hold it in place.

To remove the water reservoir tank cover, the light diffuser and upper front panel must be removed first, then (See Figure 7-43):

1. Extract screw at bottom rear of vertical control panel.
2. Extract screw at top center of tank cover.
3. Grasp bottom of tank cover and slide it back to depress retaining springs.
4. Swing front edge out and pull forward.

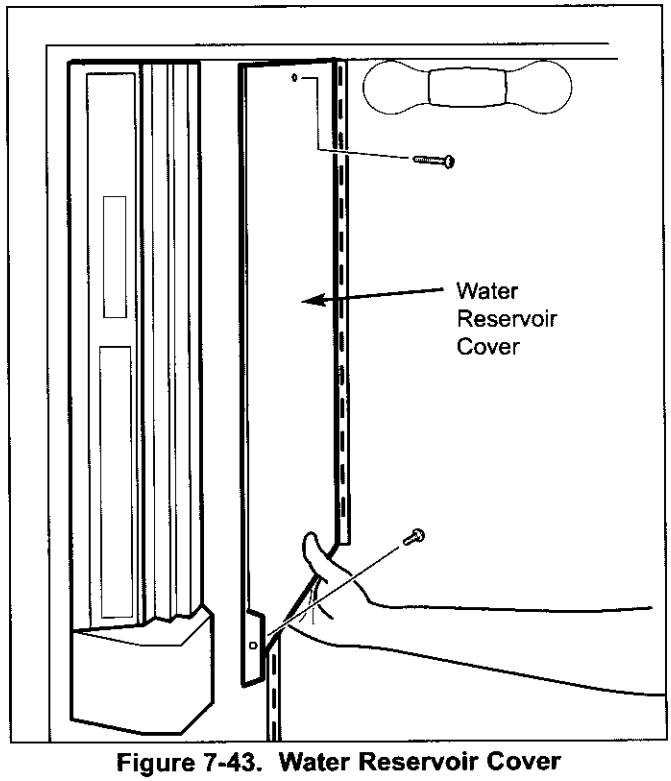

Figure 7-43. Water Reservoir Cover

Control Board Removal (685-3, 695-3)

The control board is held in position by two sets of tabs behind the control panel assembly. The two forward tabs position the LCD in the control panel window, while the other two tabs secure the middle of the control board. The control board is then shielded by a control enclosure, and concealed by the water reservoir tank cover on the mullion wall.

To remove the control board, the light diffuser, upper front panel assembly and water reservoir tank cover must first be removed, then (See Figure 7-44)

1. Extract screws securing control enclosure to wall.
2. Pull back of enclosure away from mullion wall and toward rear of unit.
3. Disconnect all electrical leads from control board.
   NOTE: *Observe orientation of membrane switch ribbon cable so it can be reconnected correctly.*
4. Expand the two tabs at middle of control board outward while pulling back of board away from wall.
5. Expand the two forward tabs outward that hold LCD in position
6. Pull control board away from wall and toward rear of unit.

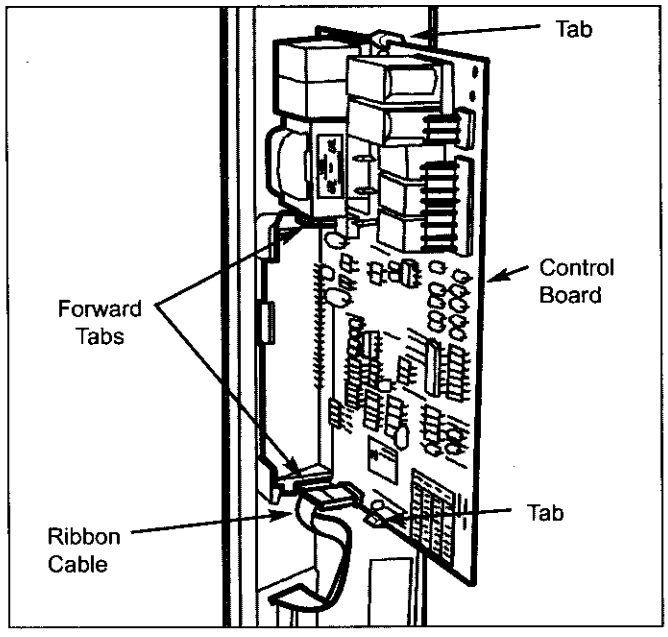

Figure 7-44. Control Board

Vertical Control Panel Assembly (685-3, 695-3)

Vertical control panel assemblies are secured to the mullion wall by screws and a sheet metal retainer.

NOTE: *It is recommended, but not necessary, to disconnect control board from control panel assembly before remove control panel assembly.*

To remove a vertical control panel assembly, the light diffuser, upper front panel and water reservoir tank cover must be removed first, then (See Figure 7-45):

1. Disconnect membrane switch ribbon cable from control board.
   NOTE: *Observe orientation of membrane switch ribbon cable so it can be reconnected correctly.*
2. Disconnect control board from control panel.
3. Extract screws at back of control panel assembly.
4. Pull panel assembly forward, from sheet metal retainer.

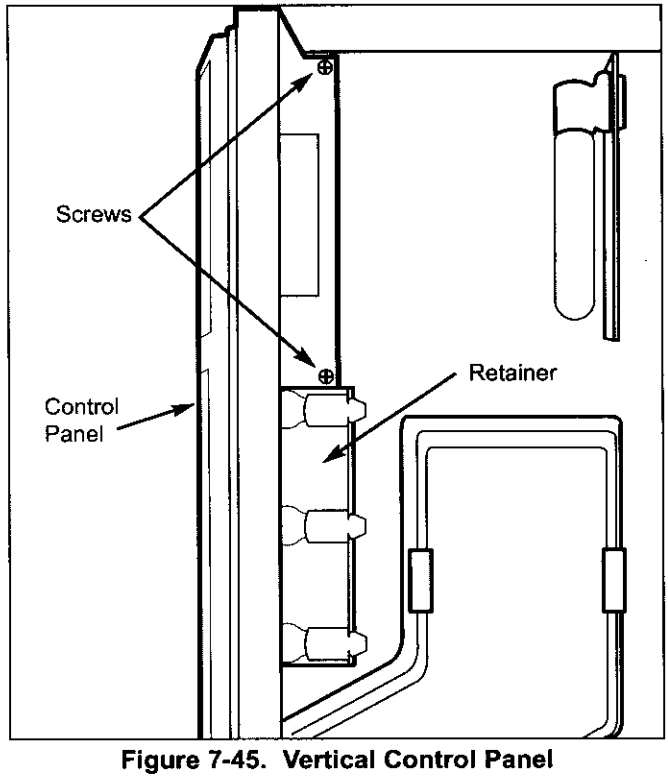

Figure 7-45. Vertical Control Panel

Water Reservoir Tank (685-3, 695-3)

The water reservoir is concealed behind the water reservoir tank cover, and is held to the mullion wall with screws fitting into spacers..

NOTE: *Before removing the water reservoir tank, turn the water supply to the unit off and drain the water from the tank.*

To remove the water reservoir tank, the light diffuser, upper front panel and water reservoir tank cover must be removed first, then (See Figure 7-46):

1. Disconnect compression fittings at inlet and outlet of water reservoir tank.
2. Remove mounting screws and lift out.

NOTE: *After reinstalling a water reservoir tank, the WATER button at the door dispenser must be depressed for approximately two minutes to refill the tank.*

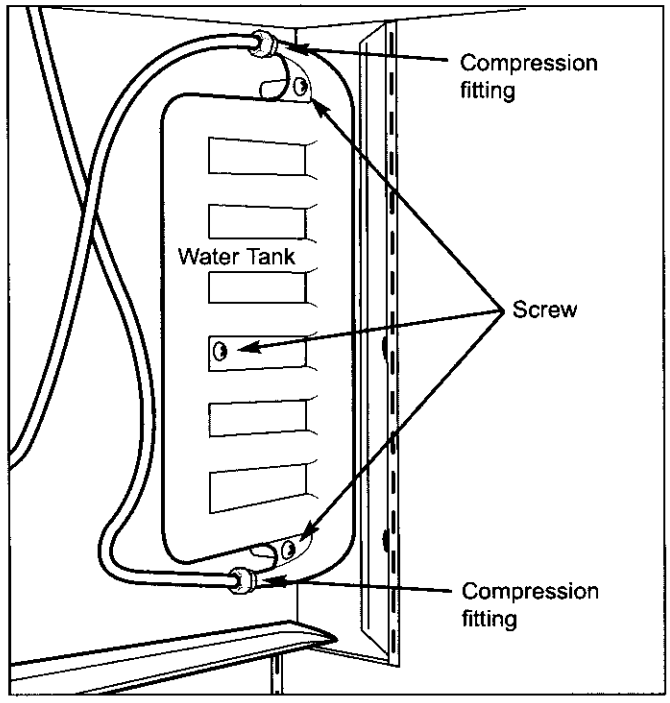

Figure 7-46. Water Reservoir Tank

Refrigerator Evaporator Cover (All Models)

The bottom of an evaporator cover is secured by slots in the side flanges fitting over pegs at the bottom of each shelf ladder. At the top, screws hold the evaporator cover to the evaporator fan shroud. On models 685-3 and 695-3, there is also a screw just below the water reservoir tank cover.

To remove an evaporator cover, the light diffuser must be removed first, then (See Figure 7-47):

1. Extract screws at top of evaporator cover.
   NOTE: *On models 685-3 and 695-3, also extract the screw just below the water reservoir tank cover.*
2. Tilt evaporator cover forward and lift off of pegs.

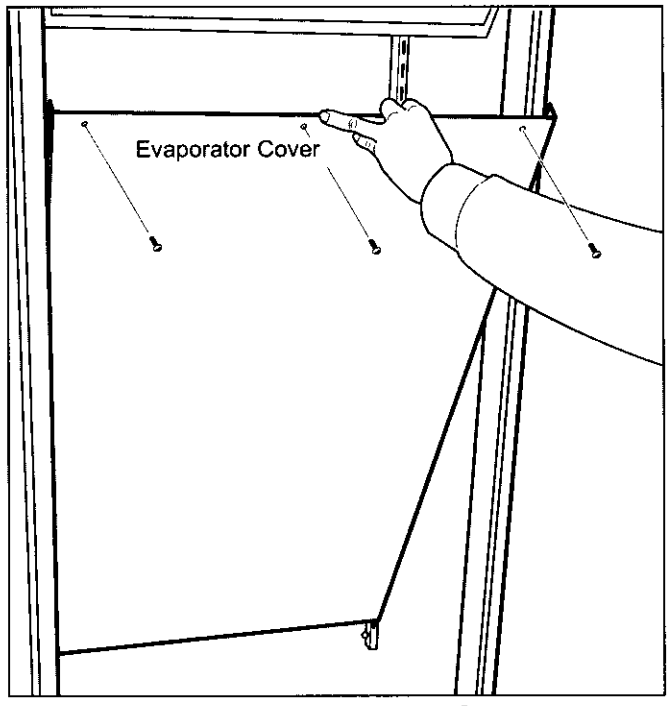

Figure 7-47. Evaporator Cover

Evaporator Fan Shroud Assembly (All Models)

Evaporator fan shroud assemblies are secured to the ceiling of the compartment with screws.

To remove an evaporator fan shroud assembly, the light diffuser and evaporator cover must be removed first, then (See Figure 7-48):

1. Extract mounting screws.
2. Lower assembly and disconnect lighting wire harness.

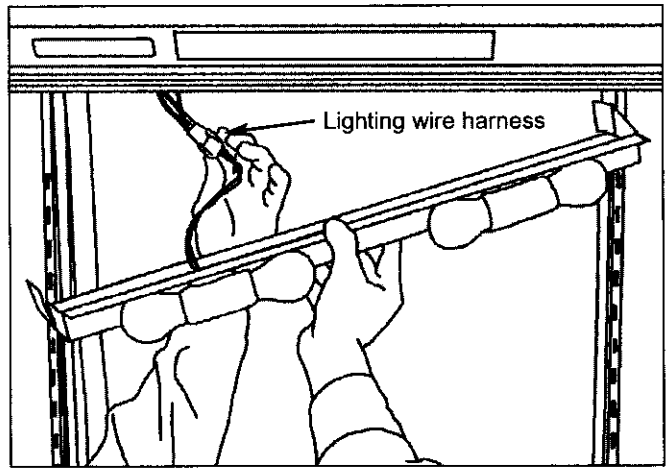

Figure 7-48. Fan Shroud

Refrigerator Evaporator Fan Assembly (All Models)

Evaporator fan assemblies are secured to the ceiling of the compartment with screws.

To remove an evaporator fan assembly, the light diffuser, evaporator cover and fan shroud must be removed first, then (See Figure 7-49):

1. Disconnect fan electrical leads.
2. Extract mounting screws and pull assembly from unit.

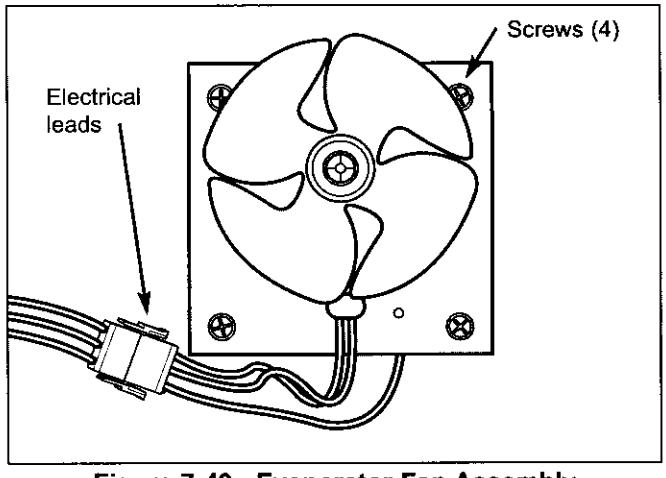

Figure 7-49. Evaporator Fan Assembly

Refrigerator Accent Light (15 Watt Light Strip) (601RG-3, 611G-3, 650G-3)

Refrigerator accent lights (a.k.a. light strips) are held in place with a light bracket at one end and grommets that fit into the light box at the other end. The light bracket and light box are secured to the ceiling with screws.

To remove a light strip, the light diffuser, evaporator cover and fan shroud must be removed first, then (See Figure 7-50):

1. Extract screws which secure light box to ceiling.
2. Disconnect light strip electrical leads.
3. Pull grommet and light strip from light box.
4. Pull light strip from light bracket.

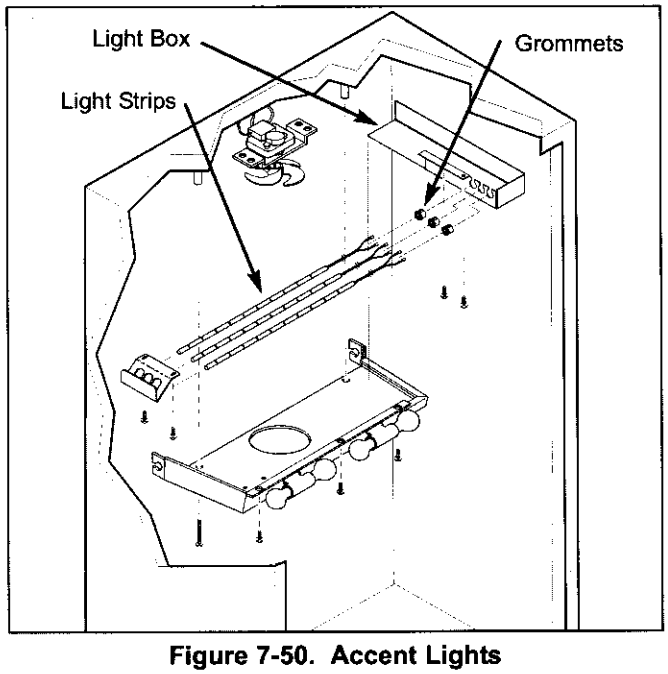

Figure 7-50. Accent Lights

Refrigerator Compartment Thermistor (All Models)

The refrigerator compartment thermistor is located behind the evaporator cover, and attached to the wall with a screw just above the evaporator.

To remove a compartment thermistor, the light diffuser and evaporator cover must be removed first, then (See Figure 7-51):

1. Disconnect thermistor electrical leads.
   NOTE: *On newer models the thermistor is hard-wired to the control board, so it will be necessary to cut the thermistor wires to remove it.*
2. Extract mounting screws an pull thermistor from unit.

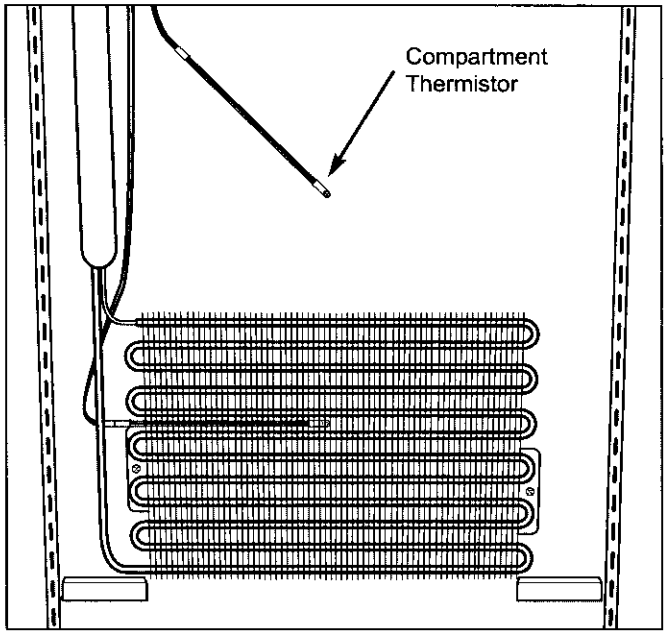

Figure 7-51. Refrigerator Compartment Thermistor

Refrigerator Evaporator Thermistor (All Models)

The refrigerator evaporator thermistor is inserted into the third opening in the evaporator fins from the top, approximately to the center of the evaporator.

To remove the refrigerator evaporator thermistor, the light diffuser and evaporator cover must be removed first, then (See Figure 7-52):

1. Disconnect thermistor electrical leads.
   NOTE: *On newer models the thermistor is hard-wired to the control board, so it will be necessary to cut the thermistor wires to remove it.*
2. Pull thermistor from evaporator fins.

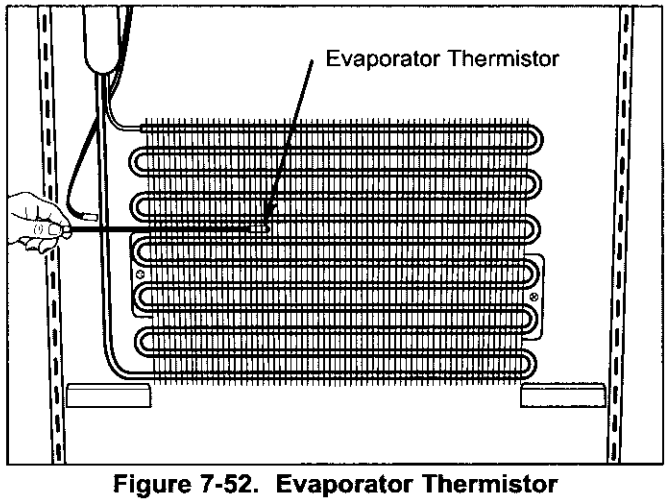

Figure 7-52. Evaporator Thermistor

FREEZER INTERIOR COSMETIC / MECHANICAL (MODEL 601F-3)

Door Shelf Assembly Removal / Adjustment (601F-3)

Removal and adjustment of door shelf assemblies is achieved by sliding the grooves in the end caps over the molded retaining ribs of the door liner.

Lift up and out to remove, push in and down to install (See Figure 7-53).

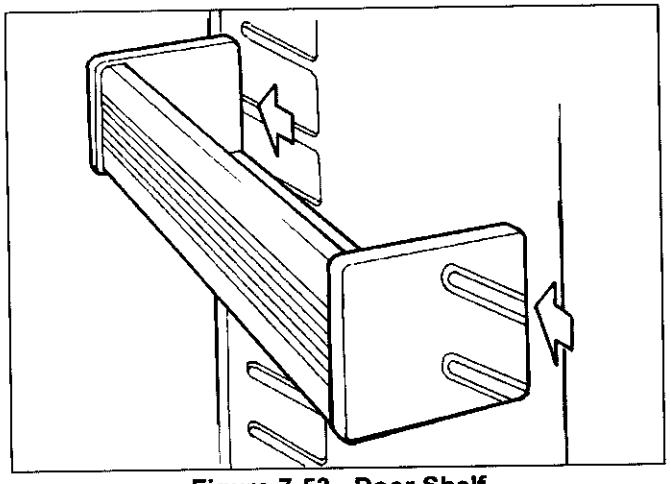

Figure 7-53. Door Shelf

Freezer Compartment Shelf Removal / Adjustment (601F-3)

Remove and adjust shelf by tilting up at front while lifting the back up and out of the shelf ladders (See Figure 7-54).

To reinstall, tilt front of shelf up and align hooks at back corners with slots in shelf ladders, then insert hooks into slots and lower front of shelf.

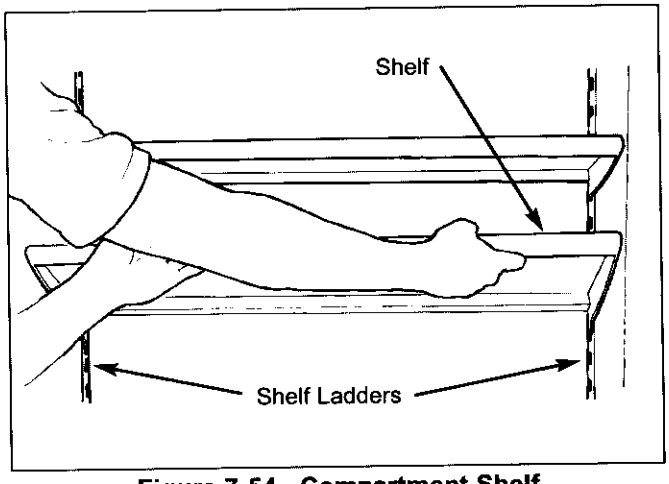

Figure 7-54. Compartment Shelf

Upper Light Diffuser (601F-3)

The side frames of the light diffuser have four inverted "T" shaped slots (two each side) which slide up over pegs protruding from the side walls. For safety purposes, retaining clips by the rear slots secure the light diffuser to the rear studs.

To remove the light diffuser (See Figure 7-55):

1. Slide fingers over retaining clips and rotate down.
2. With clips open, lift diffuser up and slide toward rear of unit until center of "T" slots line up with the pegs.
3. Then lower light diffuser and remove from unit.

⚠ WARNING

IF BULB SHOULD SEPARATE FROM BASE, DISCONNECT POWER TO UNIT BEFORE ATTEMPTING TO REMOVE BASE.

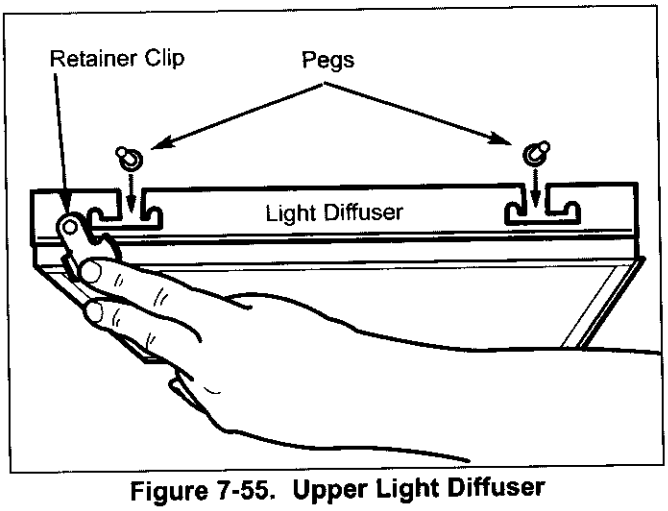

Figure 7-55. Upper Light Diffuser

Ice Bucket (601F-3)

Lift ice bucket up out of freezer basket (not shown).

Freezer Basket Assembly (601F-3)

To remove freezer basket assembly (See Figure 7-56):

1. Pull basket open until it stops.
3. Lift up at front and pull out.

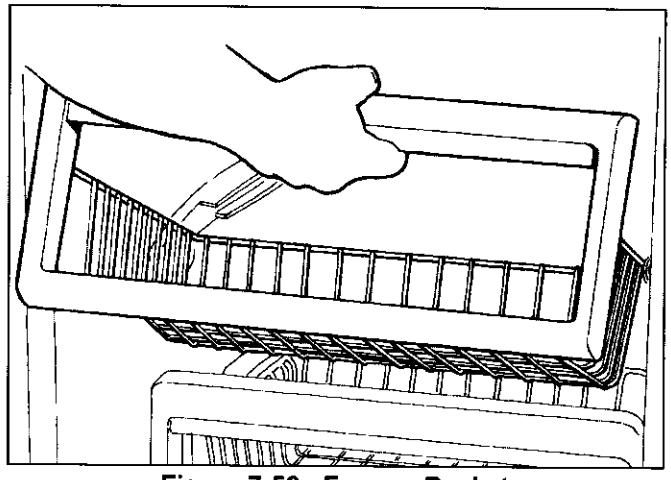

Figure 7-56. Freezer Basket

Freezer Glass Shelf (601F-3)

The glass shelf is secured to the side walls by screws that pass through the side frames.

To remove the freezer glass shelf (See Figure 7-57):

1. From underneath glass shelf, remove the two front mounting screws
2. Loosen the two rear screws.
   NOTE: *The rear screws fit into slots, so they do not need to be fully removed.*
3. Pull shelf forward slightly and lift up and out.

NOTE: *When reinstalling freezer glass shelf, make sure flange at top of freezer basket center slide support sets into the channel in freezer glass shelf front.*

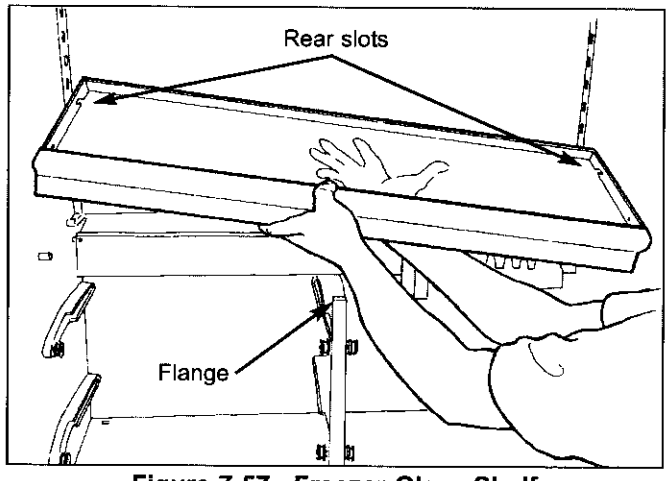

Figure 7-57. Freezer Glass Shelf

Icemaker Assembly (601F-3)

The icemaker assembly is located behind the top right freezer basket, just below the glass shelf. It is attached to the drain trough enclosure with two screws at top and one at bottom.

To remove the icemaker assembly, the top right freezer basket must first be removed, then (See Figures 7-58):

1. Disconnect ice level mechanism by sliding connecting rod to right, off of icemaker shut-off arm, allowing ice level arm to drop out of the way.
2. Extract screw at bottom left of icemaker.
3. Extract screws at top of icemaker.
4. Pull forward and disconnect electrical leads.

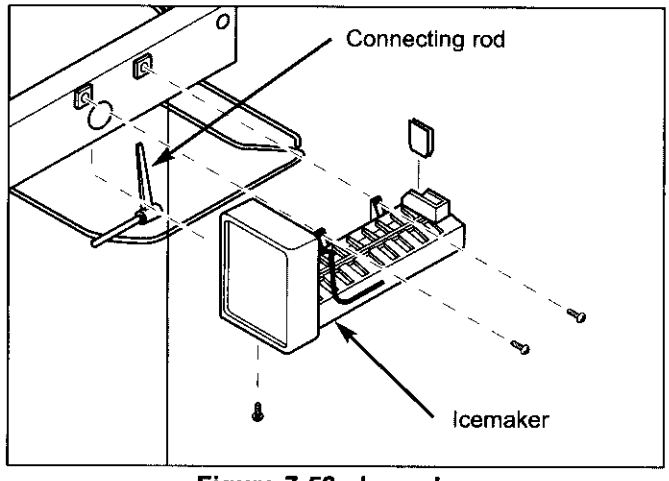

Figure 7-58. Icemaker

Drain Trough Enclosure (601F-3)

The drain trough enclosure is secured to the back wall of the compartment with screws and plastic supports, just below the freezer glass shelf.

NOTE: *It is not necessary to remove the freezer glass shelf, icemaker or compartment thermistor in order to remove the drain trough enclosure.*

To remove drain trough enclosure (See Figure 7-59):

1. Extract screws at top corners of enclosure.
2. Extract screws along bottom of enclosure.
3. Lean enclosure forward, disconnect thermistor, icemaker and icemaker switch electrical leads, then pull enclosure out.

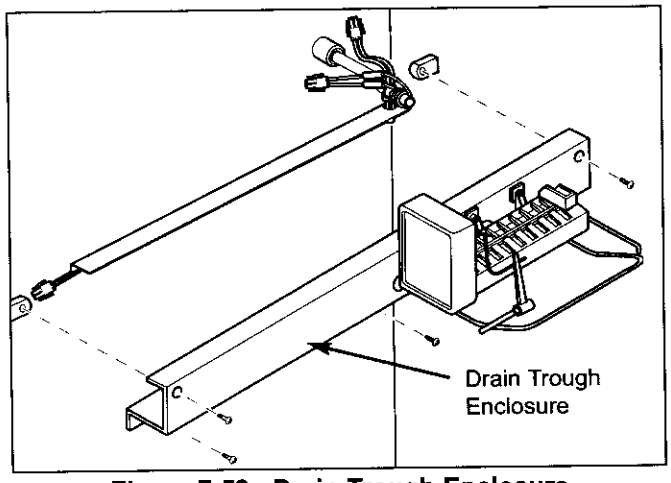

Figure 7-59. Drain Trough Enclosure

Freezer Compartment Thermistor (601F-3)

The freezer compartment thermistor is attached to the bottom center of the drain trough enclosure, just above the top center freezer basket slide. The thermistor wire leads attach to the wire harness behind the drain trough enclosure.

To remove the compartment thermistor, the drain trough enclosure must be disconnected from the back wall first, then (See Figure 7-60):

1. Disconnect thermistor from wire harness.
   NOTE: *On newer models the thermistor is hard-wired to the control board, so it will be necessary to cut the thermistor wires to remove it.*
2. Extract thermistor mounting screw.

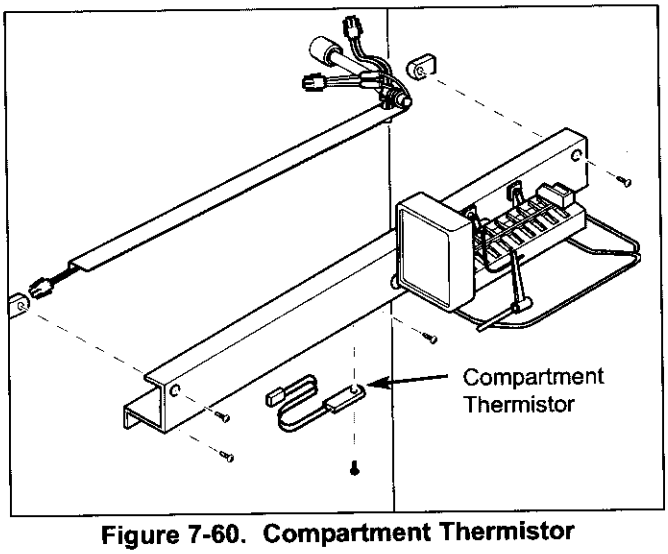

Figure 7-60. Compartment Thermistor

Icemaker Fill Tube Heater (601F-3)

The icemaker fill tube and fill tube heater are located at top right of icemaker, just below freezer glass shelf and above the drain trough enclosure. The icemaker fill tube heater plugs into the wire harness behind the drain trough enclosure.

To remove the fill tube heater, the drain trough enclosure must be disconnected from the back wall first, then (See Figure 7-61):

1. Disconnect fill tube heater from wire harness.
2. Slide fill tube heater off of fill tube.

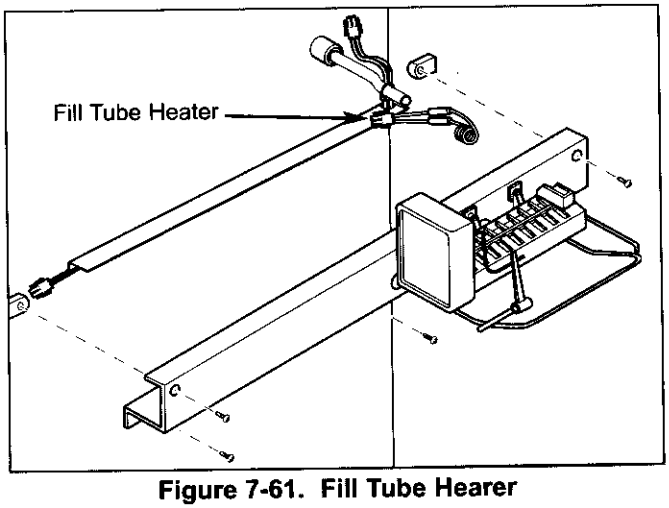

Figure 7-61. Fill Tube Hearer

Freezer Drain Tube Heater (601F-3)

The braided wire drain tube heater is connected to the wire harness behind the drain trough enclosure.

To remove the heater, drain trough enclosure must be disconnected from back wall, then (See Figure 7-62):

1. Disconnect heater from wire harness
2. Extract clamp which holds heater in place, and pull drain tube heater from drain tube.

NOTE: *When replacing the drain tube heater, it is necessary to insert it a minimum of 3" into the drain tube.*

Drain Trough Heater (601F-3)

The drain trough heater consists of a braided wire heater sandwiched between two strips of aluminum foil, one of which has adhesive on the outside to hold the heater to the bottom of the drain trough.

To remove the heater, drain trough enclosure must be disconnected from back wall, then (See Figure 7-62):

1. Disconnect heater from wire harness
2. Peel heater from bottom of drain trough.

NOTE: *When replacing the drain trough heater, bottom of drain trough must be dry in order for heater to stick.*

Control Board (601F-3)

The control board is held in position by two sets of tabs behind the left side of the control panel assembly. The two forward tabs position the LCD in the control panel window, while the other two tabs secure the middle of the control board. The control board is then shielded by a control enclosure, and concealed by the light diffuser.

To remove the control board, the light diffuser must first be removed, then (See Figures 7-63 and 7-64):

1. Extract screws securing control enclosure to ceiling of compartment.
2. Lower back of enclosure while pulling it toward rear of unit.
3. Disconnect all electrical leads from control board.
   NOTE: *Observe orientation of membrane switch ribbon cable so it can be reconnected correctly.*
4. Expand the two tabs at middle of control board outward while pulling back of board down slightly.
5. Expand the two tabs outward that hold LCD.
6. Pull control board down and toward rear of unit.

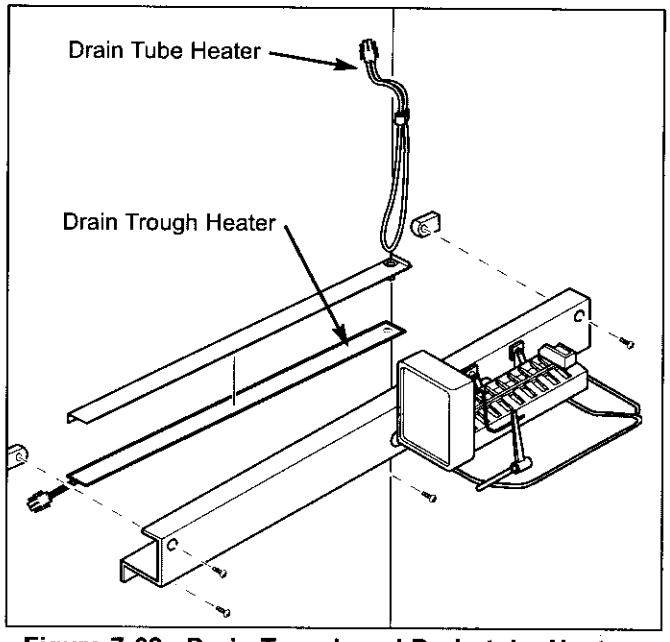

Figure 7-62. Drain Trough and Drain tube Heaters

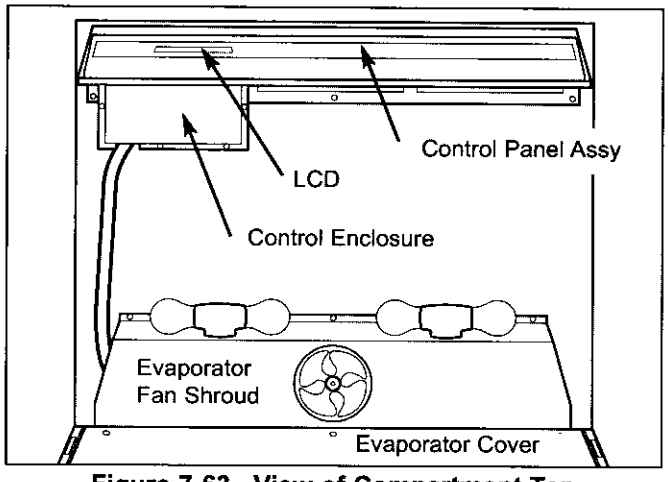

Figure 7-63. View of Compartment Top

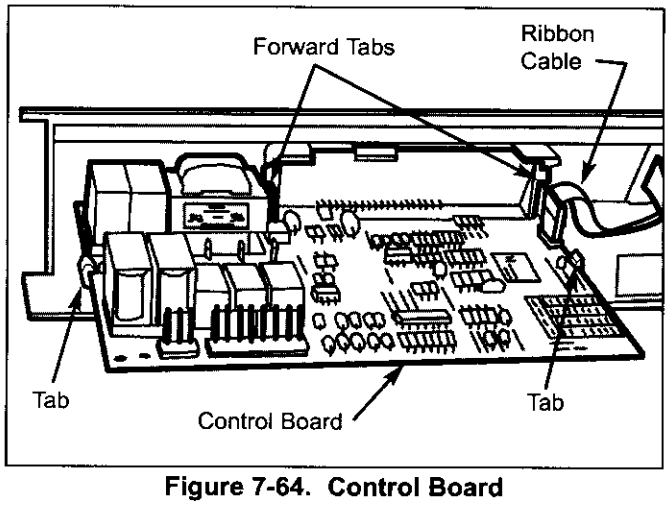

Figure 7-64. Control Board

Control Panel Assembly (601F-3)

The control panel assembly is secured to the ceiling of the compartment by two rows of screws. The front row of screws (which are hidden) pass through spacers and fit into keyhole slots in the panel assembly. The back row of screws hold the assembly in place.

To remove a control panel assembly, the light diffuser must be removed first, then (See Figure 7-65):

1. Disconnect membrane switch ribbon cable from control board.
   NOTE: *Observe orientation of membrane switch ribbon cable so it can be reconnected correctly.*
2. Detach control board from control panel assembly.
3. Extract back row of screws from panel assembly.
4. Push panel assembly back to line up front row of screws with keyhole slots.
5. Lower panel assembly down and pull out.

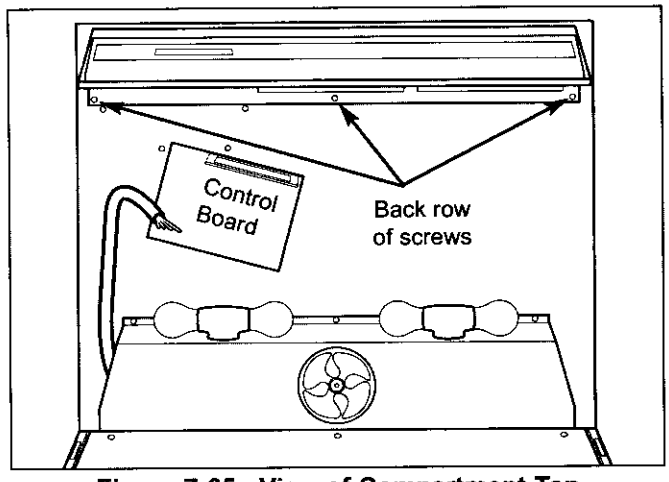

Figure 7-65. View of Compartment Top

Freezer Evaporator Fan Shroud Assembly (601F-3)

The Evaporator fan shroud assembly is secured to the ceiling of the compartment with screws.

To remove the evaporator fan shroud assembly, the light diffuser, freezer glass shelf and evaporator cover must be removed first, then (See Figure 7-66):

1. Extract mounting screws.
2. Lower assembly and disconnect lighting wire harness.

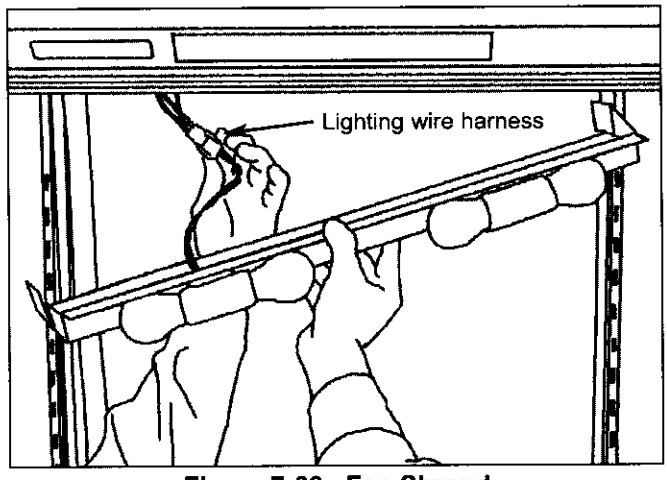

Figure 7-66. Fan Shroud

Freezer Evaporator Fan Assembly (601F-3)

Evaporator fan assemblies are secured to the ceiling of the compartment with screws.

To remove an evaporator fan assembly, the light diffuser, freezer glass shelf, evaporator cover and fan shroud must be removed first, then (See Figure 7-67):

1. Disconnect fan electrical leads.
2. Extract mounting screws and pull assembly from unit.

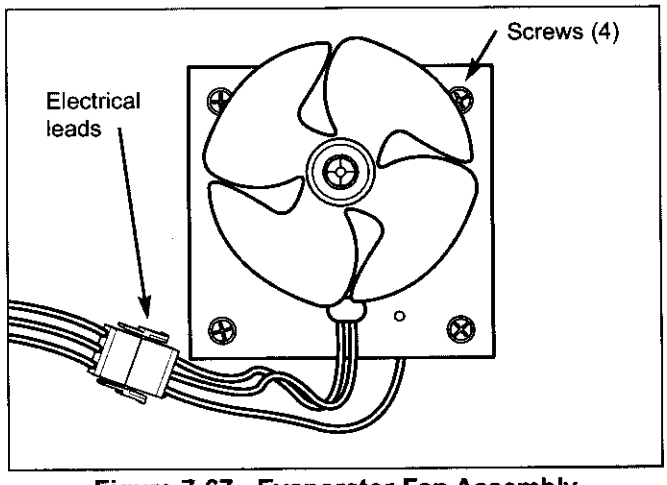

Figure 7-67. Evaporator Fan Assembly

Freezer Evaporator Thermistor (601F-3)

The freezer evaporator thermistor is attached to the left evaporator bracket.

To remove the freezer evaporator thermistor, the light diffuser, freezer glass shelf and evaporator cover must be removed first, then (See Figure 7-68):

1. Disconnect thermistor electrical leads.
   NOTE: *On newer models the thermistor is hard-wired to the control board, so it will be necessary to cut the thermistor wires to remove it.*
2. Extract mounting screws an pull thermistor from unit.

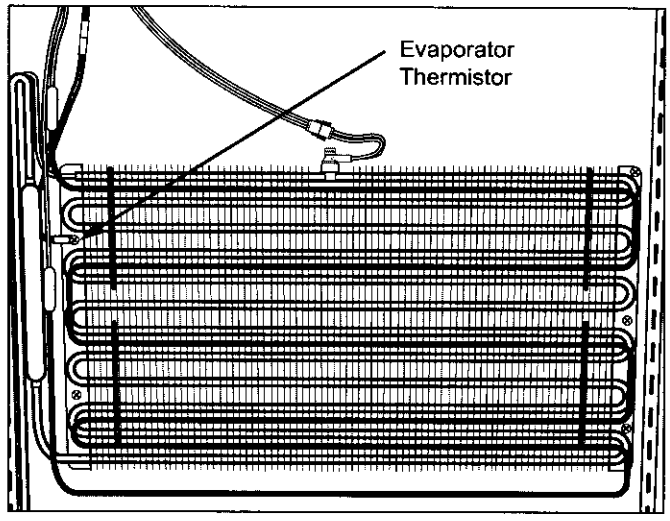

Figure 7-68. Freezer Evaporator Thermistor

Defrost Terminator (601F-3)

The defrost terminator is attached to the top center pass of the evaporator.

To remove the defrost terminator, the light diffuser, freezer glass shelf and evaporator cover must be removed first, then (See Figure 7-69):

1. Disconnect terminator electrical leads.
2. Pull terminator off of evaporator.

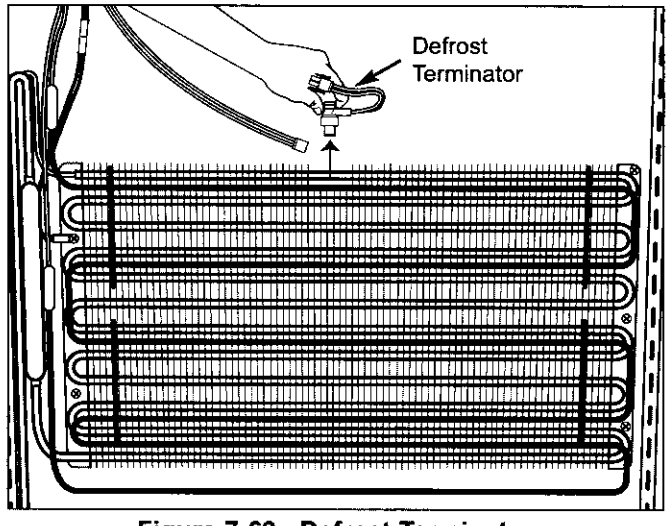

Figure 7-69. Defrost Terminator

Evaporator Defrost Heater (601F-3)

The defrost heater is inserted into channels in the fins of the evaporator. C-shaped heater clips are hooked from one evaporator tube to another, over the heater, to hold it in place.

To remove the defrost heater, the light diffuser, freezer glass shelf and evaporator cover must be removed first, then (See Figure 7-70):

1. Disconnect heater electrical leads.
2. With a needle-nose pliers, or similar tool, detach heater clips by pulling tab of clips away from evaporator.
3. Gently pull defrost heater from fins of evaporator.

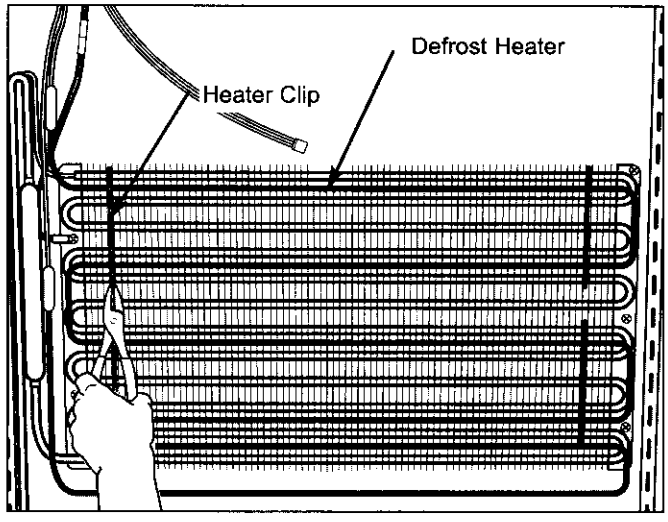

Figure 7-70. Defrost Heater

FREEZER INTERIOR COSMETIC / MECHANICAL (MODELS 611-3, 611G-3, 650-3, 650G-3)

Ice Bucket (611-3, 611G-3, 650-3, 650G-3)

Remove ice bucket by lifting out of left rear corner of upper freezer basket (not shown).

Freezer Light Bulb (611-3, 611G-3, 650-3, 650G-3)

There is no light diffuser in the freezer of these models. The light bulbs are located in front of evaporator cover.

Turn bulb counterclockwise to remove, clockwise to install (See Figure 7-71).

⚠ WARNING

IF BULB SHOULD SEPARATE FROM BASE, DISCONNECT POWER TO UNIT BEFORE ATTEMPTING TO REMOVE BASE.

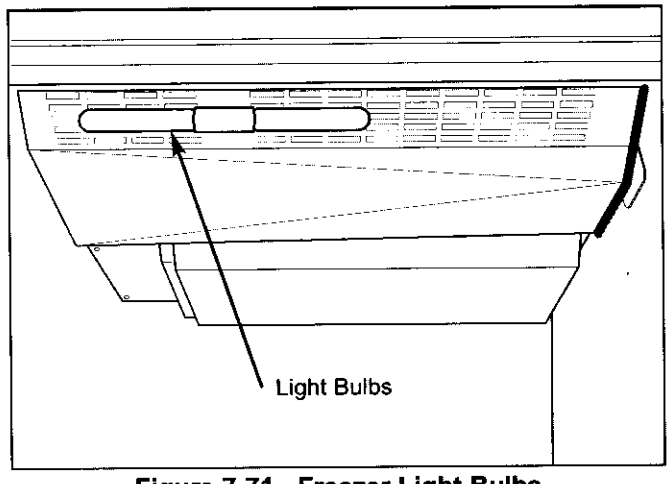

Figure 7-71. Freezer Light Bulbs

Freezer Upper Basket Assembly
(611-3, 611G-3, 650-3, 650G-3)

To remove upper basket assembly (See Figure 7-72):

1. Pull upper basket fully forward.
2. Lift front of basket up slightly, then push upper basket slides back to disengage slide hooks from the slots at rear of basket assembly.
3. Continue pulling basket forward while lifting it up off of the slides.

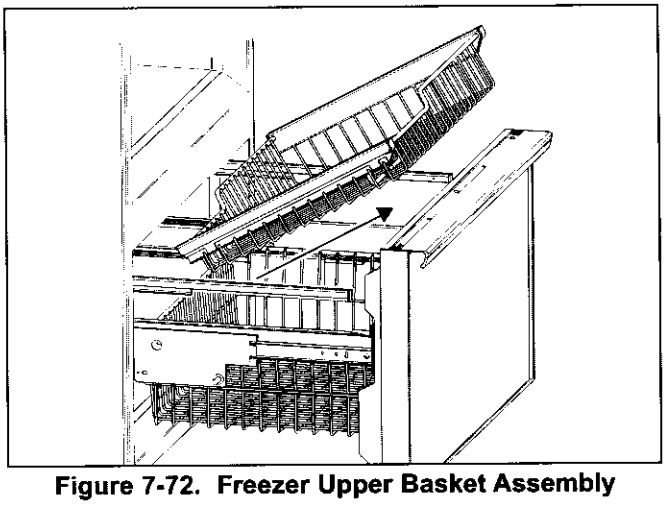

Figure 7-72. Freezer Upper Basket Assembly

Freezer Lower Basket Assembly
(611-3, 611G-3, 650-3, 650G-3)

To remove a lower basket assembly, start with the freezer drawer fully open, and upper basket fully in, or removed. Then, lift the lower freezer basket up, off of the basket retainers, and out of the freezer compartment. (See Figure 7-73)

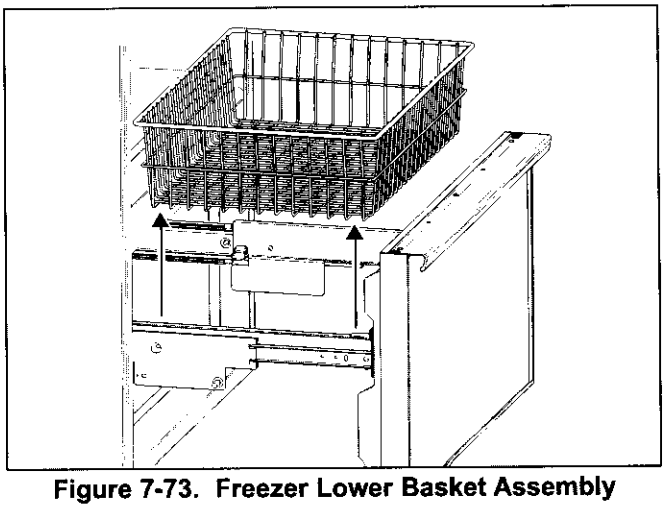

Figure 7-73. Freezer Lower Basket Assembly

Upper Freezer Basket Full Extension Slide
(611-3, 611G-3, 650-3, 650G-3)

The upper freezer basket full extension slides are attached to the side walls of the freezer with screws.

To remove an upper freezer basket full extension slide, first remove the drawer front assembly and both freezer baskets, then extract the slide mounting screws and pull the slide from the freezer compartment. (See Figure 7-74)

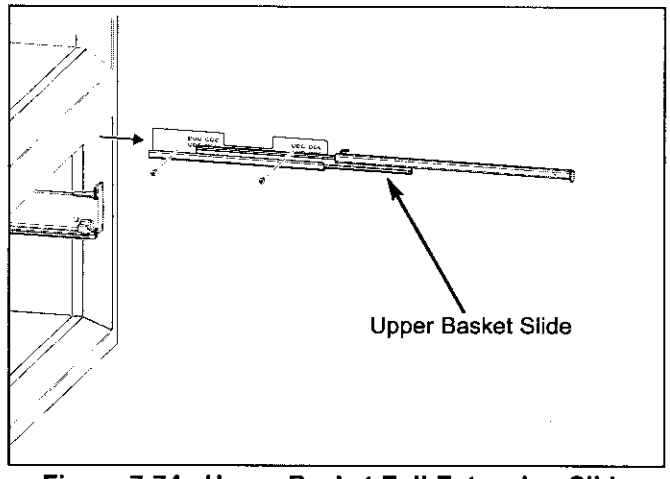

Figure 7-74. Upper Basket Full Extension Slide

Freezer Drawer Slide Rail Assembly
(611-3, 611G-3, 650-3, 650G-3)

The drawer slide rail assemblies are attached to the full extension drawer slides with screws.

To remove a drawer slide rail assembly, first remove the drawer front assembly and the lower freezer basket, then (See Figure 7-75):

1. Extend slide rail out fully.
2. Extract slide rail mounting screws, then lift slide rail from the slide.

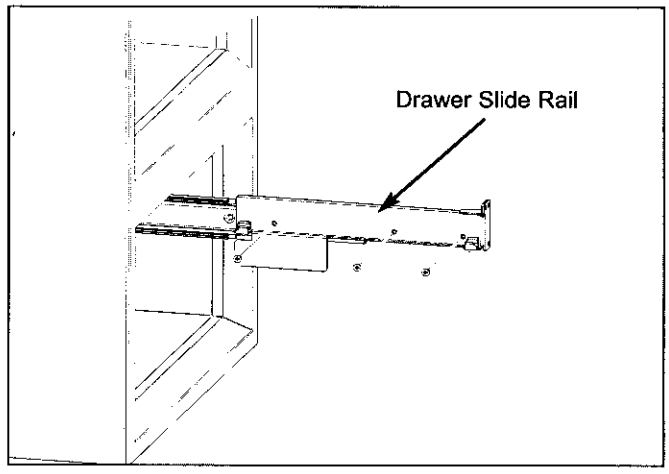

Figure 7-75. Freezer Drawer Slide Rail

Freezer Full Extension Drawer Slide Assembly
(611-3, 611G-3, 650-3, 650G-3)

The full extension drawer slide assemblies are attached to the side walls with screws.

To remove a full extension drawer slide assembly, first remove the drawer front assembly, lower freezer basket and drawer slide rail assembly, then (See Figure 7-76):

1. Extend drawer slide until front access hole lines up with front mounting screw.
2. Extract slide mounting screws, then pull slide from the freezer compartment.

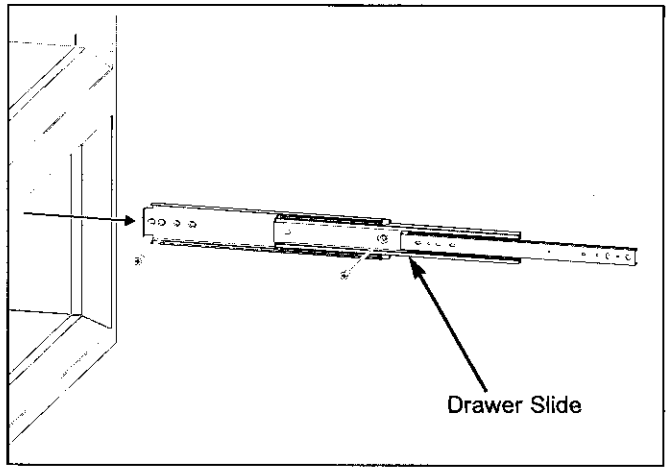

Figure 7-76. Full Extension Drawer Slide Assy.

Freezer Drawer Closer Assembly
(611-3, 611G-3, 650-3, 650G-3)

The drawer closer assembly is attached to the left side wall with screws.

To access and remove a drawer closer assembly, first remove the drawer front assembly and the lower freezer basket. Then, extract the screws that secure the drawer closer to the side wall. (See Figure 7-77)

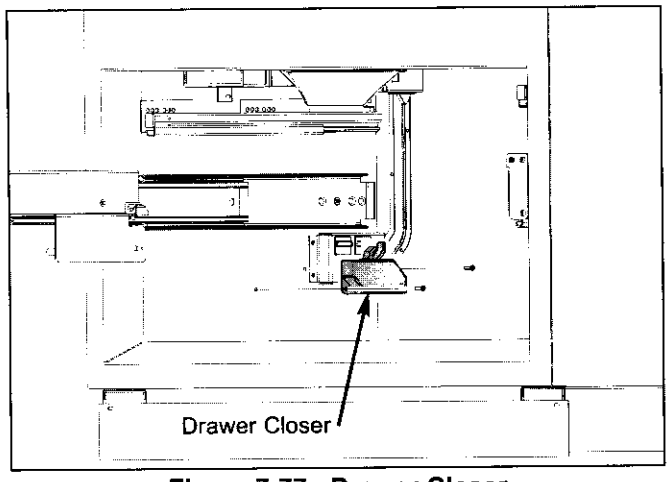

Figure 7-77. Drawer Closer

Freezer Fan and/or Light Switch
(611-3, 611G-3, 650-3, 650G-3)

The fan and light switches are in the lower switch enclosure, which is attached to the side wall with screws.

To remove a fan or light switch, first remove the drawer front assembly and the lower freezer basket, then (See Figure 7-78):

1. Extract switch box mounting screws.
2. Flip the switch box over and disconnect switch electrical leads.
3. Depress the tabs at back side of switch and push switch from hole in switch box.

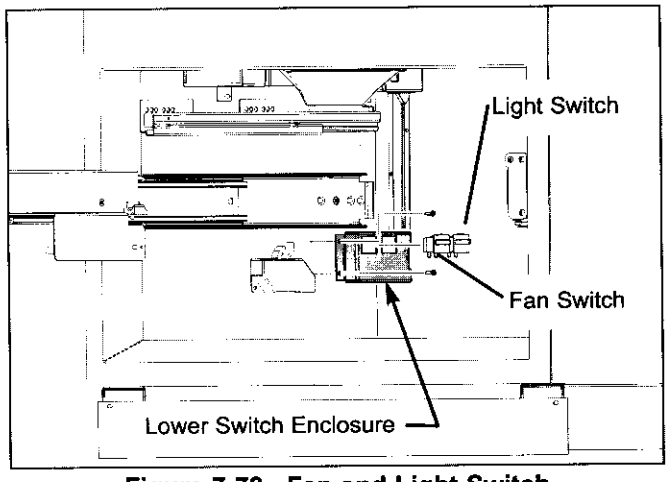

Figure 7-78. Fan and Light Switch

Icemaker Assembly **(611-3, 611G-3, 650-3, 650G-3)**

The icemaker assembly is attached to the upper left-hand wall of the freezer compartment with two screws at top and one at the bottom.

To remove the icemaker assembly, first remove the drawer front assembly, lower freezer basket and upper freezer basket, then (See Figure 7-79):

1. Extract screw at bottom left of icemaker.
2. Extract screws at top of icemaker.
3. Pull icemaker forward and disconnect electrical leads.

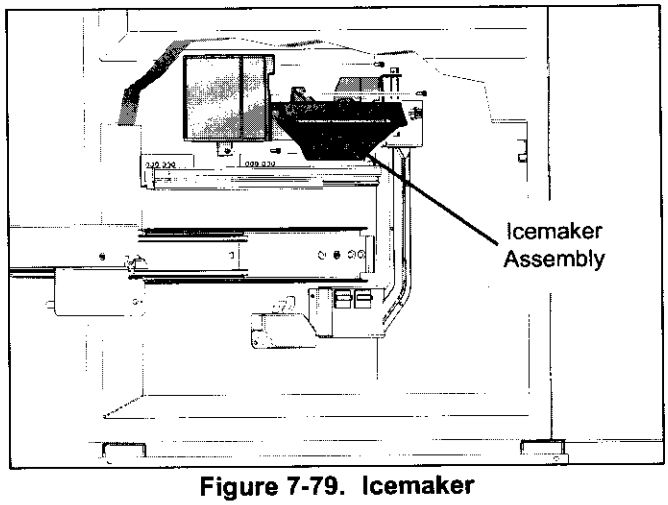

Figure 7-79. Icemaker

Freezer Ice Bucket (Icemaker) Switch
(611-3, 611G-3, 650-3, 650G-3)

The ice bucket switch is in the upper switch enclosure, which is attached to the side wall with screws.

To remove the ice bucket switch, first remove the drawer front assembly, lower and upper freezer baskets, and the icemaker, then (See Figure 7-80):

1. Extract switch box mounting screws.
2. Flip the switch box over and disconnect switch electrical leads.
3. Depress the tabs at back side of switch and push switch from hole in switch box.

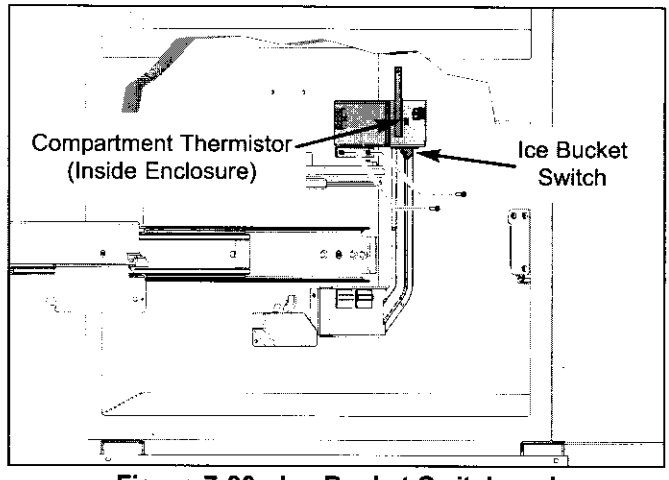

Figure 7-80. Ice Bucket Switch and Compartment Thermistor

Freezer Compartment Thermistor
(611-3, 611G-3, 650-3, 650G-3)

The freezer compartment thermistor is located inside the upper switch enclosure.

To remove the compartment thermistor, first remove the drawer front assembly, lower and upper freezer baskets, and the icemaker, then (See Figure 7-80):

1. Extract screws securing switch enclosure to wall.
2. Lower enclosure, then disconnect thermistor wire leads from wire harness.

   NOTE: *On newer models the thermistor is hard-wired to the control board, so it will be necessary to cut the thermistor wires to remove it.*
3. Extract screw which secures thermistor to inside of enclosure.

Freezer Air Duct (611-3, 611G-3, 650-3, 650G-3)

The freezer air duct is located at the top rear of the freezer compartment, directly behind evaporator cover.

To remove the air duct (See Figures 7-81):

1. Extract screws at front flange of duct.
2. Pull front flange of duct down and forward.

NOTE: *When reinstalling freezer air duct, rear flange of air duct must sit on top of the two lower white pegs in rear wall.*

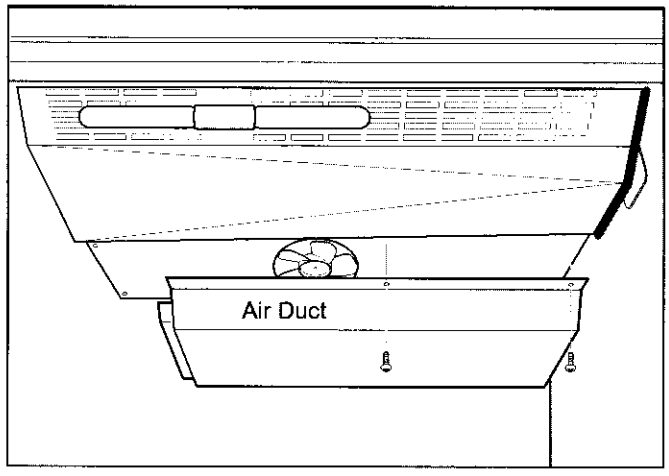

Figure 7-81. Air Duct

Freezer Evaporator Cover (611-3, 611G-3, 650-3, 650G-3)

The freezer evaporator cover is located at the top of the freezer compartment, and the right side is sealed to the right wall with silicone.

To remove the freezer evaporator cover, the freezer air duct must be removed first, then (See Figures 7-82):

1. With a knife, cut silicone seal at right side of evaporator cover.
2. Extract screws from evaporator cover back & front.
3. Pull left side of evaporator cover down and disconnect electrical leads to lights.
4. Continue pulling cover down and to the left.

NOTE: *When replacing evaporator cover it is important to reseal right side with silicone. Failure to do so could cause an icing situation in freezer compartment.*

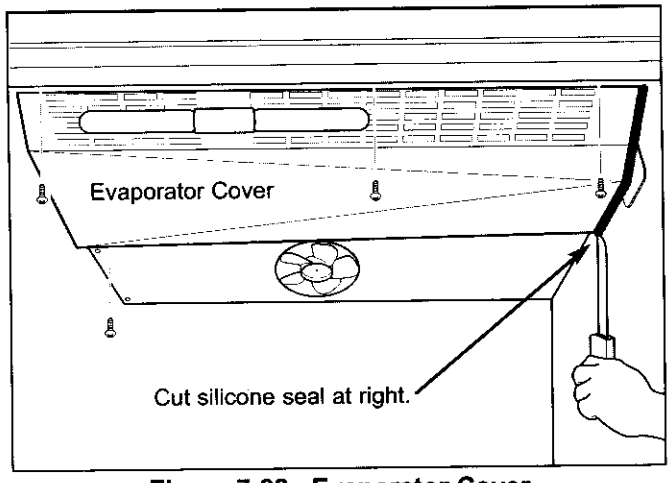

Figure 7-82. Evaporator Cover

Freezer Evaporator Fan Assembly (611-3, 611G-3, 650-3, 650G-3)

The evaporator fan is attached to the fan shroud with a bracket and screws. This assembly is located behind the evaporator cover, and above the freezer air duct.

To remove the evaporator fan assembly, the freezer air duct and freezer evaporator cover must be removed first, then (See Figures 7-83):

1. Extract screws at left side of fan shroud.
2. Tilt front edge of shroud down and disconnect fan motor wiring from wire harness.
3. Pull assembly forward and out.

   NOTE: *The freezer evaporator fan can now be removed from fan shroud.*

NOTE: *When reinstalling freezer evaporator fan assembly, the oblong holes in rear flange of fan shroud must be placed over the two <u>upper</u> white pegs in rear wall.*

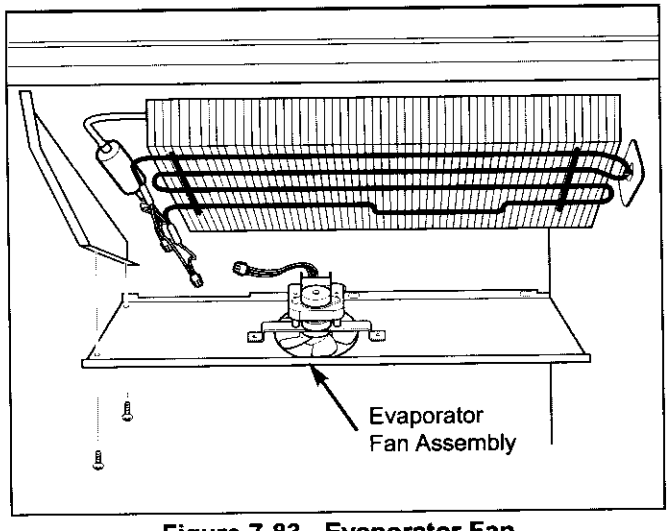

Figure 7-83. Evaporator Fan

Freezer Evaporator Thermistor (611-3, 611G-3, 650-3, 650G-3)

The freezer evaporator thermistor is attached with a screw to the left evaporator bracket.

To remove the evaporator thermistor, the freezer air duct, evaporator cover and evaporator fan assembly must be removed first, then (See Figures 7-84):

1. Disconnect thermistor wire leads from wire harness.
   NOTE: *On newer models the thermistor is hard-wired to the control board, so it will be necessary to cut the thermistor wires to remove it.*
2. Extract screw which secures thermistor to left evaporator bracket.

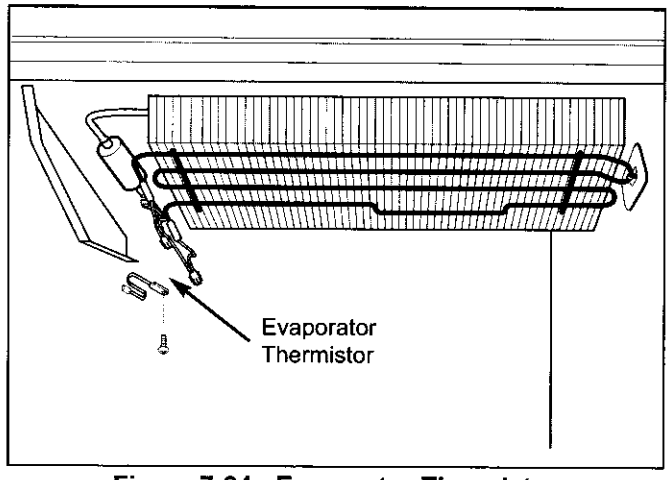

Figure 7-84. Evaporator Thermistor

Defrost Terminator (611-3, 611G-3, 650-3, 650G-3)

The defrost terminator is attached to the evaporator outlet, after the accumulator.

To remove the defrost terminator, the freezer air duct, freezer evaporator cover and evaporator fan assembly must be removed first, then (See Figures 7-85):

1. Disconnect terminator wire leads from wire harness.
2. Pull terminator off of tubing.

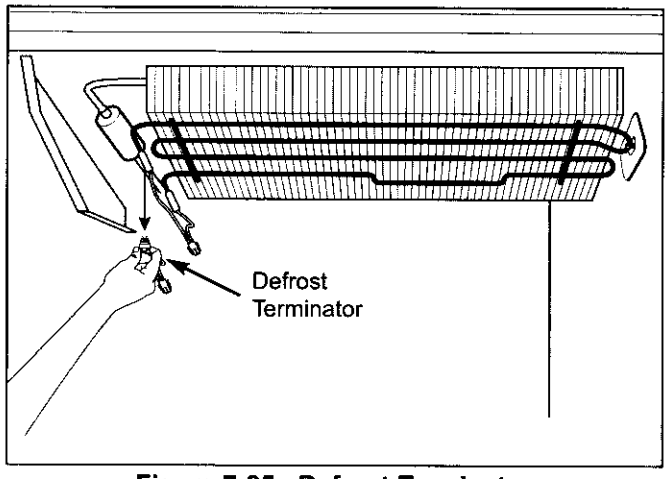

Figure 7-85. Defrost Terminator

Defrost Heater (611-3, 611G-3, 650-3, 650G-3)

The defrost heater is inserted into channels in the fins of the evaporator. C-shaped heater clips are hooked from one evaporator tube to another, over the heater, to hold it in place.

To remove the defrost heater, the freezer air duct, freezer evaporator cover and evaporator fan assembly must be removed first, then (See Figures 7-86):

1. Disconnect heater wire leads from wire harness.
2. With pliers, or similar tool, detach heater clips by pulling tab of clips away from evaporator.
3. Gently pull heater down and to the left, out of evaporator fins.

NOTE: *A heater strap is wrapped around the defrost heater, then inserted into the drain cup. This strap conducts heat into the drain cup during defrost. This strap must be reinstalled when replacing the defrost heater.*

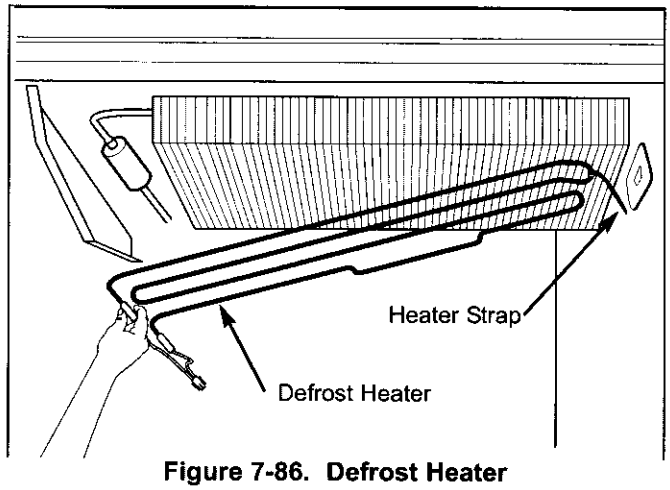

Figure 7-86. Defrost Heater

FREEZER INTERIOR COSMETIC / MECHANICAL (MODELS 632-3, 642-3, 661-3)

Freezer Door Shelf Assembly Removal and Adjustment (632-3, 642-3, 661-3)

Removal and adjustment of door shelf assemblies is achieved by sliding the grooves in the end caps over the molded retaining ribs of the door liner.

Lift up and out to remove, push in and down to install (See Figure 7-87).

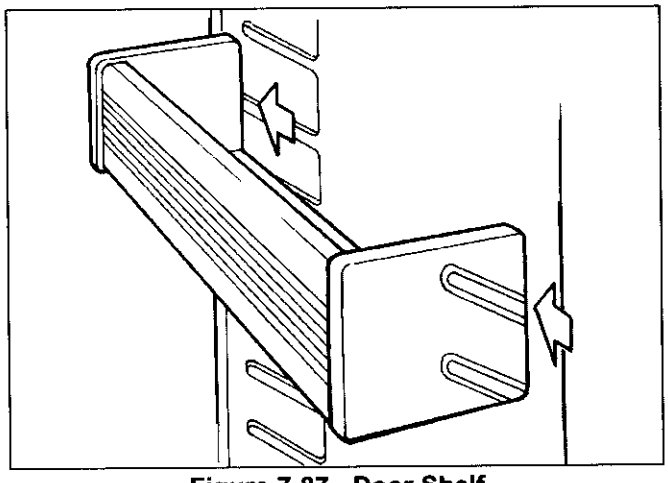

Figure 7-87. Door Shelf

Freezer Compartment Shelf Removal and Adjustment (632-3, 642-3, 661-3)

Remove and adjust shelf by tilting up at front while lifting the back up and out of the shelf ladders (See Figure 7-88).

To reinstall, tilt front of shelf up and align hooks at back corners with slots in shelf ladders, then insert hooks into slots and lower front of shelf.

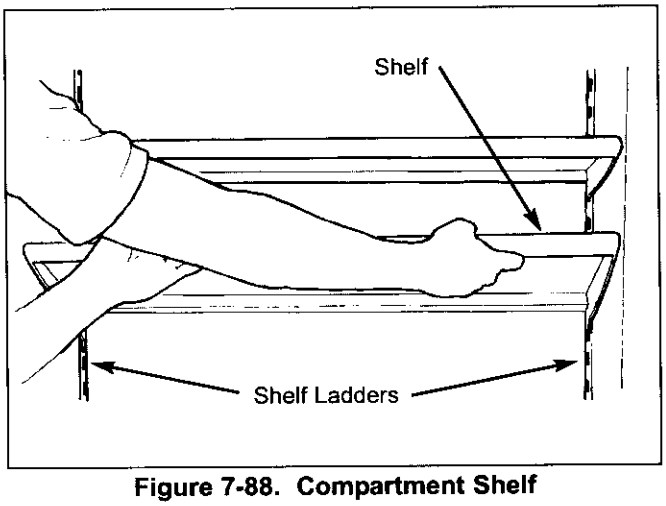

Figure 7-88. Compartment Shelf

Upper Light Diffuser (632-3, 642-3, 661-3)

Side frames of light diffusers have inverted "T" shaped slots (two each side) which fit up over pegs protruding from side walls. For safety purposes, retainer clips by the rear slots secure the light diffuser to the rear studs.

To remove the light diffuser (See Figure 7-89):

1. Slide fingers over retaining clips and rotate down.
2. With clips open, lift diffuser up and slide toward rear of unit until center of "T" slots line up with the pegs.
3. Then lower light diffuser and remove from unit.

⚠ WARNING

IF BULB SHOULD SEPARATE FROM BASE, DISCONNECT POWER TO UNIT BEFORE ATTEMPTING TO REMOVE BASE.

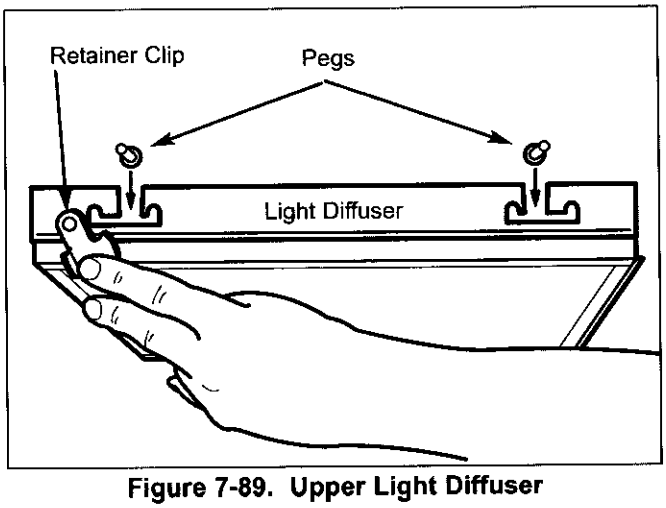

Figure 7-89. Upper Light Diffuser

Freezer Upper Front Panel Assembly (632-3, 642-3, 661-3)

The upper front panel assembly is secured to the ceiling of a compartment by two rows of screws. The front row of screws (which are hidden) pass through spacers and fit into keyhole slots in the panel assembly. The back row of screws hold the assembly in place.

To remove a upper front panel assembly, the light diffuser must be removed first, then (See Figure 7-90):

1. Extract back row of screws from panel assembly.
2. Push panel assembly back to line up front row of screws with keyhole slots.
3. Lower panel assembly down and pull out.

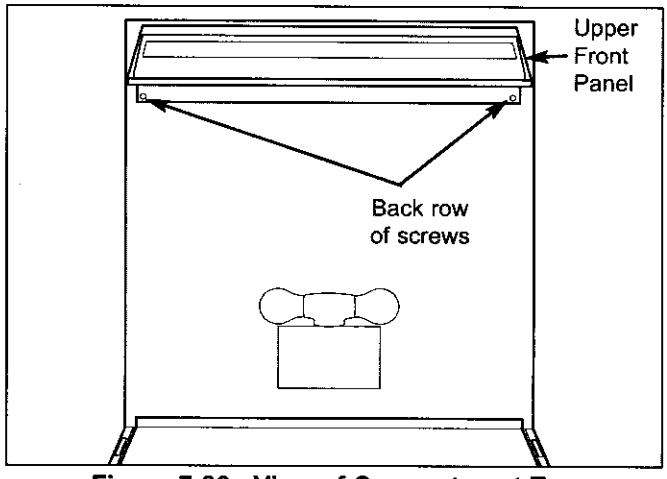

Figure 7-90. View of Compartment Top

Freezer Basket Assembly (632-3, 642-3, 661-3)

To remove freezer basket assembly (See Figure 7-91):

1. Pull basket open until it stops.
2. Lift up at front and pull out.

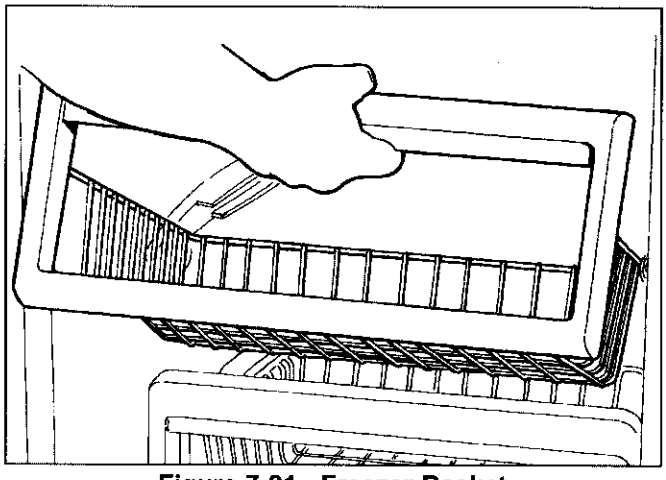

Figure 7-91. Freezer Basket

Ice Bucket Assembly (632-3, 642-3, 661-3)

A flange at the back of the ice bucket assembly hooks over the top edge of the ice bucket carriage assembly.

To remove the ice bucket assembly (See Figure 7-92):

1. Pull ice bucket open until it stops.
2. Lift up and pull forward.

NOTE: *To reinstall ice bucket, pull ice bucket carriage assembly all the way forward before attempting to hook flange at back of ice bucket over top edge of carriage assembly.*

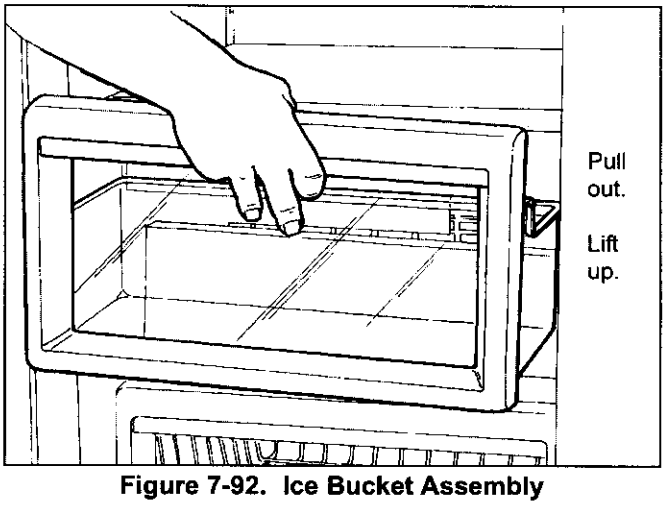

Figure 7-92. Ice Bucket Assembly

Icemaker Assembly (632-3, 642-3, 661-3)

The icemaker assembly attached to the evaporator cover with two screws at top and one at bottom.

To remove the icemaker assembly, remove the freezer shelves and ice bucket first. Push the ice bucket carriage assembly back in, then (See Figures 7-93):

1. Extract screws from evaporator shelf front.
2. Pull freezer duct/shelf forward slightly to allow greater access to icemaker assembly.
3. Disconnect ice level mechanism by sliding connecting rod to right, off of shut-off arm, allowing ice level arm to drop out of the way.
4. Extract screws from bottom left & top of icemaker.
5. Lift icemaker up slightly to clear ice level arm, then pull forward and disconnect electrical leads.

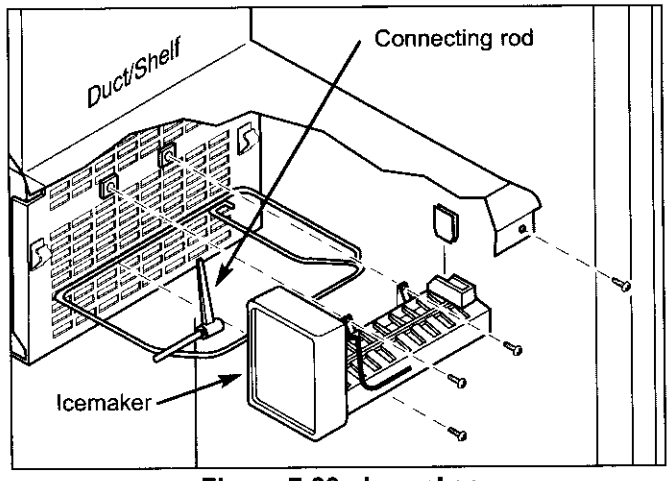

Figure 7-93. Icemaker

Ice Bucket Carriage Assembly (632-3, 642-3, 661-3)

The ice bucket carriage assembly rollers are captivated by the ice bucket slides attached to each side wall.

To remove the ice bucket carriage assembly, remove the ice bucket first and push the ice bucket carriage assembly back in, then (See Figures 7-94):

1. Extract the two front most screws from each ice bucket slide.
   NOTE: *It is not necessary to remove the screws that fit into slots at the bottom rear of each slide.*
2. Pull slides and carriage assembly forward and out.

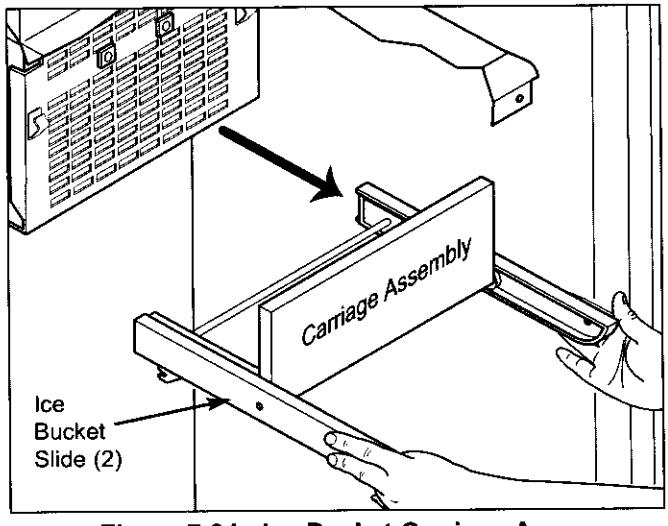

Figure 7-94. Ice Bucket Carriage Assy

Compartment Thermistor (632-3, 642-3, 661-3)

The freezer compartment thermistor is attached to the left side wall with a screw, in the icemaker area.

To remove the thermistor, remove the ice bucket and icemaker first, then (See Figures 7-95):

1. Disconnect thermistor electrical leads.
   NOTE: *On newer models the thermistor is hard-wired to the control board, so it will be necessary to cut the thermistor wires to remove it.*
2. Extract mounting screws an pull thermistor from unit.

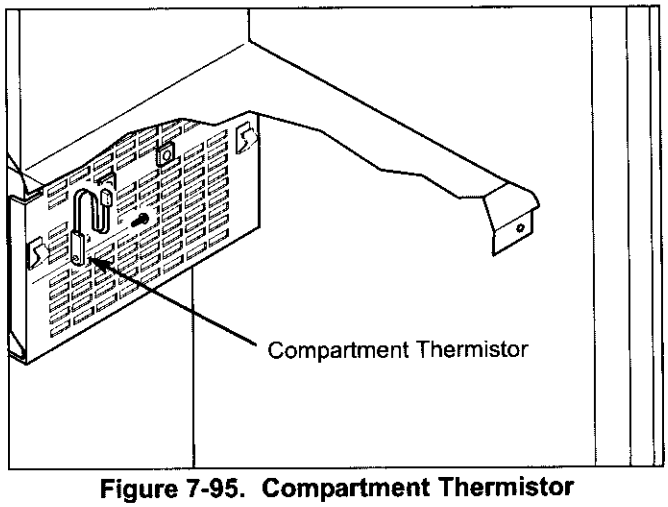

Figure 7-95. Compartment Thermistor

Freezer Lower Light Diffuser (632-3, 642-3, 661-3)

The lower light diffuser is a flexible plastic material and is held in place with diffuser retainers at top and bottom.

To remove the lower light diffuser, remove the top freezer basket first, then (See Figures 7-96):

1. Push top of diffuser down, causing it to flex and release from top retainer.
2. Pull diffuser forward.

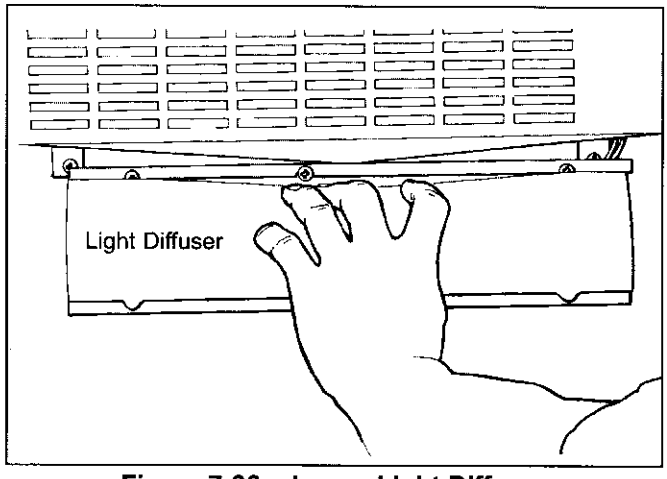

Figure 7-96. Lower Light Diffuser

Freezer Duct/Shelf Assembly (632-3, 642-3, 661-3)

The freezer duct/shelf assembly is secured at the top by slots in the side flanges fitting over pegs at the top of each shelf ladder. Screws at the shelf front hold the duct/shelf to supports in the side walls.

To remove the freezer duct/shelf assembly, remove the freezer light diffuser, freezer shelves and ice bucket first, then (See Figures 7-97):

1. Pull grounding clip terminal from top flange of duct/shelf and pull duct/shelf out.
2. Extract screws from evaporator shelf front.
3. Pull freezer duct/shelf forward and down.

NOTE: *When reinstalling freezer duct/shelf, be sure to reattach grounding clip terminal to top flange.*

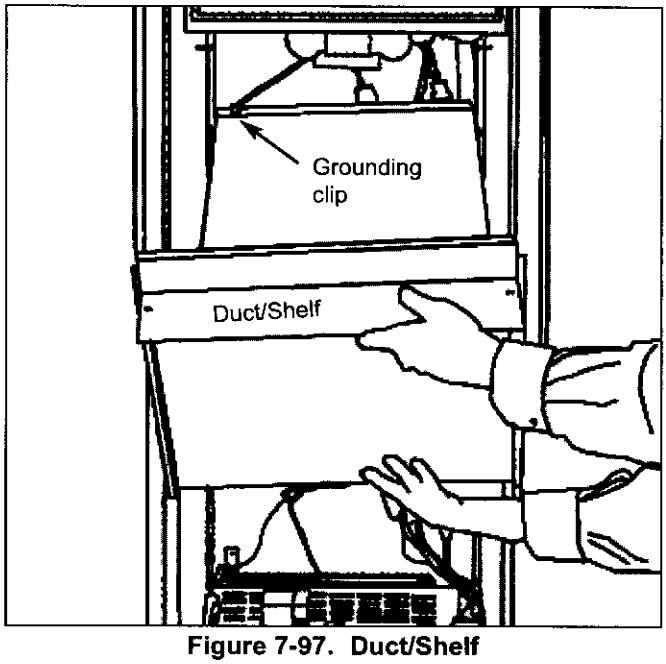

Figure 7-97. Duct/Shelf

Fill Tube Heater (632-3, 642-3, 661-3)

To remove the fill tube heater, remove the freezer shelves, ice bucket and duct/shelf assembly first, then (See Figures 7-98):

1. Disconnect heater wire leads from wire harness.
2. Slide heater off of fill tube.

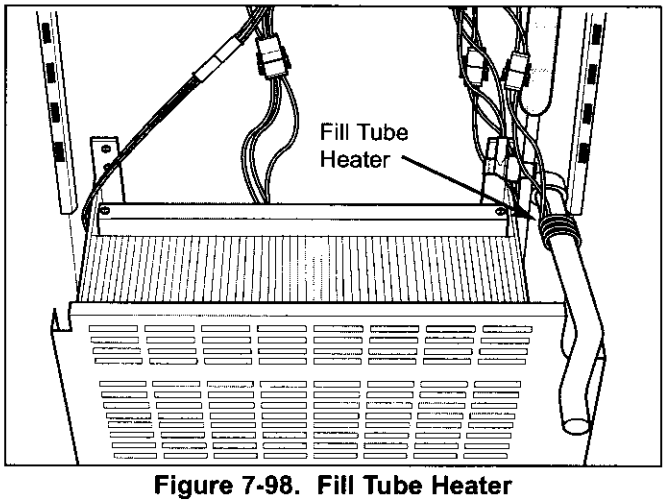

Figure 7-98. Fill Tube Heater

Defrost Terminator (632-3, 642-3, 661-3)

The defrost terminator is clipped onto the evaporator outlet, after the accumulator.

To remove the defrost terminator, remove the freezer shelves, ice bucket and duct/shelf assembly first, then (See Figures 7-99):

1. Disconnect terminator wire leads from wire harness.
2. Pull terminator off of tubing.

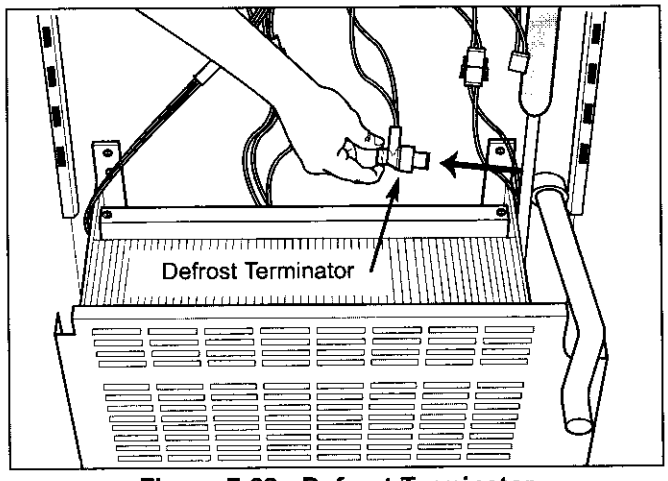

Figure 7-99. Defrost Terminator

Freezer Evaporator Fan Assembly (632-3, 642-3, 661-3)

Two screws at the top of the evaporator fan shroud secure the evaporator fan assembly to the evaporator brackets at the back of the evaporator.

To remove the evaporator fan assembly, remove the freezer shelves, ice bucket and duct/shelf assembly first, then (See Figures 7-100):

1. Disconnect evaporator fan wire leads from wire harness.
2. Extract retaining screws at top of evaporator fan shroud.
3. Pull fan assembly up, slightly forward, and out.

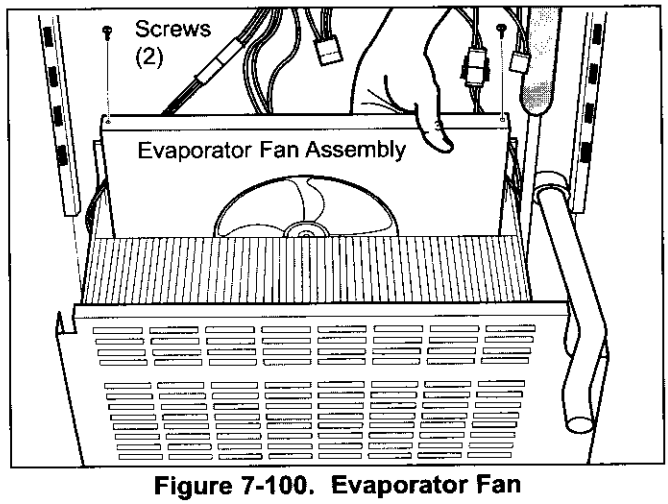

Figure 7-100. Evaporator Fan

Freezer Evaporator Cover (632-3, 642-3, 661-3)

A grounding screw secures the evaporator cover to a bracket at the front of the evaporator. The evaporator cover also bends back underneath the evaporator to act as the drain trough.

To remove the evaporator cover, remove the freezer shelves, ice bucket and duct/shelf assembly first, then (See Figures 7-101):

1. Extract ground screw at front of evaporator cover.
2. Lean evaporator cover forward to gain access to drain tube heater, then pull drain tube heater from drain tube.
3. Pull evaporator cover forward while pulling drain tube off of drain spout.

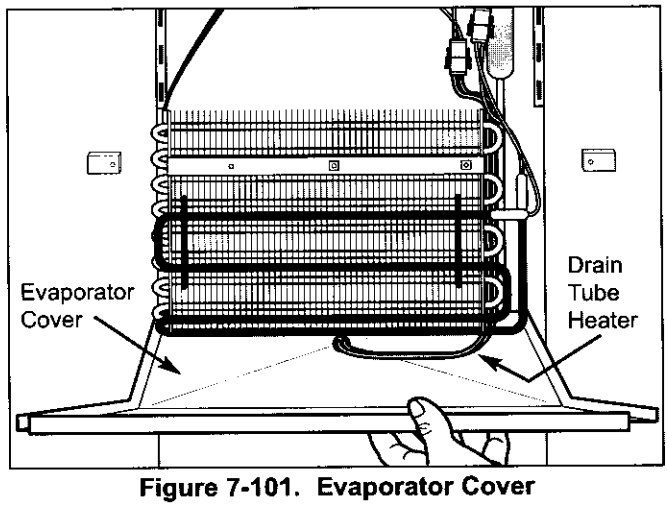

Figure 7-101. Evaporator Cover

Defrost Heater (632-3, 642-3, 661-3)

The defrost heater is inserted into channels in the evaporator fins. C-shaped heater clips hook from one evaporator tube to another, over heater, to hold it in place.

To remove the defrost heater, remove the freezer shelves, ice bucket, duct/shelf assembly and evaporator cover first, then (See Figures 7-101):

1. Disconnect heater wire leads from wire harness.
2. With needle-nose pliers, or similar tool, detach heater clips by pulling clips away from evaporator.
3. Gently pull defrost heater from fins of evaporator.

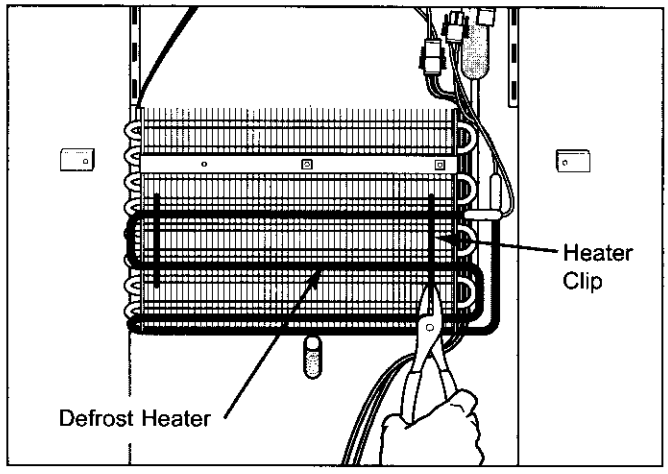

Figure 7-102. Defrost Heater

Freezer Drain Tube Heater (632-3, 642-3, 661-3)

The drain tube heater runs down the right side of the evaporator. A clamp at the bottom right of the evaporator holds the heater in place. It is then routed to the drain tube at bottom center rear of evaporator cover.

To remove the drain tube heater, remove the freezer shelves, ice bucket, duct/shelf assembly and evaporator cover first, then (See Figures 7-103):

1. Disconnect heater wire leads from wire harness.
2. Extract screws which secure evaporator to rear wall of freezer compartment.
3. Rotate evaporator to left to gain access to clamp holding heater at bottom right rear of evaporator.
4. Extract screw holding clamp and pull heater out.

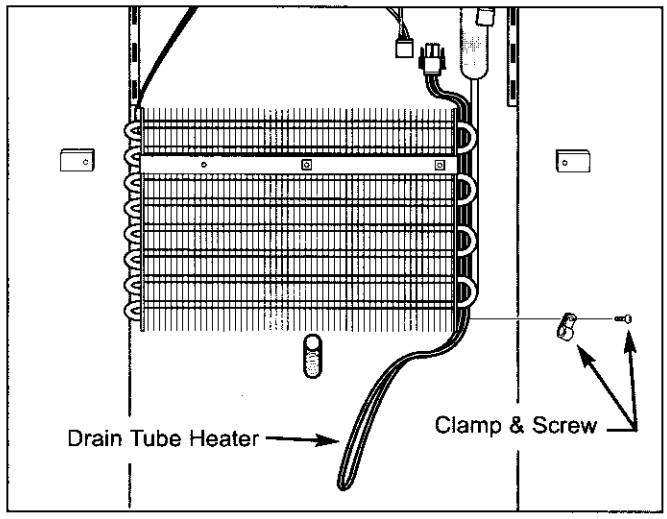

Figure 7-103. Drain Tube Heater

Freezer Evaporator Thermistor (632-3, 642-3, 661-3)

The freezer evaporator thermistor is attached at the top of the left evaporator bracket with a screw.

To remove the evaporator thermistor, remove the freezer shelves, ice bucket, duct/shelf assembly and evaporator cover first, then (See Figures 7-104):

1. Disconnect thermistor electrical leads.
   NOTE: *On newer models the thermistor is hard-wired to the control board, so it will be necessary to cut the thermistor wires to remove it.*
2. Extract screws which secure evaporator to rear wall of freezer compartment.
3. Pull bottom of evaporator up while rotating to the right to gain access to thermistor mounting screw.
4. Extract screw securing thermistor.

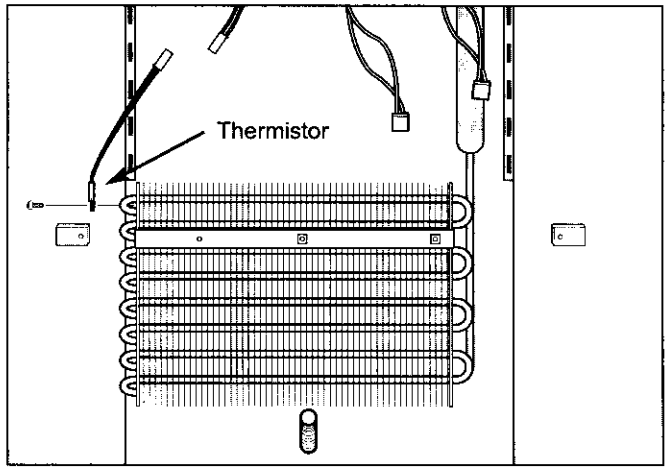

Figure 7-104. Evaporator Thermistor

FREEZER INTERIOR COSMETIC / MECHANICAL (MODELS 685-3, 695-3)

Freezer Door Shelf Assembly Removal / Adjustment (685-3, 695-3)

Removal and adjustment of door shelf assemblies is achieved by sliding the grooves in the end caps over the molded retaining ribs of the door liner.

Lift up and out to remove, push in and down to install (See Figure 7-105).

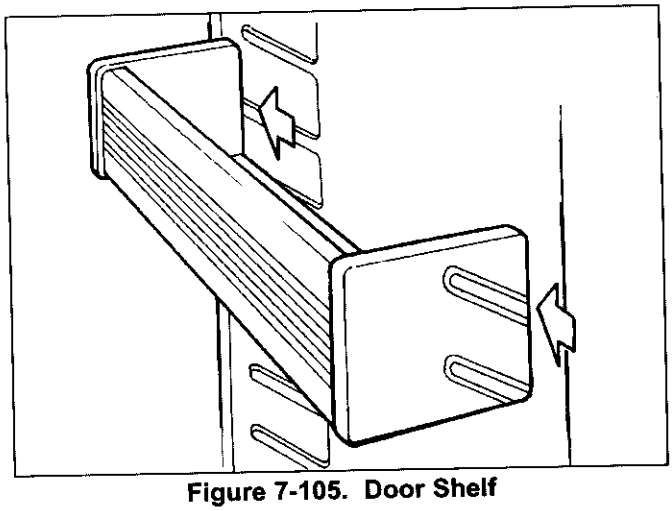

Figure 7-105. Door Shelf

Freezer Compartment Shelf Removal / Adjustment (685-3, 695-3)

Remove and adjust shelf by tilting up at front while lifting the back up and out of the shelf ladders (See Figure 7-106).

To reinstall, tilt front of shelf up and align hooks at back corners with slots in shelf ladders, then insert hooks into slots and lower front of shelf.

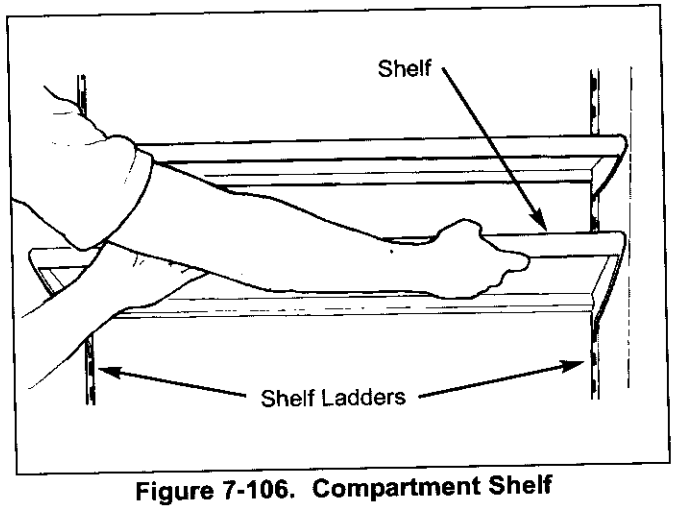

Figure 7-106. Compartment Shelf

Juice Can Rack Assembly (685-3, 695-3)

Hooks at the back of the juice can rack assembly fit into slots in the evaporator front cover.

To remove juice can rack assembly (See Figure 7-106):

1. Lift rack up.
2. Pull rack forward.

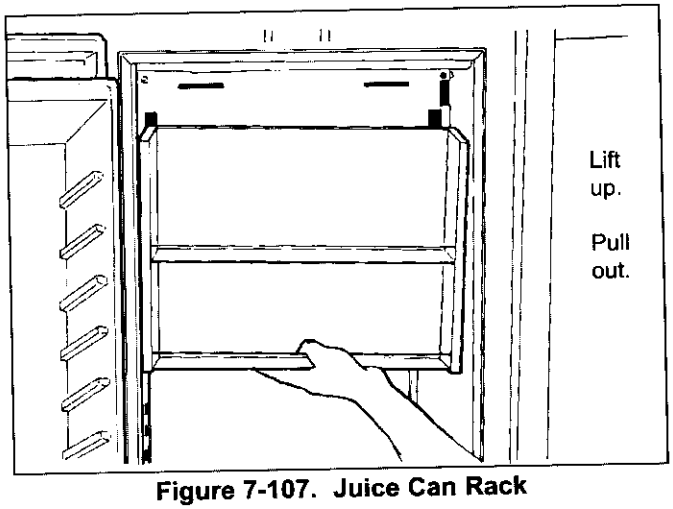

Figure 7-107. Juice Can Rack

Ice Bucket Assembly (685-3, 695-3)

The ice bucket has a flange at the top of each side that rides on the slides that are part of the ice bucket mainframe assembly. When the ice bucket is installed properly, the coupler at the back engages the motor drive yoke to turn the auger and impeller.

To remove the ice bucket assembly, the juice can rack must be removed first, then (See Figure 7-108):

1. Lift front of ice bucket up slightly.
2. Pull ice bucket forward and out.

NOTE: *To insure the juice can rack will fit after the ice bucket is installed, the coupler at the back of the ice bucket must engage the motor drive yoke properly.*

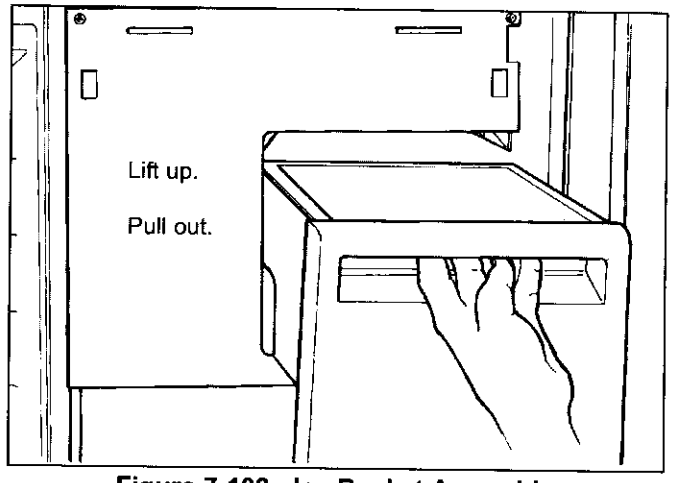

Figure 7-108. Ice Bucket Assembly

Freezer Lower Light Diffuser Glass (685-3, 695-3)

Press the tab to the right of the diffuser glass, then slide the glass to the right (See Figure 7-109).

NOTE: *There is no upper light diffuser in the freezer. The light bulbs are located directly behind the upper front panel (See Figure 7-104).*

⚠ WARNING

IF BULB SHOULD SEPARATE FROM BASE, DISCONNECT POWER TO UNIT BEFORE ATTEMPTING TO REMOVE BASE.

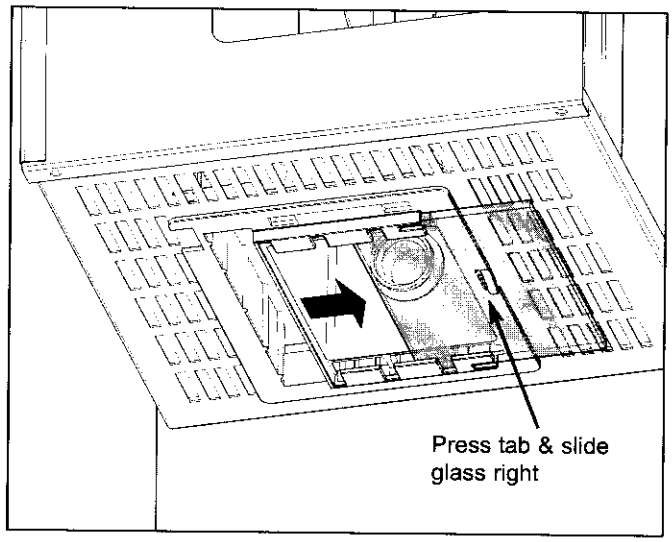

Figure 7-109. Light Diffuser

Freezer Upper Front Panel Assembly (685-3, 695-3)

The upper front panel assembly is secured to the ceiling of a compartment by two rows of screws. The front row (which is hidden) passes through spacers and fit into keyhole slots in the panel assembly. The back row of screws hold the assembly in place.

To remove a upper front panel (See Figure 7-110):

1. Extract back row of screws from panel assembly.
2. Push panel assembly back to line up front row of screws with keyhole slots.
3. Lower panel assembly down and pull out.

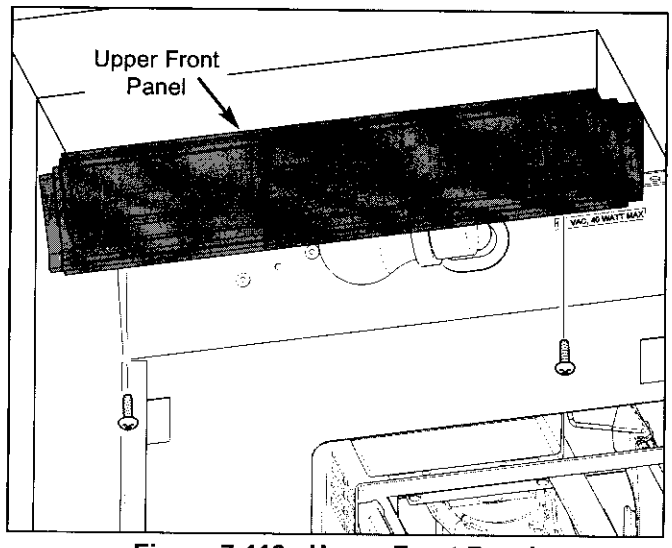

Figure 7-110. Upper Front Panel

Ice Auger Motor Assembly (685-3, 695-3)

The ice auger motor assembly consists of the ice auger motor and two icemaker switches. It is attached to the rear wall with screws, directly behind the ice bucket assembly.

To remove the ice auger motor assembly, the juice can rack and ice bucket must first be removed, then (See Figure 7-111):

1. Extract screws securing ice auger motor assembly to rear wall.
2. Disconnect auger motor and icemaker switches electrical leads, then pull assembly out.

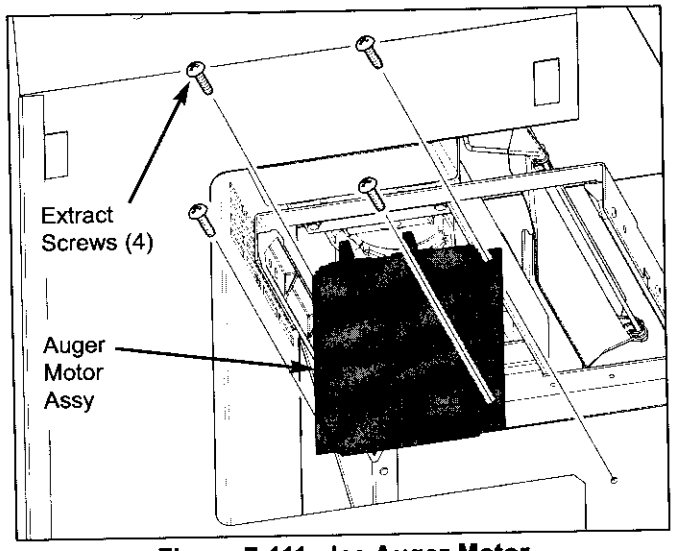

Figure 7-111. Ice Auger Motor

Freezer Evaporator Front Cover/Light Assy (685-3, 695-3)

The freezer evaporator front cover/light assembly is held in place by two screws at top, and two screws through the bottom flange into the lower evaporator cover/light assembly.

To remove the evaporator front/light assembly, the juice can rack must first be removed, then (See Figure 7-112):

1. Extract screws from bottom flange.
2. Extract screws from top flange.
3. Lower evaporator front cover down and disconnect lighting electrical leads.

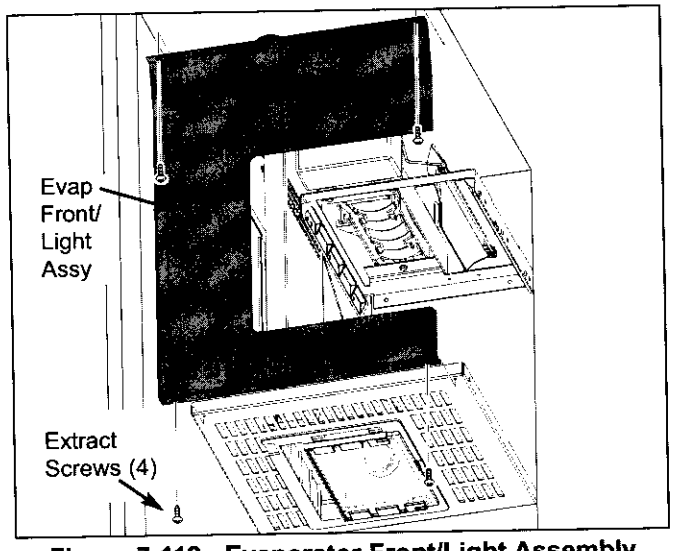

Figure 7-112. Evaporator Front/Light Assembly

Freezer Compartment Thermistor (695-3 only)

NOTE: *The model 685-3 freezer compartment thermistor is located behind the evaporator front cover, just inside the air duct. See "Freezer Compartment Thermistor (685-3)" later in this section.*

The 695-3 freezer compartment thermistor is located on the mullion wall by the icemaker.

To remove the compartment thermistor, the juice can rack, ice bucket and freezer evaporator front cover/light assembly must be removed first, then (See Figure 7-113):

1. Disconnect thermistor electrical leads.
   NOTE: *On newer models the thermistor is hard-wired to the control board, so it will be necessary to cut the thermistor wires to remove it.*
2. Extract screw securing thermistor to wall.

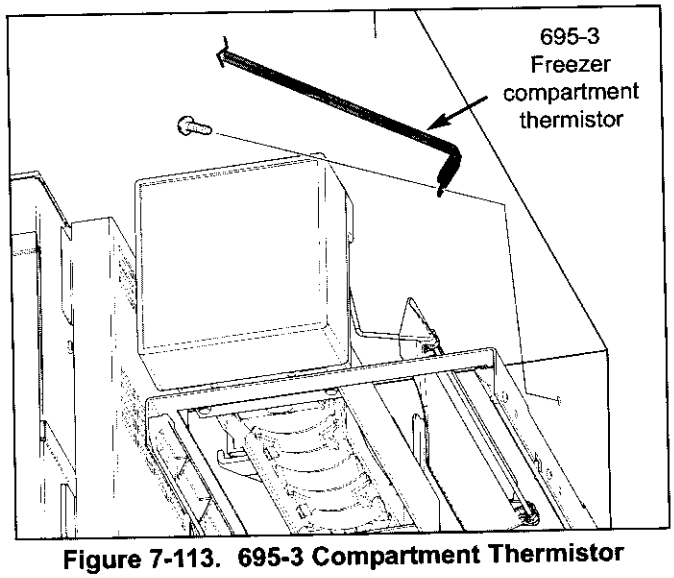

Figure 7-113. 695-3 Compartment Thermistor

Freezer Lower Evaporator Cover/Light Assembly (685-3, 695-3)

The lower evaporator cover/light assembly has two holes at the rear which fit over pegs in the rear wall. Screws toward the front sides of the cover secure the assembly to the side walls.

To remove the lower evaporator cover/light assembly, the evaporator front cover/light assembly must first be removed, then (See Figure 7-114):

1. Extract screws toward front sides of assembly.
2. Disconnect lighting electrical leads.
3. Pull assembly forward.

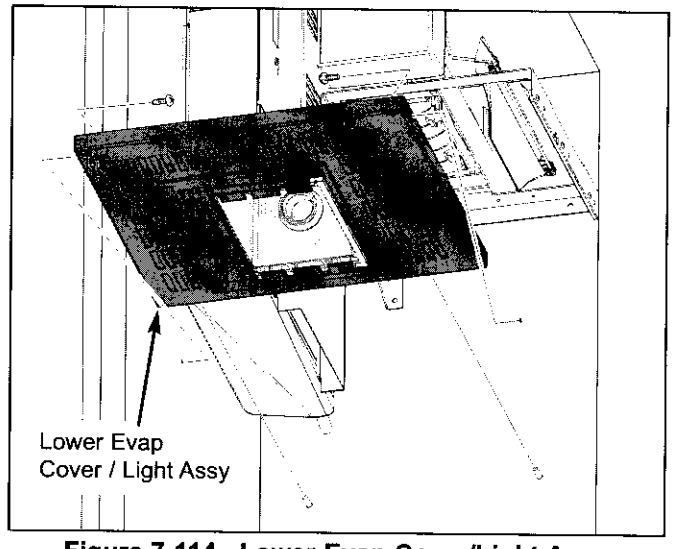

Figure 7-114. Lower Evap Cover/Light Assy

Ice Bucket Mainframe Assembly (685-3, 695-3)

The ice bucket mainframe assembly is secured to the mullion wall and the rear wall with screws.

To remove the ice bucket mainframe assembly, the juice can rack and evaporator front cover/light assembly will need to be removed first, then (See Figure 7-115):

1. Extract mounting screws from rear wall.
2. Extract mounting screws from mullion wall.
3. Pull ice bucket mainframe assembly down slightly and disconnect icemaker electrical leads.

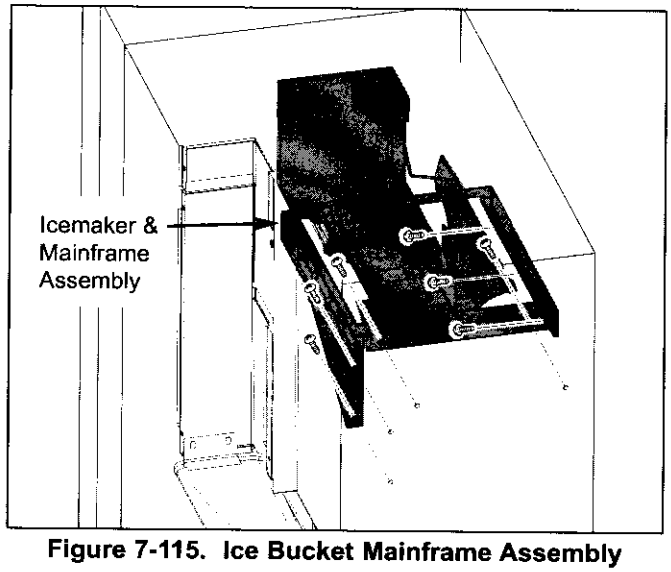

Figure 7-115. Ice Bucket Mainframe Assembly

Icemaker (685-3, 695-3)

The icemaker is attached to the ice bucket mainframe assembly with screws.

To remove the icemaker, the ice bucket mainframe assembly will need to be removed from the freezer section first, then (See Figure 7-116):

1. Extract mounting screw which secure icemaker to ice bucket mainframe assembly.
2. Lift icemaker assembly off of ice bucket mainframe assembly.

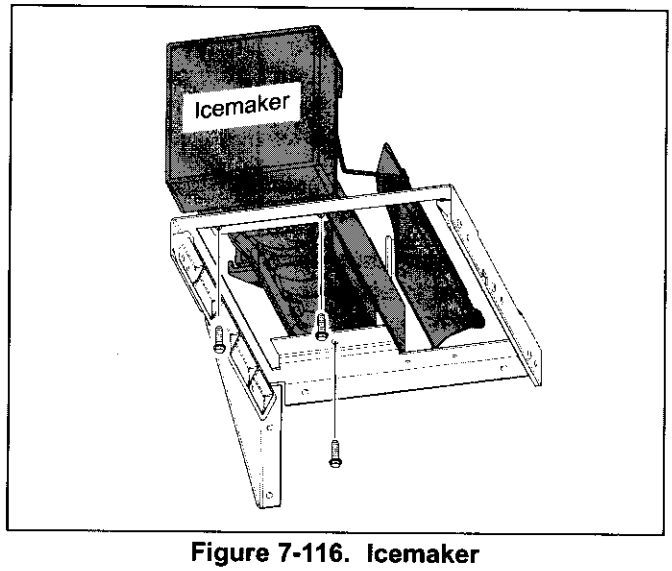

Figure 7-116. Icemaker

Icemaker Fill Tube Heater (685-3, 695-3)

To remove the icemaker fill tube heater, the juice can rack, evaporator front cover/light assembly, and ice bucket mainframe assembly will need to be removed first, then (See Figure 7-117):

1. Disconnect heater electrical leads.
2. Extract retaining screw and clamp (if present).
3. Pull heater and aluminum fill tube extension out as one.

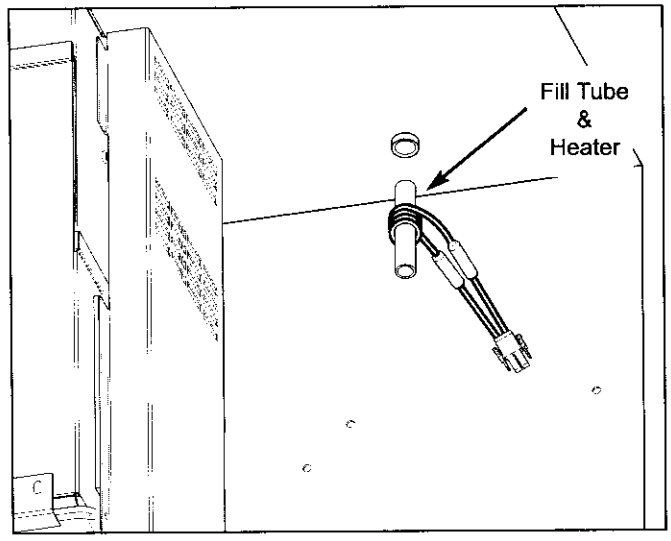

Figure 7-117. Icemaker Fill Tube and Heater

Freezer Fan Cover Assembly (685-3, 695-3)

The freezer fan cover is held in place at the top by clips that are pat of the evaporator fan assembly. At the bottom left of the fan cover, a screw secures it to the evaporator cover assembly.

To remove the freezer fan cover assembly, the juice can rack, evaporator front cover/light assembly, and lower evaporator cover/light assembly will need to be removed first, then (See Figure 7-118):

1. Extract the screw from the bottom left corner.
2. Slide assembly down, out of clips.

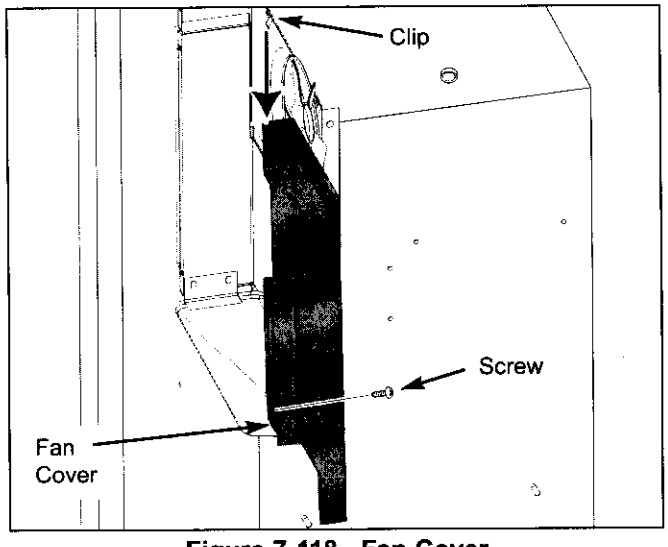

Figure 7-118. Fan Cover

Evaporator Cover Assembly (685-3, 695-3)

The evaporator cover assembly is held to the back and left side wall with screws, and the drain pan support is held to the evaporator cover assembly with screws passing into screw grommets.

To remove the evaporator cover assembly (along with the drain pan support), the juice can rack, evaporator front cover/light assembly, lower evaporator cover/light assembly and freezer fan cover need to be removed first, then (See Figure 7-119):

1. Extract the screws from the back and left side walls.
2. Pull assembly forward.

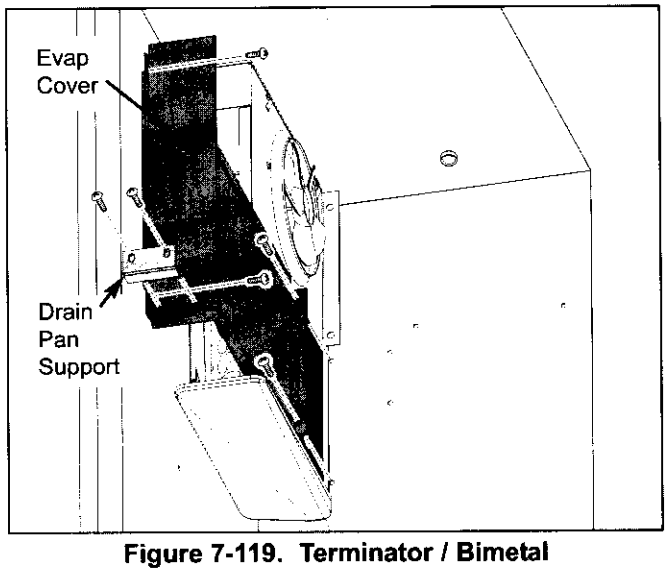

Figure 7-119. Terminator / Bimetal

Freezer Compartment Thermistor (685-3 only)

NOTE: *The model 695-3 freezer compartment thermistor is attached to the mullion wall. See "Freezer Compartment Thermistor (695-3)" earlier in this section.*

The 685-3 freezer compartment thermistor is behind the evaporator cover assembly, inside the air duct.

To remove the compartment thermistor, the juice can rack, evaporator front cover/light assembly, lower evaporator cover/light assembly, freezer fan cover, and evaporator cover assembly must be removed first, then (See Figure 7-120):

1. Disconnect thermistor electrical leads.
   NOTE: *On newer models the thermistor is hard-wired to the control board, so it will be necessary to cut the thermistor wires to remove it.*
2. Pull thermistor up out of duct.

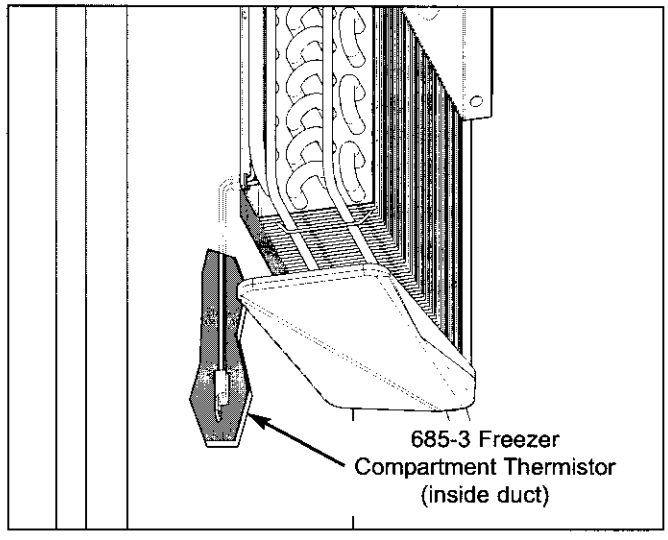

Figure 7-120. 685-3 Compartment Thermistor

Freezer Evaporator Thermistor (685-3, 695-3)

The freezer evaporator thermistor is attached to the front evaporator bracket with a screw.

To remove the freezer evaporator thermistor, the juice can rack, evaporator front cover/light assembly, lower evaporator cover/light assembly, freezer fan cover, and evaporator cover assembly will need to be removed first, then (See Figure 7-121):

1. Disconnect thermistor electrical leads.
   NOTE: *On newer models the thermistor is hard-wired to the control board, so it will be necessary to cut the thermistor wires to remove it.*
2. Extract screw securing thermistor to evaporator bracket.

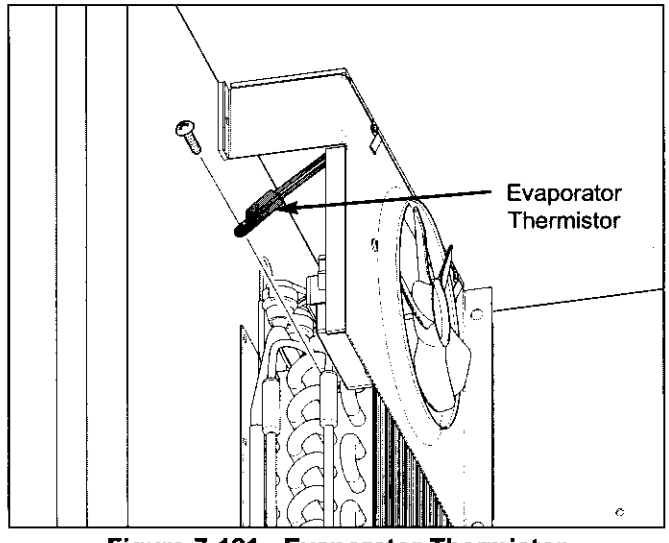

Figure 7-121. Evaporator Thermistor

Defrost Terminator & Fan Delay Bimetal (685-3, 695-3)

The defrost terminator and fan delay bimetal are attached to the evaporator outlet.

To remove the defrost terminator and fan delay bimetal, the juice can rack, evaporator front cover/light assembly, lower evaporator cover/light assembly, freezer fan cover, and evaporator cover assembly will need to be removed first, then (See Figure 7-122):

1. Disconnect terminator, or bimetal electrical leads.
2. Pull terminator, or bimetal off of tubing.

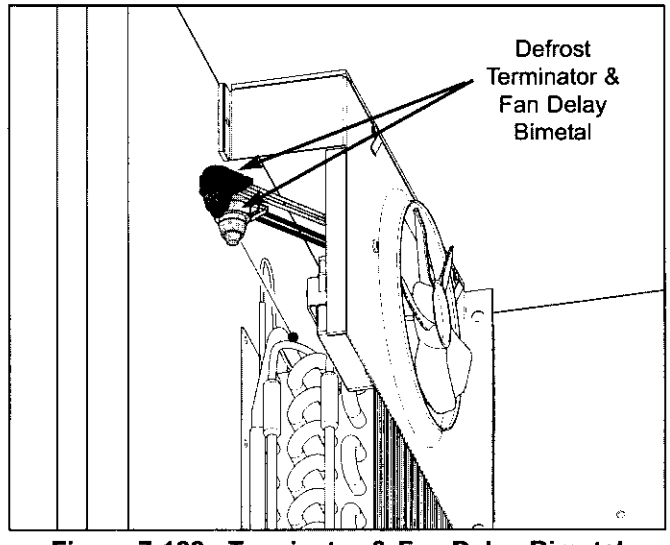

Figure 7-122. Terminator & Fan Delay Bimetal

Evaporator Defrost Heater (685-3, 695-3)

The defrost heater sits under the evaporator, fitting into a slot at bottom of the evaporator back bracket, with a heater clip holding the other end of the heater.

To remove the defrost heater, the juice can rack, evaporator front cover/light assembly, lower evaporator cover/light assembly, freezer fan cover, and evaporator cover assembly will need to be removed first, then (See Figure 7-123):

1. Disconnect heater wire leads from wire harness.
2. Pull defrost heater toward front of unit.

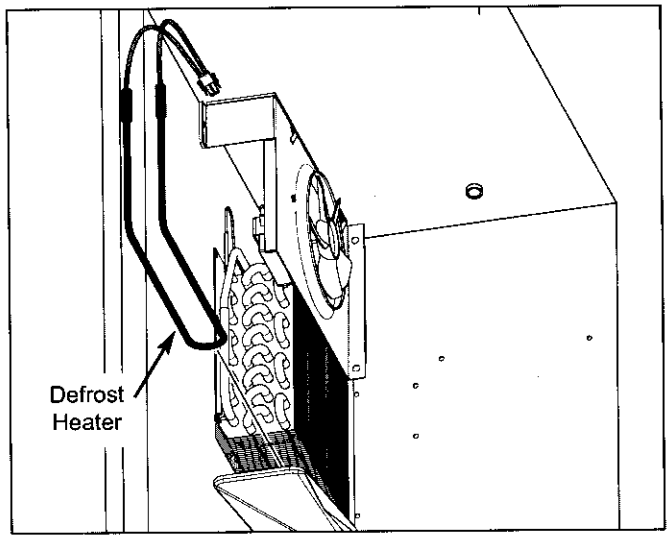

Figure 7-123. Defrost Heater

Freezer Evaporator Fan Assembly (685-3, 695-3)

Holes in the back flange of the freezer evaporator fan assembly fit over pegs in the back wall. A screw through the front flange holds the assembly to the left wall.

To remove the evaporator fan assembly, the juice can rack, evaporator front cover/light assembly, lower evaporator cover/light assembly, freezer fan cover, and evaporator cover assembly will need to be removed first, then (See Figure 7-124):

1. Extract the screws from the back and left side walls.
2. Pull assembly forward.

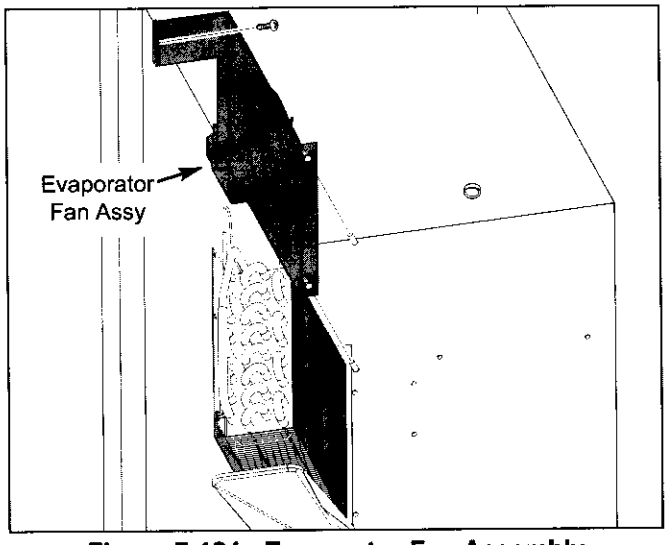

Figure 7-124. Evaporator Fan Assembly

Freezer Drain Pan and Drain Tube Heat Conductor (685-3, 695-3)

The drain tube heat conductor is riveted to the bottom of the evaporator back bracket, and protrudes into the drain pan spout. The support, attached to the evaporator cover assembly, holds the drain pan front in place.

To remove the drain pan, the juice can rack, evaporator front cover/light assembly, lower evaporator cover/light assembly, freezer fan cover, evaporator cover assembly and evaporator fan assembly will need to be removed first, then (See Figure 7-125):

1. Extract screws securing evaporator to wall.
2. Pull evaporator assembly forward and up, until drain tube heat conductor clears drain pan spout.
3. Pull drain pan forward.

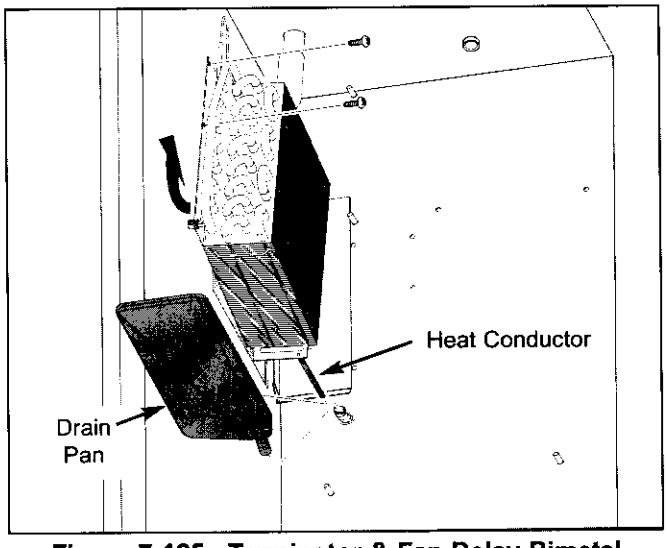

Figure 7-125. Terminator & Fan Delay Bimetal

LOWER COMPRESSOR AREA MECHANICAL (MODELS 601R-3, 601RG-3, 601F-3)

Water Valve (601F-3)

NOTE: *Models* **611-3, 611G-3, 632-3, 642-3, 650-3, 650G-3, 661-3. 685-3 and 695-3** *water valve removal instructions are covered in "EXTERIOR COSMETIC / MECHANICAL (ALL MODELS EXCEPT 601'S)" earlier in this section.*

The water valve is mounted to a bracket in the compressor area.

To remove a water valve, first remove the lower grille section, then (See Figure 7-126):

1. Loosen mounting screw which holds water valve to bracket.
2. Lift valve until screw head aligns with large section of key-hole slot.
3. Push valve back until screw head clears bracket, then lower valve and pull forward.
4. Disconnect electrical leads from valve.
5. Disconnect water lines from valve.

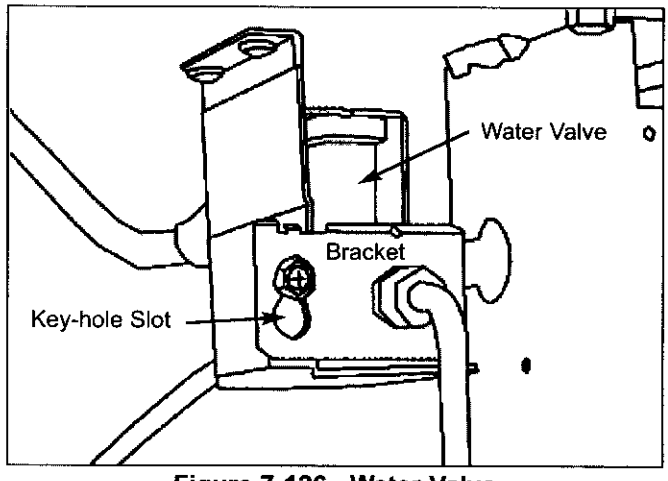

Figure 7-126. Water Valve

Condenser Fan (601R-3, 601RG-3, 601F-3)

The condenser fan is mounted to the condenser fan shroud with three fan mounting brackets that are hooked into grommeted holes in the fan shroud. Screws passing through these brackets secure the fan motor to the brackets. The condenser fan blade is held onto the fan motor shaft with a nut.

To remove the condenser fan, first remove the grille, then (See Figure 7-127):

1. Extract screws securing motor to brackets.
   NOTE: *Brackets will unhook from grommeted holes in condenser fan shroud after screws are removed.*
2. To remove fan blade from fan motor:
   a. Grab blade and motor while turning nut counterclockwise.
   b. Then pull the blade from the motor shaft.

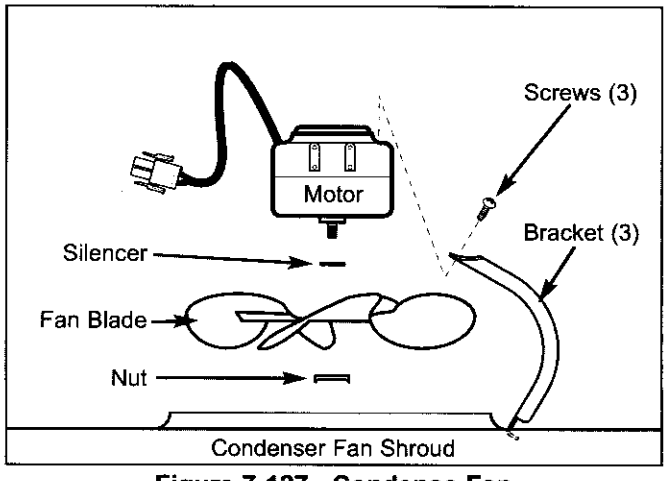

Figure 7-127. Condense Fan

UPPER COMPRESSOR AREA MECHANICAL (ALL MODELS EXCEPT 601'S)

Condenser Fan (All Models except 601's)

The condenser fan is mounted to the condenser fan shroud with three fan mounting brackets that are hooked into grommeted holes in the fan shroud. Screws passing through these brackets secure the fan motor to the brackets. The condenser fan blade is held onto the fan motor shaft with a nut.

To remove the condenser fan, first remove the grille, then (See Figure 7-128):

1. Extract screws securing motor to brackets.
   NOTE: *Brackets will unhook from grommeted holes in condenser fan shroud after screws are removed.*
2. To remove fan blade from fan motor:
   a. Grab blade and motor while turning nut counterclockwise.
   b. Then pull the blade from the motor shaft.

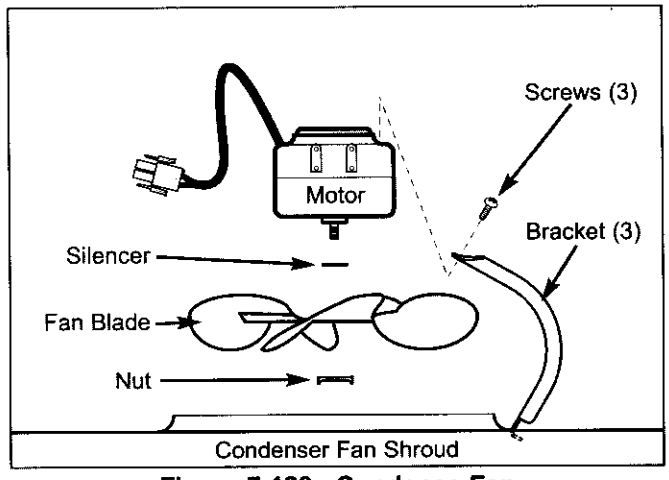

Figure 7-128. Condense Fan

SEALED SYSTEM (MODELS 601R-3, 601RG-3, 601F-3)

Filter-Drier (601R-3, 601RG-3, 601F-3)

The filter-drier is attached to the condenser outlet and secured to the condenser with a cable tie.

After capturing the refrigerant from sealed system, (See Figure 7-129):

1. Cut cable tie.
2. With a file, score a line around capillary tube 1" or less from drier outlet, then fatigue capillary tube at this line until it separates.
3. With a tube-cutter, cut inlet tube 1" or less from drier inlet.

NOTE: *It is not recommended to sweat tubing apart. Doing so will induce moisture into the sealed system.*

NOTE: *After capillary tube separates, check tubing for internal burrs. If burrs exist, repeat step 2 above.*

NOTE: *When installing replacement filter-drier, insert capillary tube until it touches screen inside drier, then pull capillary tube away from screen approximately 3/8" (9.5 mm) before brazing (See Figure 7-130).*

NOTE: *Filter-drier outlet must be facing downward in order to function properly.*

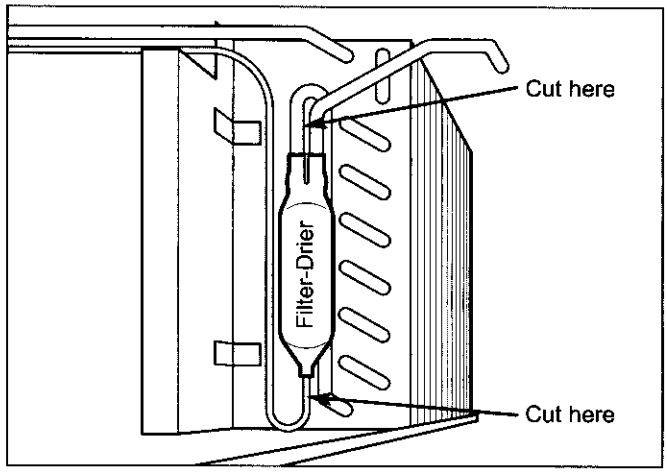

Figure 7-129. Filter-Drier

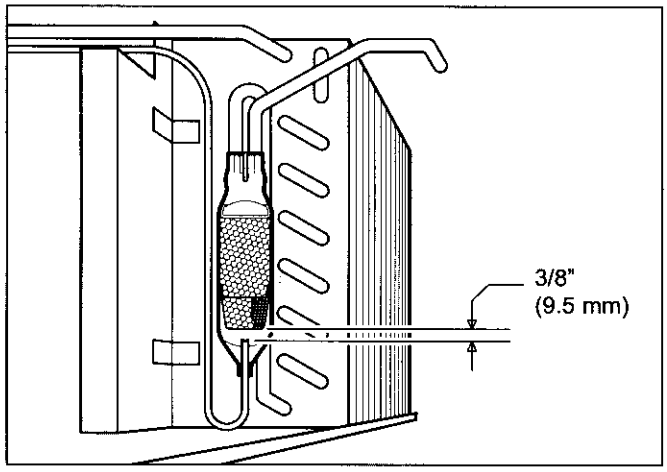

Figure 7-130. Filter-Drier Cut-Away View

Compressor (601R-3, 601RG-3, 601F-3)

The Compressor is secured to the unit tray by bolts into grommets.

NOTE: *When replacing a compressor, the filter-drier must also be replaced.*

After capturing the refrigerant from sealed system, (See Figure 7-131):

1. Remove compressor electrical cover and disconnect electricals from compressor.
2. Extract bolts from grommets at each corner of compressor base.
3. Pull compressor forward and rotate to the right to gain access to suction and discharge lines.
4. Using a tube cutter, cut suction and discharge lines approximately 1" from compressor.

NOTE: *It is not recommended to sweat tubing apart. Doing so will induce moisture into the sealed system.*

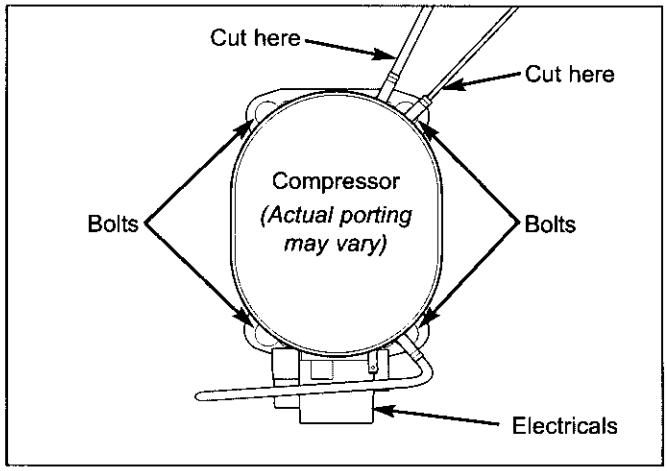

Figure 7-131. Compressor Top View

Drain Pan Condensate Heater Loop (601R-3, 601RG-3)

The drain pan condensate heater loop is located in the compressor area, and sits in the drain pan.

NOTE: *When replacing a condensate heater loop, the filter-drier must also be replaced.*

NOTE: *It is recommended that a suction line drier be added to the sealed system when replacing the condensate heater loop.*

After capturing the refrigerant from sealed system, (See Figure 7-132):

1. Extract bolts from grommets at each corner of compressor base.
2. Pull compressor forward and rotate to gain access to condensate heater tubing.
3. Using a tube cutter, cut condensate loop inlet and outlet.

NOTE: *It is not recommended to sweat tubing apart. Doing so will induce moisture into the sealed system.*

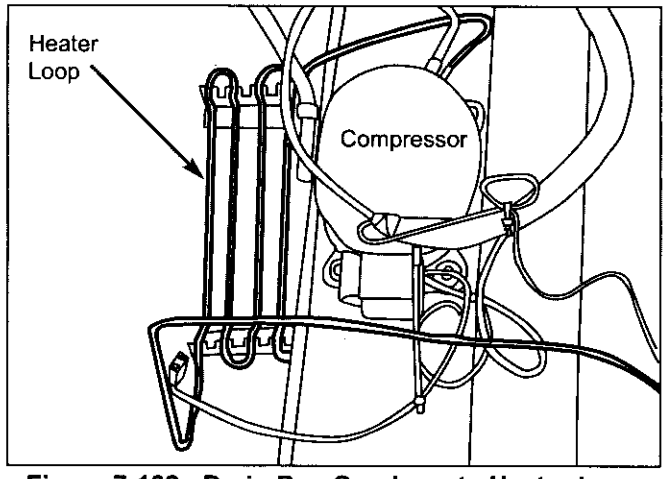

Figure 7-132. Drain Pan Condensate Heater Loop

Condenser (601R-3, 601RG-3, 601F-3)

NOTE: *When replacing the condenser, the filter-drier must also be replaced.*

After capturing the refrigerant from sealed system, (See Figure 7-133):

1. Extract screws which hold condenser fan shroud to condenser.
2. Using a tube cutter, cut condenser inlet and outlet.
   NOTE: *It is not recommended to sweat tubing apart. Doing so will induce moisture into the sealed system.*
3. Extract condenser mounting screws which hold condenser side brackets to unit tray.
4. Slide condenser to the right, then pull forward.

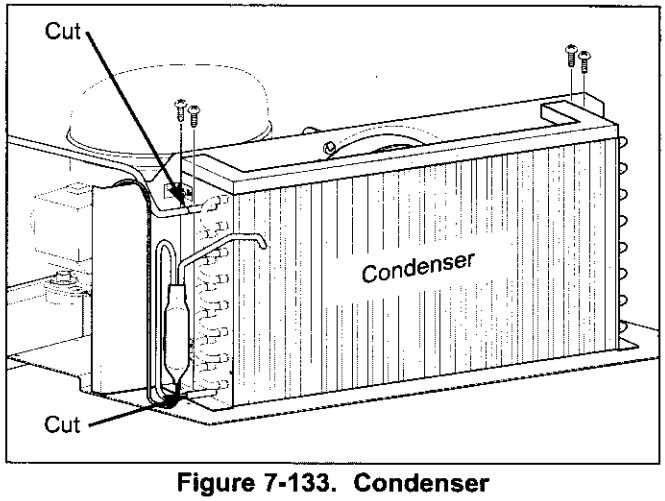

Figure 7-133. Condenser

Evaporator (601R-3, 601RG-3, 601F-3)

The evaporator is attached to the rear wall with screws, behind the evaporator cover.

NOTE: *When replacing an evaporator, the filter-drier must also be replaced.*

NOTE: *When removing a 601F-3 evaporator, the evaporator thermistor, defrost terminator and defrost heater must also be removed and reused on new evaporator.*

After capturing the refrigerant from the sealed system (See Figure 7-134):

1. Extract screws which hold evaporator to rear wall.
2. Pull bottom of evaporator up and rotate heat exchanger out.
3. With a file, score a line around capillary tube, 1" or less from evaporator inlet, then fatigue capillary tube at this line until it separates.
4. With a tube-cutter, cut evaporator outlet 1" or less from accumulator (if applicable), or 1" or less from suction line connection point.

NOTE: *It is not recommended to sweat tubing apart. Doing so will induce moisture into the sealed system.*

NOTE: *After capillary tube is fatigue until it separates, check tubing for internal burrs. If burrs exist, repeat step 3 above.*

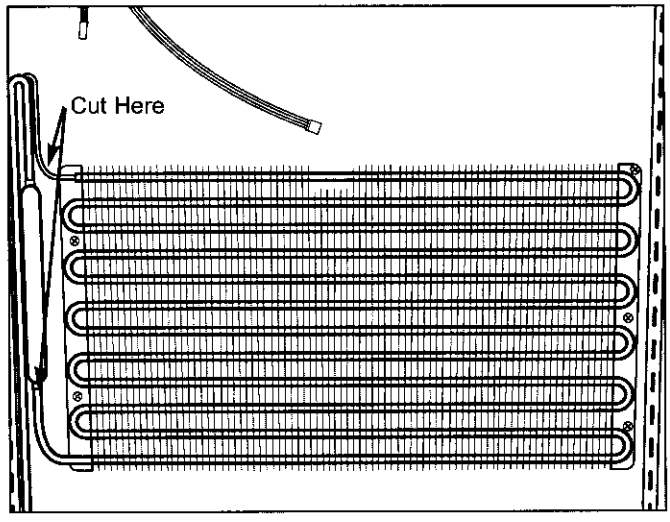

Figure 7-134. Evaporator

Heat Exchanger (601R-3, 601RG-3, 601F-3)

NOTE: *When replacing a heat exchanger, the filter-drier must also be replaced.*

NOTE: *It is not necessary to pull the unit from its installation in order to replace a heat exchanger. The heat exchanger travels through tubing channel which is foamed into the rear wall of the unit.*

After capturing the refrigerant from the sealed system (See Figures 7-135, 7-136 and 7-137):

1. Extract screws which hold evaporator to rear wall.
2. Pull bottom of evaporator up and rotate heat exchanger out.
3. With a file, score a line around capillary tube, 1" or less from evaporator inlet, then fatigue capillary tube at this line until it separates.
4. With a tube-cutter, cut evaporator outlet 1" or less from accumulator (if applicable), or 1" or less from suction line connection point.
5. With a tin snips, or similar tool, cut heat exchanger in compartment as close to tubing channel as possible.
6. In lower compressor area, use a tube-cutter to cut drier from condenser.
7. Extract bolts from grommets at each corner of compressor base.
8. Pull compressor forward and rotate to gain access to suction line.
9. Using a tube cutter, cut suction line approximately 1" from compressor.
10. Pull remaining heat exchanger from tubing channel.

NOTE: *It is not recommended to sweat tubing apart. Doing so will induce moisture into the sealed system.*

NOTE: *When replacing the heat exchanger, it is recommended to attach it at the evaporator end first, then feed heat exchanger down through the tubing channel.*

NOTE: *After heat exchanger is installed, the tubing channel must be sealed closed with silicone.*

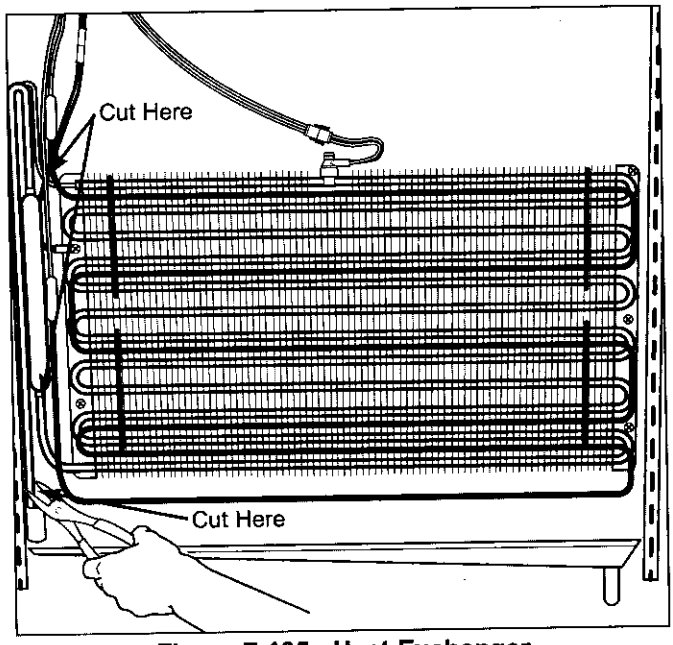

Figure 7-135. Heat Exchanger

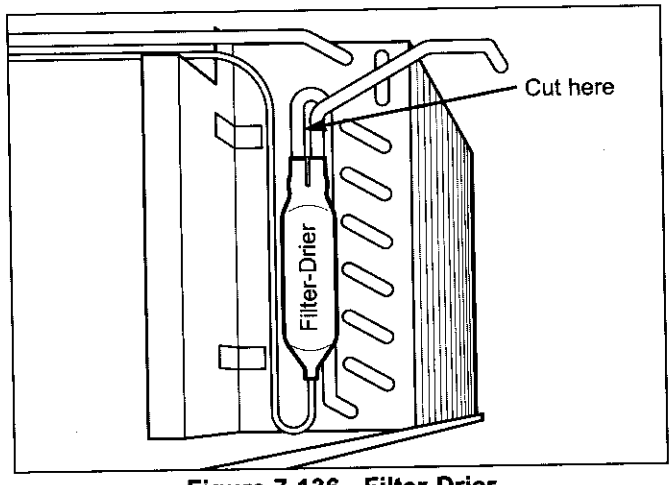

Figure 7-136. Filter-Drier

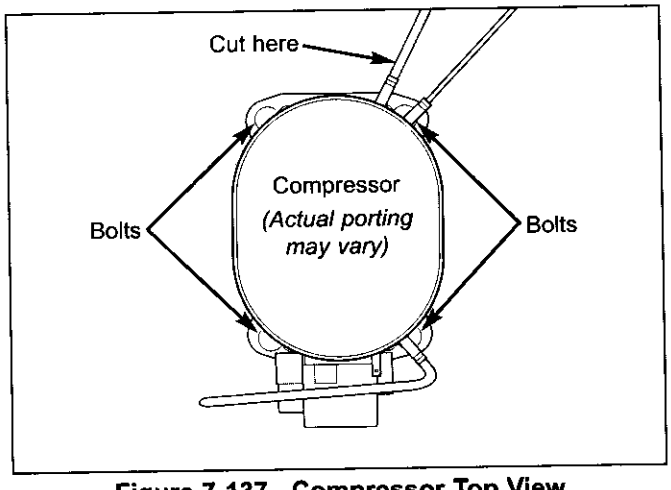

Figure 7-137. Compressor Top View

SEALED SYSTEM (ALL MODELS EXCEPT 601'S)

Filter-Drier (All Models except 601's)

The filter-drier is attached to to a drier bracket in the compressor area by a cable tie.

After capturing the refrigerant from sealed system, (See Figure 7-138):

1. Cut Cable tie.
2. With a file, score a line around capillary tube 1" or less from drier inlet, then fatigue capillary tube at this line until it separates.
3. With a tube-cutter, cut inlet tube 1" or less from drier inlet.

NOTE: *It is not recommended to sweat tubing apart. Doing so will induce moisture into the sealed system.*

NOTE: *After capillary tube separates, check tubing for internal burrs. If burrs exist, repeat step 2 above.*

NOTE: *When installing replacement filter-drier, insert capillary tube until it touches screen inside drier, then pull capillary tube away from screen approximately 3/8" before brazing.* (See Figure 7-139).

NOTE: *Filter-drier outlet must be facing downward in order to function properly.*

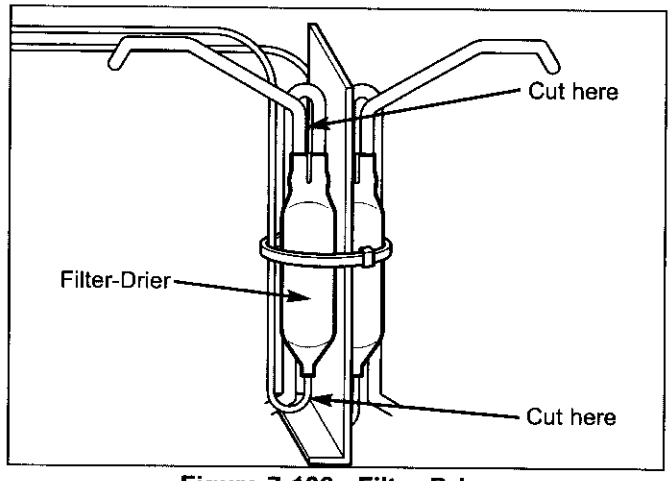

Figure 7-138. Filter-Drier

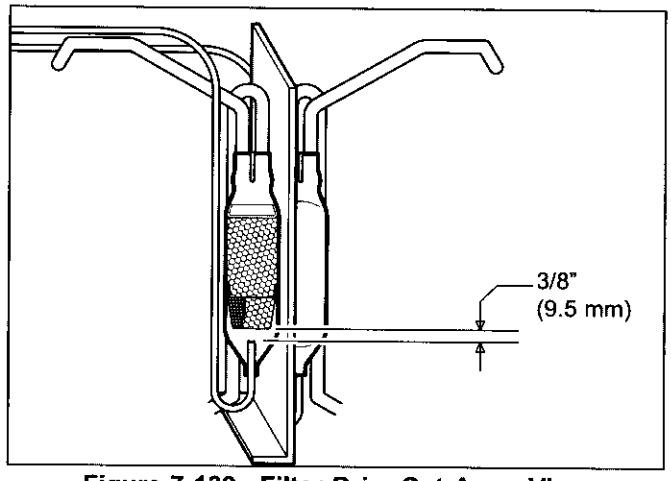

Figure 7-139. Filter-Drier Cut-Away View

Compressor (All Models except 601's)

Compressors are secured to the top of the unit with nuts over stud-bolts. The left compressor is for the freezer, the right is the refrigerator compressor.

NOTE: *When replacing a compressor, the filter-drier must also be replaced.*

After capturing the refrigerant from sealed system, (See Figure 7-140):

1. Remove compressor electrical cover and disconnect electricals from compressor.
2. Extract nuts from stud-bolts at each corner of compressor base.
3. Lift compressor up and pull forward to gain access to suction and discharge lines.
4. Using a tube cutter, cut suction and discharge lines approximately 1" from compressor.

NOTE: *It is not recommended to sweat tubing apart. Doing so will induce moisture into the sealed system.*

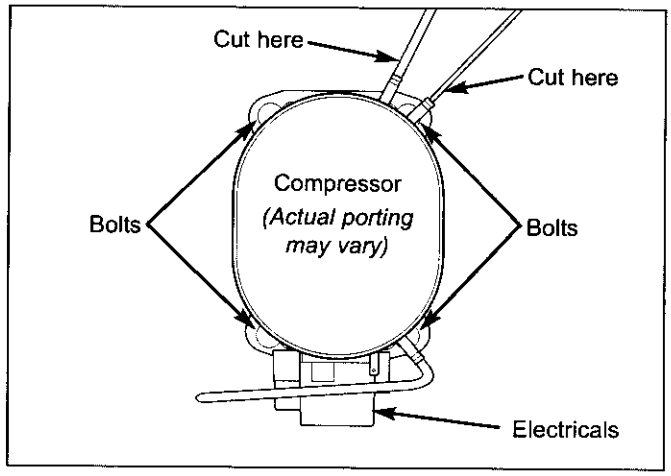

Figure 7-140. Compressor Top View

Condenser (All Models except 601's)

NOTE: *When replacing the condenser, both filter-driers must also be replaced.*

NOTE: *It is necessary to pull the unit from its installation and remove the unit shroud in order to replace a condenser.*

After capturing the refrigerant from sealed system, (See Figure 7-141):

1. Extract screws which hold condenser fan shroud to condenser.
2. Using a tube cutter, cut condenser inlet and outlet.
   NOTE: *It is not recommended to sweat tubing apart. Doing so will induce moisture into the sealed system.*
3. Extract condenser mounting screws which hold condenser side brackets to top of unit.
4. Lift condenser off of unit

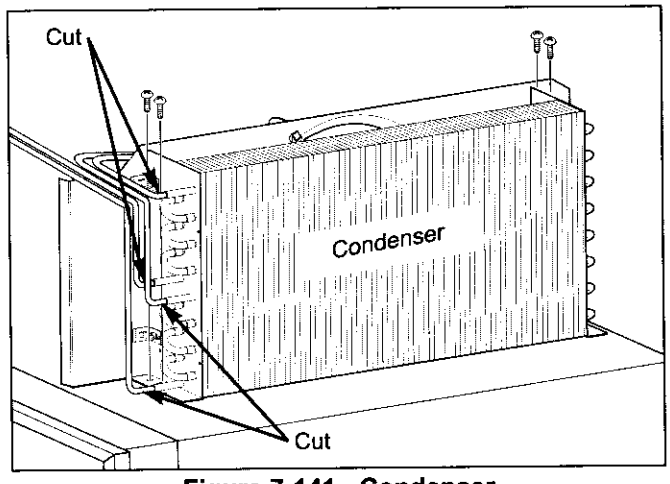

Figure 7-141. Condenser

Evaporator (All Models except 601's)

Evaporators are attached to rear walls, or ceilings with screws, behind evaporator covers.

NOTE: *When replacing an evaporator, the filter-drier must also be replaced.*

NOTE: *When removing a freezer evaporator, the evaporator thermistor, defrost terminator and defrost heater must also be removed and reused on new evaporator.*

After capturing the refrigerant from the sealed system (See Figure 7-142):

1. Extract screws which hold evaporator to rear wall or ceiling of compartment.
2. Pull and rotate evaporator so heat exchanger is accessible.
3. With a file, score a line around capillary tube, 1" or less from evaporator inlet, then fatigue capillary tube at this line until it separates.
4. With a tube-cutter, cut evaporator outlet 1" or less from accumulator (if applicable), or 1" or less from suction line connection point.

NOTE: *It is not recommended to sweat tubing apart. Doing so will induce moisture into the sealed system.*

NOTE: *After capillary tube is fatigue until it separates, check tubing for internal burrs. If burrs exist, repeat step 3 above..*

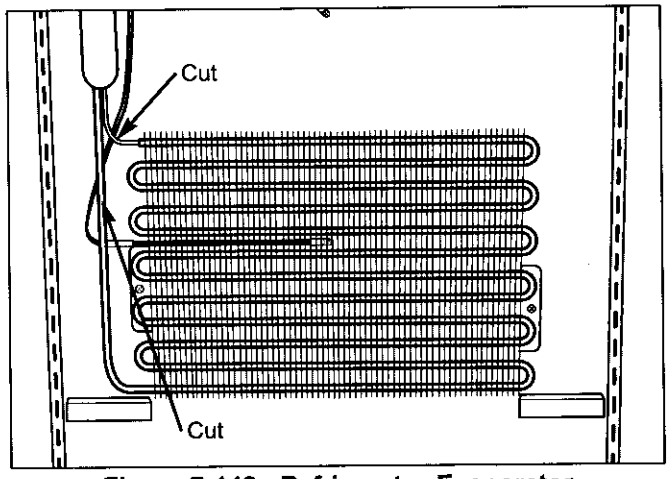

Figure 7-142. Refrigerator Evaporator

NOTE: *Freezer evaporator removal not illustrated.*

Heat Exchanger (All Models except 601's)

NOTE: *When replacing a heat exchanger, the filter-drier must also be replaced.*

NOTE: *It is necessary to pull a model 611-3, 611G-3, 650-3 and 650G-3 from its its installation in order to replace a freezer heat exchanger. For all other models, it is not necessary to the unit from its installation in order to replace a freezer heat exchanger.*

After capturing the refrigerant from the sealed system (See Figures 7-143, 7-144, 7-145):

1. Extract screws which hold evaporator.
2. Pull and rotate evaporator so heat exchanger is accessible.
3. With a file, score a line around capillary tube, 1" or less from evaporator inlet, then fatigue capillary tube at this line until it separates.
4. With a tube-cutter, cut evaporator outlet 1" or less from accumulator (if applicable), or 1" or less from suction line connection point.
5. With a tin snips, or similar tool, cut heat exchanger in compartment as close as possible to wall or ceiling where heat exchanger passes through.
6. In upper compressor area, use a tube-cutter to cut drier from condenser.
7. Extract nuts from stud-bolts at each corner of compressor base.
8. Lift compressor up and pull forward to gain access to suction line.
8. Using a tube cutter, cut suction line approximately 1" from compressor.
9. Pull remaining heat exchanger from unit.

NOTE: *It is not recommended to sweat tubing apart. Doing so will induce moisture into the sealed system.*

NOTE: *When replacing the heat exchanger, it is recommended to attach it at the evaporator end first, then feed the heat exchanger through hole, up to compressor area.*

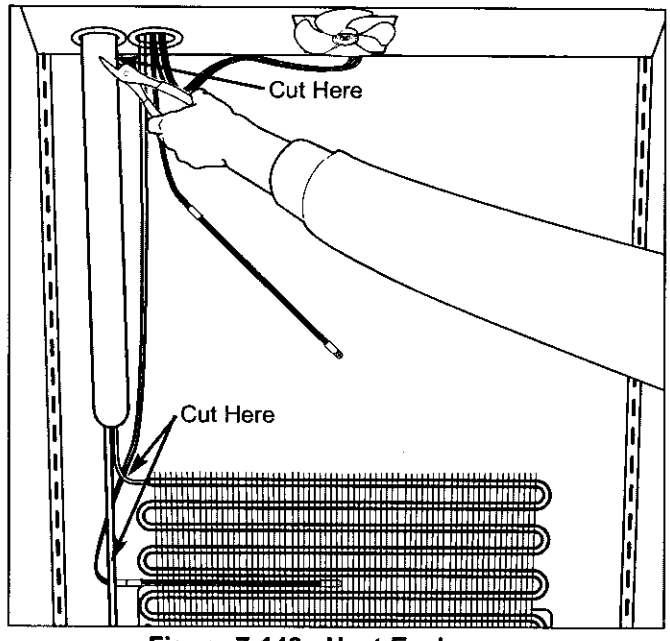

Figure 7-143. Heat Exchanger

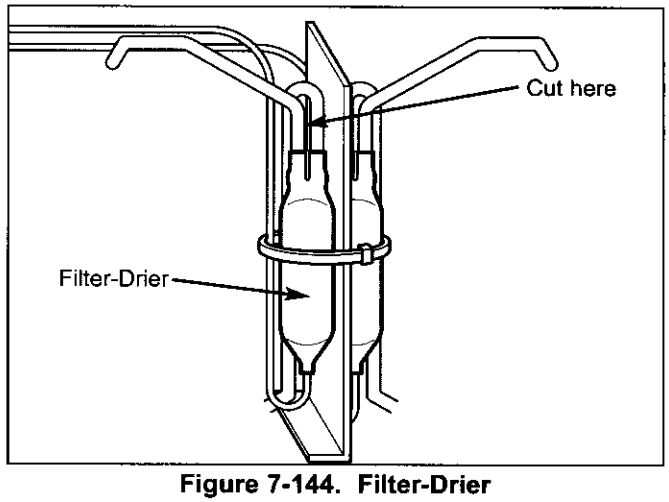

Figure 7-144. Filter-Drier

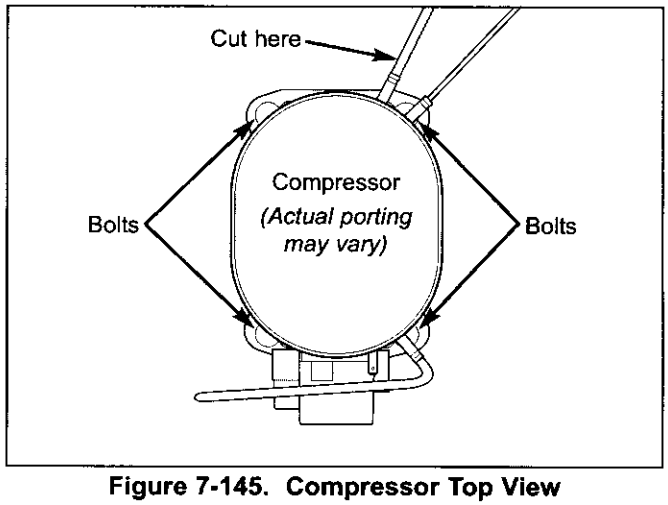

Figure 7-145. Compressor Top View