

COMPONENT ACCESS AND REMOVAL

This section explains how to remove components from 736 Series Units starting with serial # 2970000.

If different models have similar adjusting, accessing and/or removal procedures, they are grouped together under the appropriate heading. The units covered in the procedures are listed between brackets after the heading. This section is arranged as follows: Exterior cosmetic and mechanical components, followed by the internal cosmetic and mechanical components, unit tray mechanical components, with the sealed system components at the end. 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 listed 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, POWER 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 hinge assemblies, remember they are spring loaded and may recoil quickly when released.
- If working in the compressor area, remember that compressor and tubing may be hot.
- If working on or around the evaporator or condenser, remember that evaporator and condenser fins are sharp.

EXTERIOR COSMETIC AND MECHANICAL COMPONENTS

Kickplate/Grille Removal (All Models)

The kickplate/grille is attached by four screws passing through the kickplate into adjustable kickplate brackets.

NOTE: Because drawer panels may extend down in front of the kickplate/grille, it may be necessary to remove the bottom drawer to gain access.

To remove kickplate/grille, extract screws (two each side) and pull kickplate/grille forward. (See Figure 7-1)

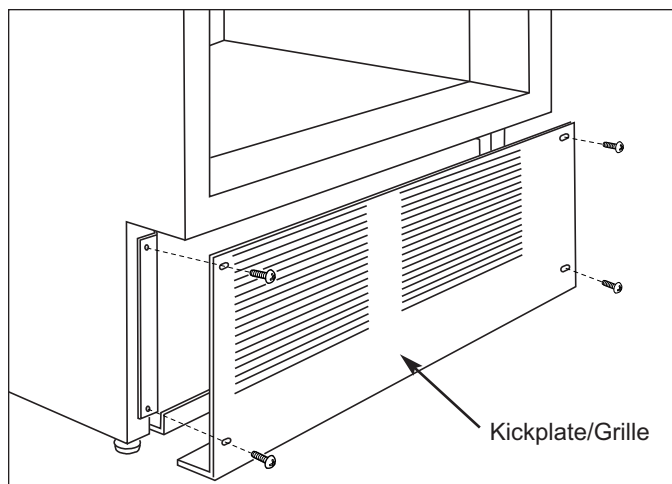


Figure 7-1. Kickplate/Grille Removal

Side Molding Strip Removal (All Models)

Side molding strips are held in place by four unit-to-cabinet brackets attached to the sides of the cabinet.

NOTE: Remove drawers first to make this task easier.

To remove the side trim molding strips (See Figure 7-2):

1. Place a straight-blade screwdriver in channel at bottom of molding. Gently pull molding forward until face-frame edge of molding is accessible.
2. Place another straight-blade screwdriver under face-frame edge and gently work molding away from face-frame, and off of unit-to-cabinet brackets.

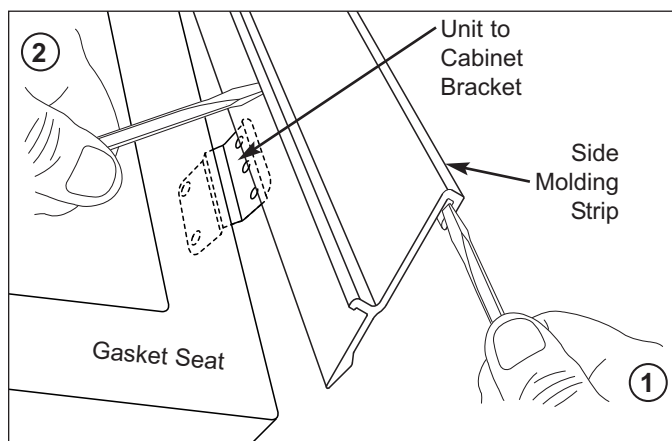


Figure 7-2. Side Molding Strip Removal

Upper Compartment Light Switch & Fan Switch Removal (All Models)

The upper door compartment light switch and fan switch protrude through the top trim molding, just above the door. Tabs on the switches hold switches in the switch bracket behind the top trim. The bracket is attached to the switch enclosure with screws.

NOTE: The switch with white back is for the lights and the switch with black back is for the evaporator fan.

To access and remove a light and/or fan switch (See Figure 7-3):

1. Remove side molding strips.
2. Pull top of top molding forward, then lift up.
3. Extract screws from switch bracket and pull bracket forward.
4. Disconnect electrical leads from switch being removed.
5. Depress tabs on side of switch and push switch out of bracket.

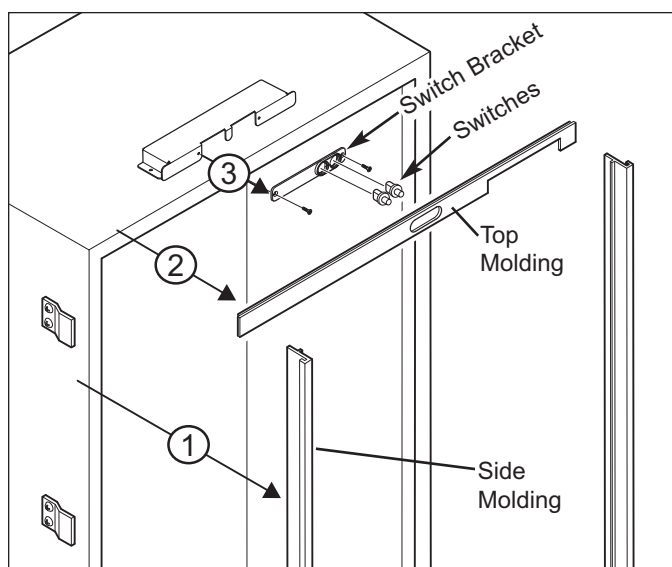


Figure 7-3. Upper Light Switch & Fan Switch

Drawer Assembly Removal (All Models)

There are inverted channels on both sides of the drawer tubs which rest on telescoping drawer slide assemblies. A pin at the front of each drawer slide fits into a hole in the inverted channel of each drawer tub, holding the drawer assembly in place.

To remove a drawer assembly (See Figure 7-4):

1. Pull drawer open. Lift front of drawer up and off of pins at front end of drawer slides.
2. Pull drawer assembly forward and off of drawer slides.
3. Push telescoping drawer slide assemblies back in.

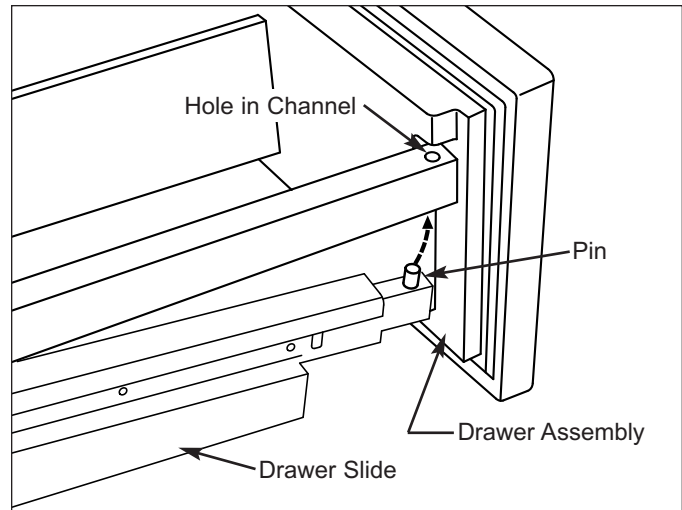


Figure 7-4. Drawer Assembly Removal

Door & Drawer Gasket Removal (All Models)

The door and drawer gaskets are pressed into retaining channels that are molded into door and drawer liners.

NOTE: Drawer assemblies must be removed from the unit in order to remove and/or install their gaskets.

To remove a door or drawer gasket, simply pull the gasket from the retaining channel. (See Figure 7-5)

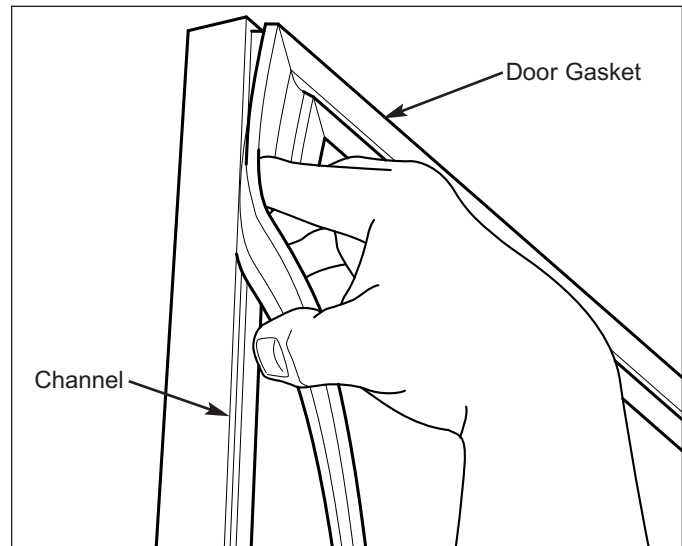


Figure 7-5. Gasket Removal

Door Assembly Removal (All Models)

The door assembly is held in place with Allen-head screws that pass down through the arm of the top hinge assembly and up through the arm of the bottom hinge assembly, then into the door. These mounting screws are concealed by a hinge cover on each hinge arm. The hinge covers are held in place by tabs that fit into notches in the hinge arms.

NOTE: Removing the top drawer first will make this task easier.

To remove a door assembly (See Figure 7-6):

1. Open door and removing both hinge covers.
2. With Allen-head wrench, extract the two inner-most door mounting screws from top and bottom hinge arms, leaving the two outer-most screws in place.
3. Close door and extract the outer-most door mounting screws from bottom hinge arm.
4. Extract the two outer-most door mounting screws from top hinge arm.
5. Lift door from unit.

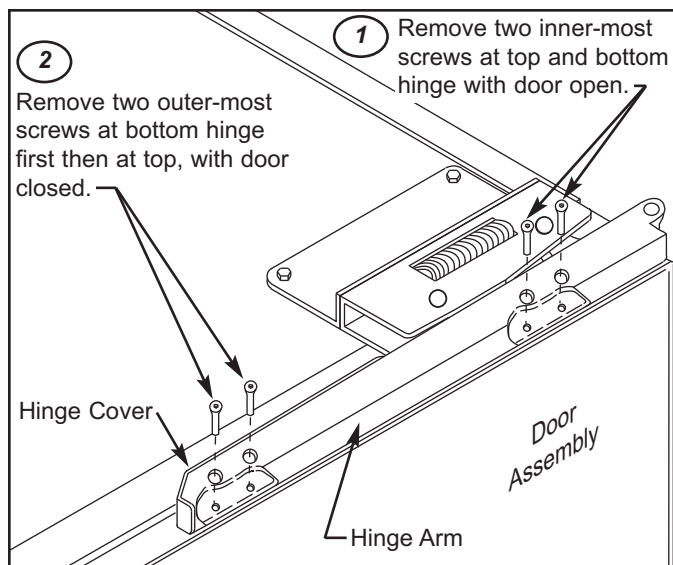


Figure 7-6. Door Assembly Removal

Upper and Lower Hinge Assembly Removal (All Models)

The hinge assemblies are attached to hinge mounting brackets with Allen-head bolts.

To remove a hinge assembly, you will need to remove the door assembly first. Then, extract the Allen-head bolts from the appropriate hinge mounting bracket and pull the hinge assembly from the unit. (See Figure 7-7)

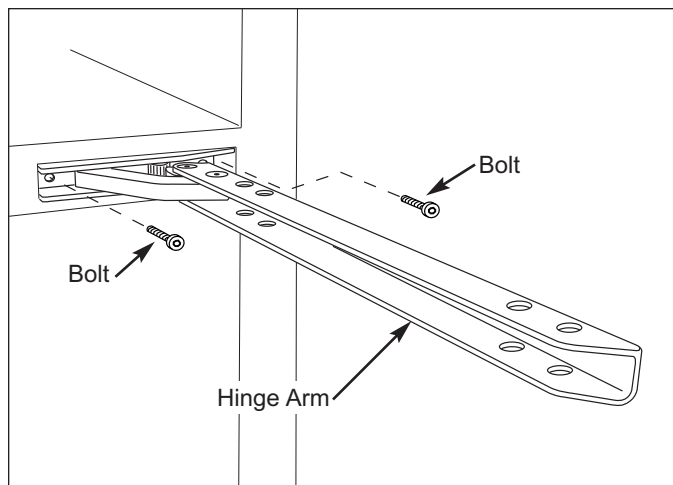


Figure 7-7. Hinge Assembly Removal

INTERIOR COSMETIC, MECHANICAL AND ELECTRICAL COMPONENTS

Door Shelf and Dairy Compartment Adjustment / Removal (All Models)

There are "L" shaped grooves in the end caps of the door shelves and dairy compartment, and there are knobs formed in the dikes of the door liner. (See Figure 7-8) The door shelves and dairy compartment are hung on the door by lining up the "L" shaped grooves with the knobs.

Push in and down to install a door shelf. Pull up and out to remove a door shelf.

Compartment Shelf Adjustment / Removal (All Models)

Compartment shelf side rails have hooks at the back that allow the shelves to be hung from shelf ladders.

To remove a compartment shelf, tilt the front of the shelf up, then lift the back of the shelf up to disengage the hooks from the shelf ladders and pull the shelf from the unit. (See Figure 7-9)

To reinstall a compartment shelf, tilt the front of the shelf up and align the hooks with the slots in shelf ladders, then insert the hooks into slots and lower the front of the shelf.

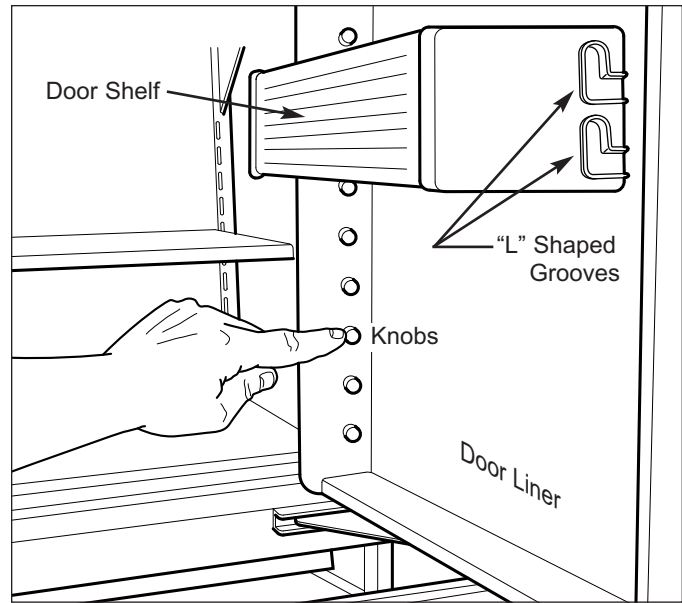


Figure 7-8. Door Shelf

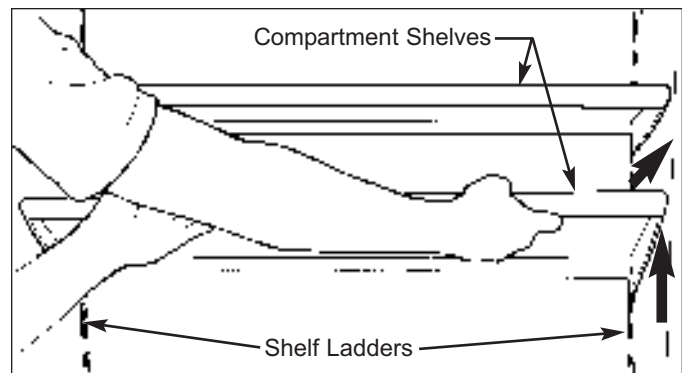


Figure 7-9. Compartment Shelf Removal

Upper Light Diffuser Removal (All Models)

The side frames of the upper light diffuser have four inverted “T” shaped slots (two each side) which fit over pegs protruding from the side walls of the upper compartment. Retaining clips at the rear slots secure the diffuser to the rear pegs.

To remove the light diffuser (See Figure 7-10):

1. Slide a finger over the top of each retainer clip flange and rotate the retainer clip down and back.
2. With clips open, lift the diffuser up and slide it towards the rear of unit until center of the “T” slots line up with the pegs.
3. Lower diffuser down and pull forward from the unit. (See Figure 7-11)

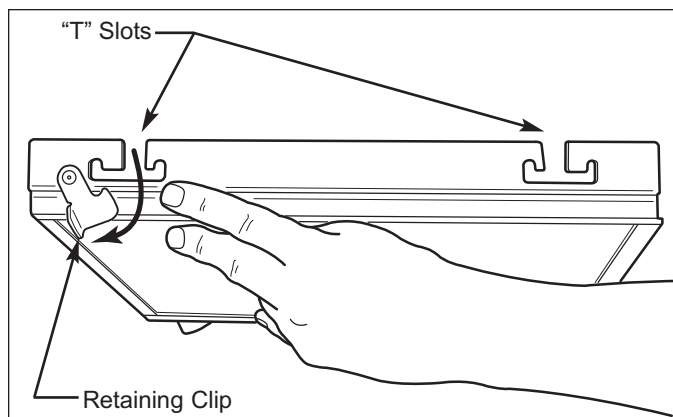


Figure 7-10. Upper Light Diffuser Removal

Light Bulb Removal (All Models)

To access the upper light bulbs, the light diffuser must be removed first. With the diffuser removed, screw the bulb counterclockwise to remove it and clockwise to install it. (See Figure 7-12)

The light bulbs in the drawer area are not covered by light diffusers. Screw the bulb counterclockwise to remove and clockwise to install. (See Figure 7-12)

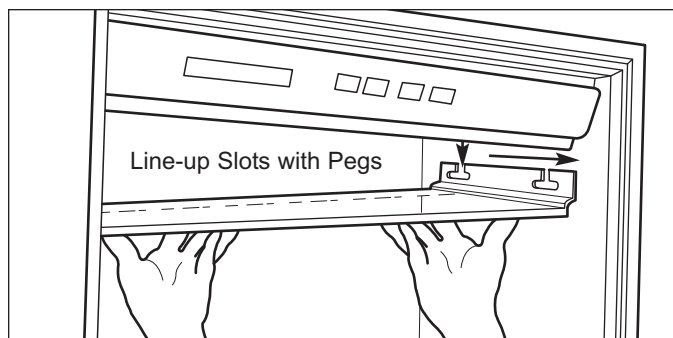


Figure 7-11. Upper Light Diffuser Removal

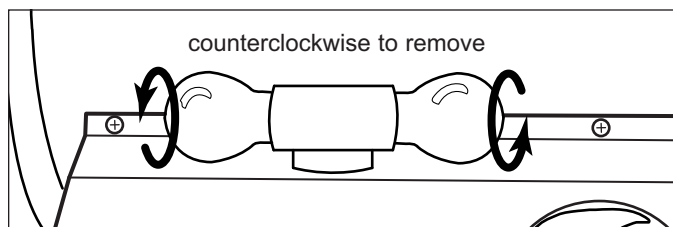


Figure 7-12. Light Bulb Removal

Control Board Removal (All Models)

The control board is held in position by two sets of tabs behind the left side of the control panel. 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 access and remove control board, the light diffuser must be removed first, then (See Figures 7-13 & 7-14):

1. Extract screws securing control enclosure to ceiling of the compartment. Lower the back of enclosure while pulling it toward rear of unit.
2. Disconnect all electrical leads from control board.
3. Expand the two tabs at middle of control board outward while pulling the back of board down slightly. Then, expand the two forward tabs that hold the LCD in position outward. Now, pull control board down and toward rear of unit.

Control Panel Assembly Removal (All Models)

The control panel is held in place with two rows of screws. The front row of screws go through spacers that fit into key-hole slots at the front of the panel. The rear screws secure the assembly to the ceiling.

To access and remove the control panel, the light diffuser and control enclosure must be removed first.

NOTE: It is recommended but not necessary to remove the control board in order to remove the control panel. If leaving the control board secured to the control panel, all electrical leads attached to the control board must be disconnected.

1. Extract rear mounting screws from control panel.
2. Push panel toward rear of unit to release the front screws from key-hole slots, then lower panel down and pull out of unit. (See Figure 7-15)

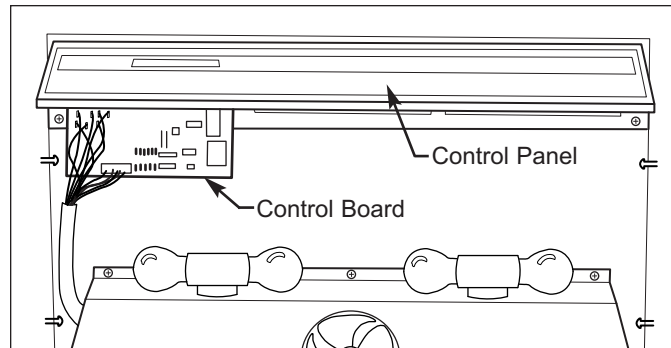


Figure 7-13. Control Board And Control Panel

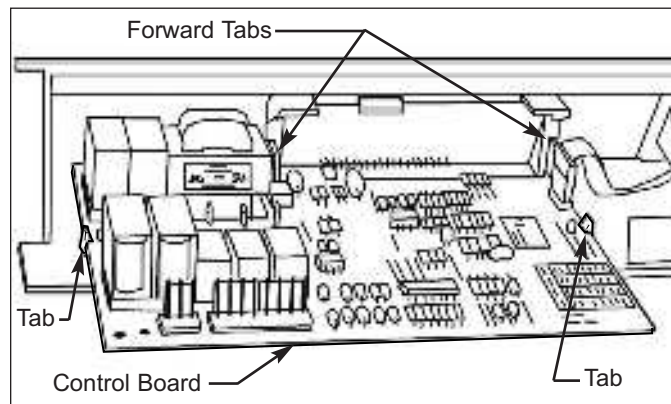


Figure 7-14. Control Board Removal

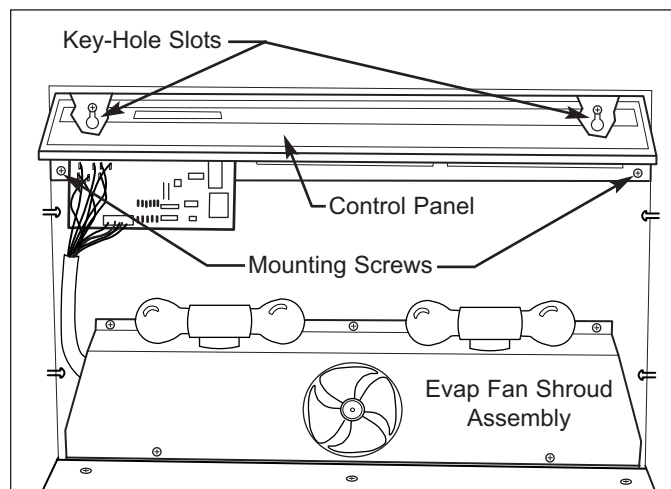


Figure 7-15. Control Panel Removal

Upper Evaporator Cover / Air Duct Removal (All Models)

The bottom of the upper evaporator cover sets into a channel at the bottom of the upper compartment. At the top, screws hold the evaporator cover to the evaporator fan shroud.

To access and remove the evaporator cover, the light diffuser must first be removed, then (See Figure 7-16):

1. Extract screws at top of evaporator cover.
2. Tilt cover forward and lift out of unit.

Upper Evaporator Fan Shroud Assembly Removal (All Models)

The evaporator fan shroud assembly, which holds the upper compartment lighting components, is secured to the ceiling with screws.

To access and remove the evaporator fan shroud assembly, first remove the light diffuser and evaporator cover, then (See Figure 7-17):

1. Extract the mounting screws which secure fan shroud assembly to ceiling of compartment.
2. Lower the assembly and disconnect wire harness.

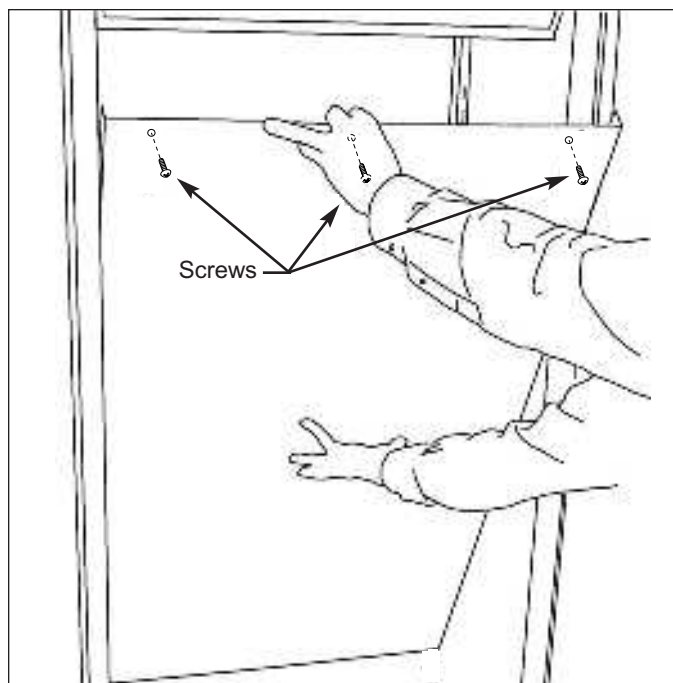


Figure 7-16. Upper Evaporator Cover Removal

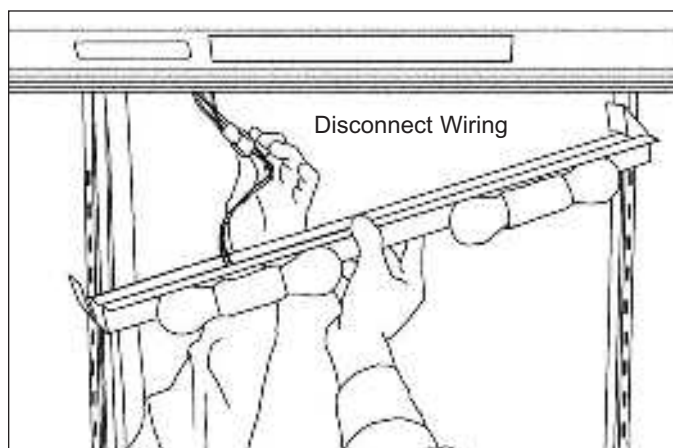


Figure 7-17. Upper Evaporator Fan Shroud Assy

Upper Compartment Evaporator Fan Assembly Removal (All Models)

The upper evaporator fan assembly sets in a pocket in the ceiling of the upper compartment and is secured to the ceiling with screws.

To access and remove the evaporator fan assembly, first remove light diffuser, evaporator cover, and evaporator fan shroud assembly, then (See Figure 7-18):

1. Disconnect fan motor wire leads from wire harness.
2. Extract fan assembly mounting screws and remove from unit.
3. The evaporator fan blade is pressed onto the shaft of the fan motor and can be removed by simply pulling it away from the motor.

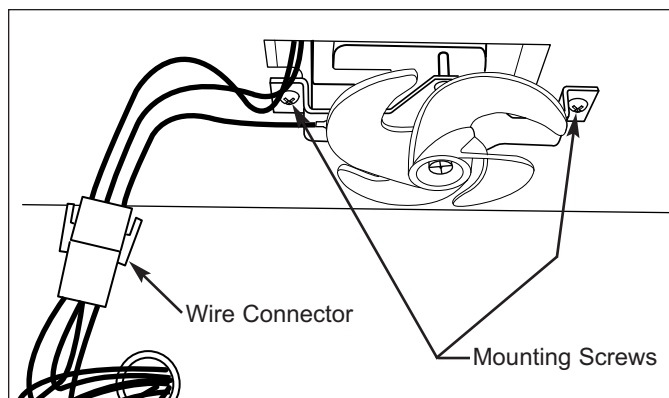


Figure 7-18. Upper Evap Fan Assy

Upper Compartment Thermistor Removal (All Models)

The upper compartment thermistor is behind the evaporator cover, attached to the back wall with a screw.

To access and remove the upper compartment thermistor, first remove the light diffuser and evaporator cover, then (See Figure 7-19):

1. Extract thermistor mounting screw.
2. Cut thermistor's wire leads six (6) to twelve (12) inches from the back wall, then pull thermistor from compartment.

Upper Evaporator Thermistor Removal (All Models except 736TFI)

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

To access and remove the upper evaporator thermistor, first remove light diffuser and evaporator cover, then (See Figure 7-19):

1. Cut thermistor's wire leads six (6) to twelve (12) inches from the back wall.
2. Pull thermistor from evaporator fins.

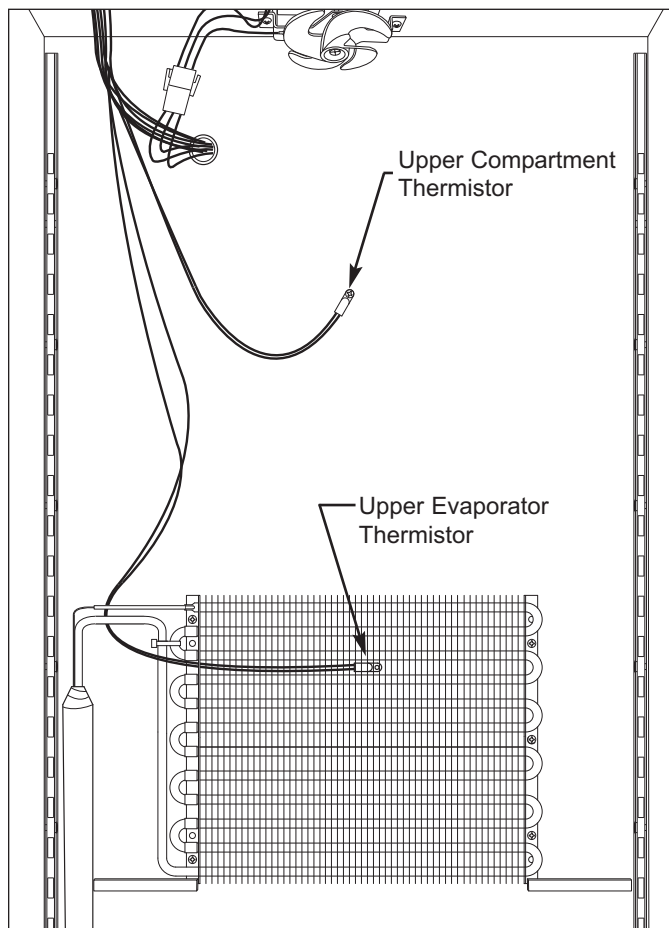


Figure 7-19. Upper Compartment and Evaporator Thermistors

Drawer Closer Assembly Removal (All Models)

The drawer closer assemblies are located on the right side wall, towards the front of the two drawer areas. Screws secure each drawer closer to the wall.

To access and remove a drawer closer assembly, first remove the appropriate drawer. Then, extract the screws that secure the drawer closer to the wall. (See Figure 7-20)

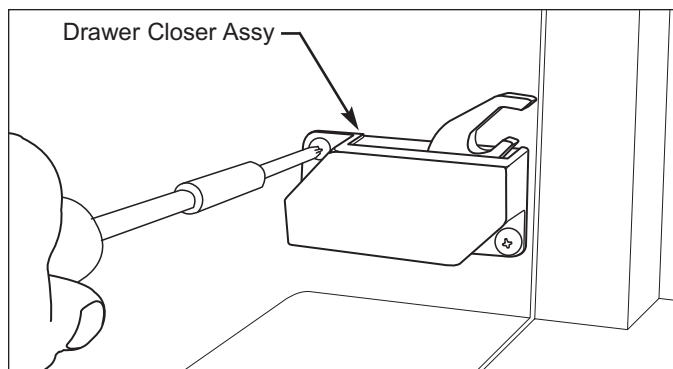


Figure 7-20. Drawer Closer Assembly Removal

Drawer Slide Assembly Removal (All Models)

The four drawer slide assemblies are attached to the side walls with Allen-head screws passing through the drawer slide bracket into blind threaded inserts.

To access and remove a drawer slide assembly, first remove the drawer. Then, extract the drawer slide mounting screws with a 5/32" Allen-head wrench, and pull the drawer slide assembly away from the wall. (See Figure 7-21)

NOTE: The pins at front end of the drawer slides are replaceable. Screw pins counterclockwise to remove them. (See Figure 7-22)

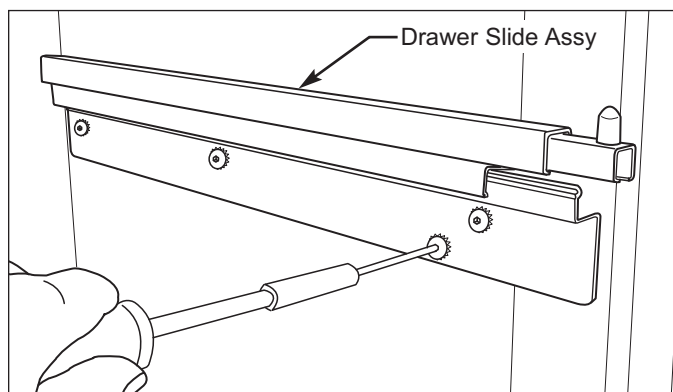


Figure 7-21. Drawer Slide Assembly Removal

Icemaker Assembly Removal (All Models with Icemakers)

The icemaker is attached to a support plate with screws that pass up through the plate into the bottom of the icemaker. The ice level arm is also attached to the support plate using two P-clamps and two screws. The P-clamps fit around rods at the back of the ice level arm. Screws passing through the P-clamps secure them to the support plate at the rear. At the front, a connecting rod is used to attach the ice level arm to the icemaker shut-off arm. This whole assembly is attached to the evaporator cover with three mounting screws, two at the top and one at the bottom.

To access and remove the icemaker assembly, first remove the bottom drawer, then (See Figure 7-23):

1. Extract mounting screw at bottom and two top mounting screws.
2. Lower the icemaker assembly down and disconnect wire harness from back left of icemaker.
3. The icemaker can now be removed from the support plate by sliding the connecting rod off of the shut-off arm, then extracting the screws from bottom of icemaker.

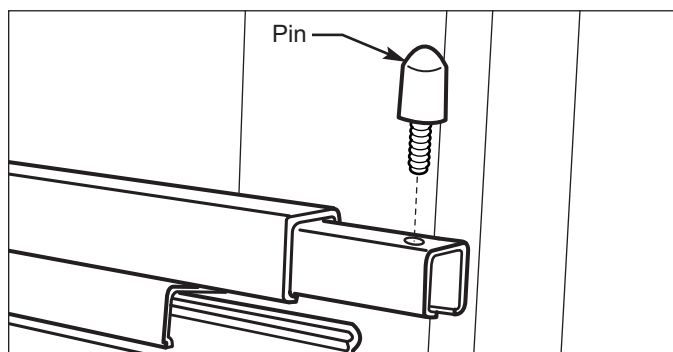


Figure 7-22. Pin Replacement

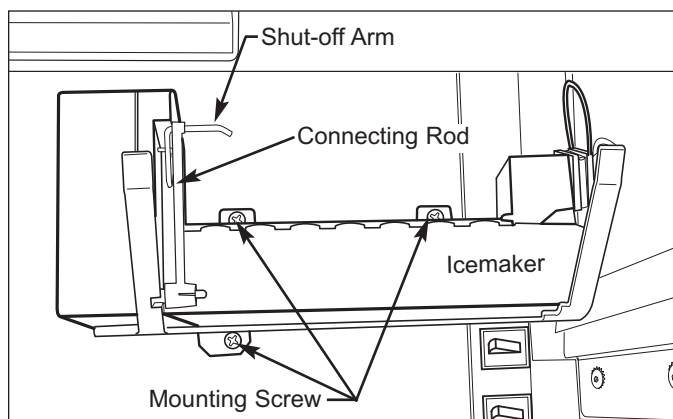


Figure 7-23. Icemaker Assy

Heat Exchanger Cover Removal (All Models)

The heat exchanger cover is held in the back left corner of the lower compartment with screws that go through the cover and into stand-offs. (See Figure 7-24)

To access and remove the heat exchanger cover, the drawers and the left side drawer slides will need to be removed first. Then, extract the mounting screws and pull the cover from the unit.

Lower Evaporator Cover Assembly Removal (Models 736TR)

NOTE: In these models, the evaporator fan assembly is attached to the lower evaporator cover assembly.

The lower evaporator cover assembly is held in place with screws. The left side mounting screws will be visible after the heat-exchanger cover is removed. Screws on the right side secure the assembly to the switch enclosure, and screws at top secure the assembly to the ceiling of the lower compartment. (See Figure 7-25)

To access and remove lower evaporator cover assembly, first remove drawers, left drawer slides, and heat exchanger cover, then (See Figure 7-25):

1. Extract left side mounting screws.
2. Extract screws from top and right side of assembly.

NOTE: Bottom screw on right side also secures the compartment thermistor.

3. Pull right top front of assembly down slightly and disconnect evaporator fan electrical leads, then pull assembly out through upper drawer opening.

Lower Evaporator Fan Assembly Removal (Models 736TR)

The lower evaporator fan assembly is held in place by bolts passing through access holes in the evaporator fan shroud, then through the top flange of the evaporator cover and into well-nuts in the fan bracket.

To access and remove the lower evaporator fan assembly, first remove drawers, left side drawer slides, heat exchanger cover and evaporator cover assembly. Then, extract the bolts from the well-nuts (See Figure 7-26).

The evaporator fan blade is pressed onto the shaft of the fan motor and can be removed by simply pulling it away from the motor.

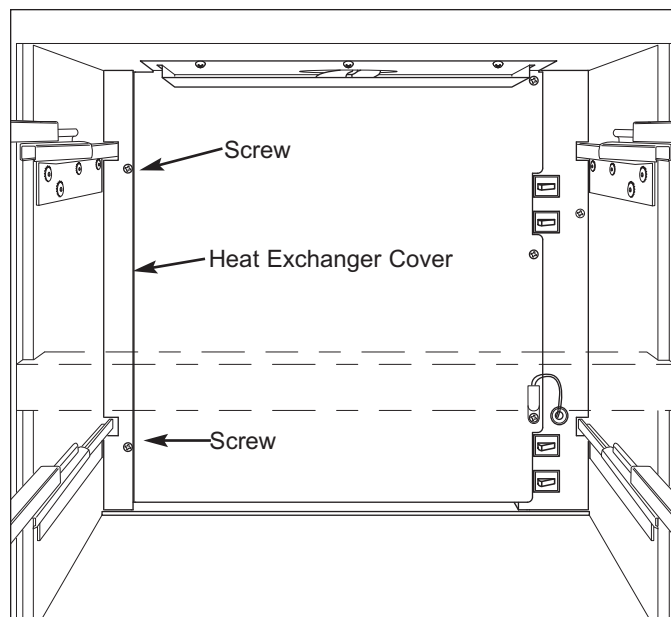


Figure 7-24. Heat Exchanger Cover Removal

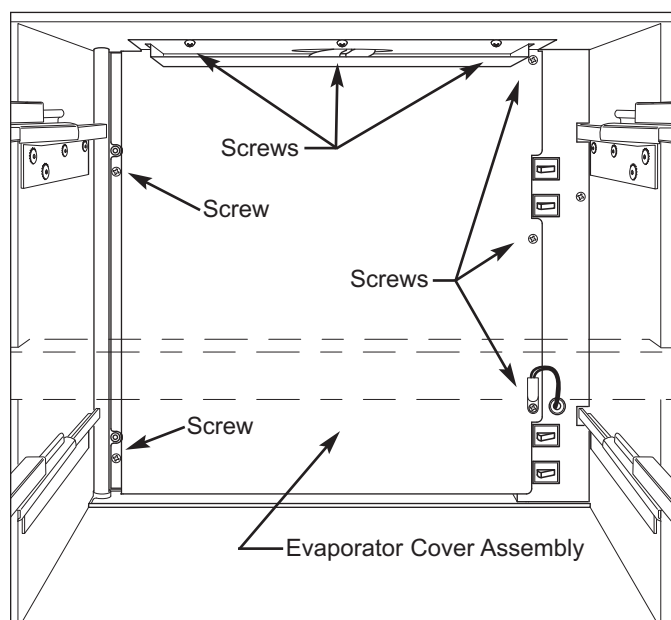


Figure 7-25. Evaporator Cover Removal, 736TR

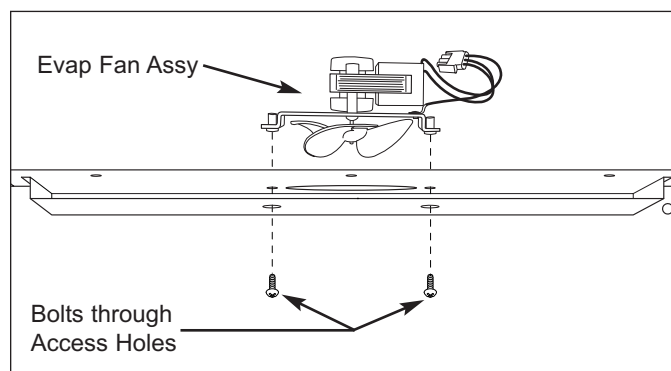


Figure 7-26. Evaporator Fan Removal, 736TR

Lower Compartment Thermistor Removal (Models 736TR)

The lower compartment thermistor in these models is attached at front of the switch enclosure with a screw.

To access and remove the lower compartment thermistor, first remove drawers, left side drawer slides, heat exchanger cover and lower evaporator cover, then (See Figure 7-27):

1. The screw securing compartment thermistor to switch enclosure will be removed when evaporator cover is removed.
2. Extract switch enclosure mounting screws and pull enclosure away from back wall.
3. Cut thermistor's wire leads six (6) to twelve (12) inches from back wall.

Lower Evaporator Thermistor Removal (Models 736TR)

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

To access and remove the lower evaporator thermistor, first remove drawers, left side drawer slides, heat exchanger cover and lower evaporator cover assembly, then (See Figure 7-27):

1. Cut thermistor's wire leads six (6) to twelve (12) inches from the back wall.
2. Pull thermistor from evaporator fins.

Lower Evaporator Cover Assembly Removal (Models 736TFI, 736TCI)

The lower evaporator cover in these models is held in place with screws and a locating peg. The left side mounting screws are hidden by the heat-exchanger cover; screws at top secure evaporator cover to ceiling of lower compartment; a peg protruding from the bottom left side of switch enclosure fits into a hole at bottom right side of evaporator cover.

To access and remove the lower evaporator cover, first remove drawers, left side drawer slides, and heat exchanger cover, as well as icemaker, if applicable, then (See Figure 7-28):

1. Extract left side and top mounting screws.
2. Pull evaporator cover toward left wall to disengage peg from hole at bottom right, then pull assembly out through upper drawer opening.

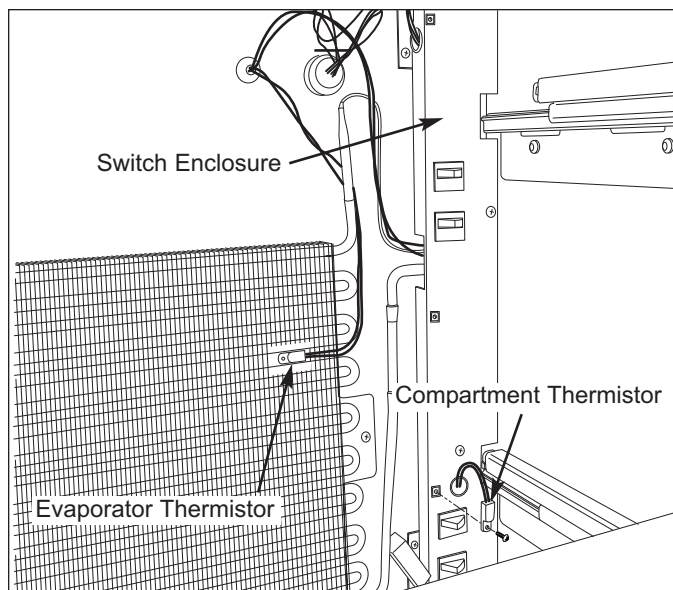


Figure 7-27. Lower Thermistors, 736TR

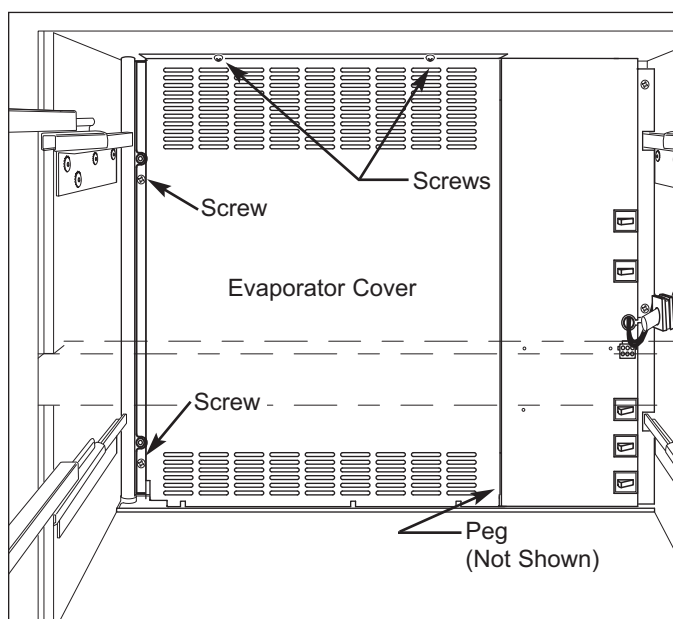


Figure 7-28. Evaporator Cover Removal, Model 736TCI Shown

Drain Trough Heater Removal (Models 736TF/I, 736TCI)

The drain trough heater in the lower compartment is positioned just above the drain trough and held in place by three heater brackets.

To access and remove the drain trough heater, first remove drawers, left side drawer slides, heat exchanger cover and the evaporator cover, then (See Figure 7-29):

1. Pull heater up and out of notches in the side brackets, and down and out of notches in middle bracket.
2. Pull heater toward left until electrical connections emerge from behind switch enclosure, then disconnect electrical leads.

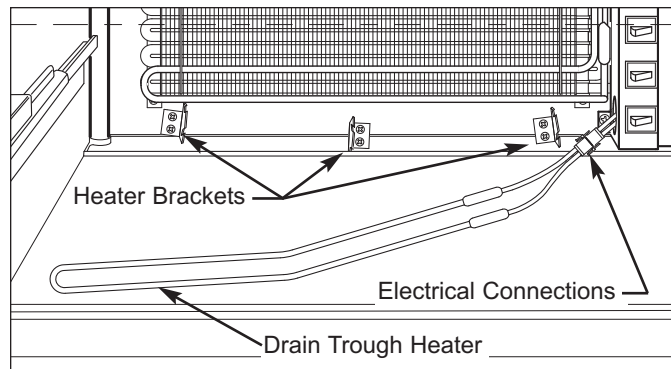


Figure 7-29. Drain Trough Heater

Lower Evaporator Fan Shroud Removal (736TFI & 736TCI)

The lower evaporator fan shroud is attached to the evaporator fan bracket assembly with two screws.

To access and remove the lower evaporator fan shroud, first remove drawers, left side drawer slides, heat exchanger cover and the evaporator cover. Then, extract the screws that pass through the fan shroud into the evaporator fan bracket. (See Figure 7-30)

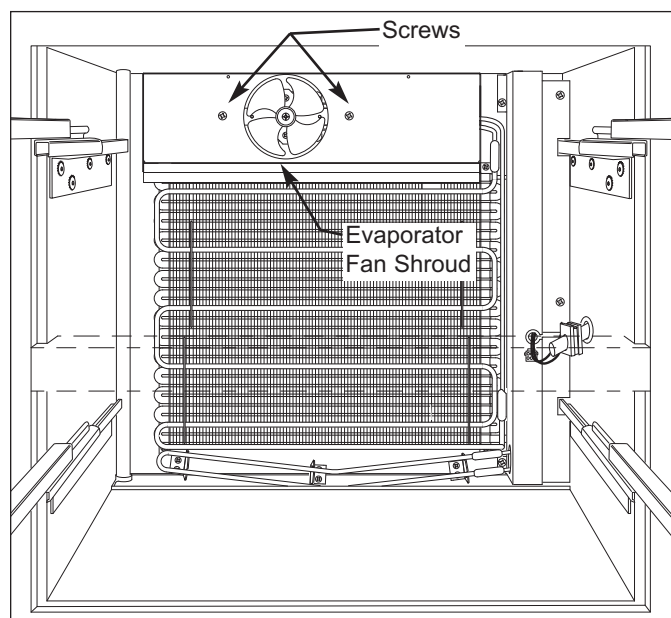


Figure 7-30. Evap Fan Shroud, 736TCI

Lower Evaporator Fan Assembly Removal (736TFI & 736TCI)

The lower evaporator fan assembly in these models is attached to the upper back wall of the lower compartment with screws.

To access and remove the lower evaporator fan assembly, first remove drawers, left side drawer slides, heat exchanger cover, evaporator cover and the evaporator fan shroud, then (See Figure 7-31):

1. Disconnect fan wire leads from wire harness.
2. Extract fan assembly mounting screws from back wall and pull fan assembly from unit.

NOTE: The evaporator fan blade is pressed onto the shaft of the fan motor and can be removed by simply pulling it away from the motor.

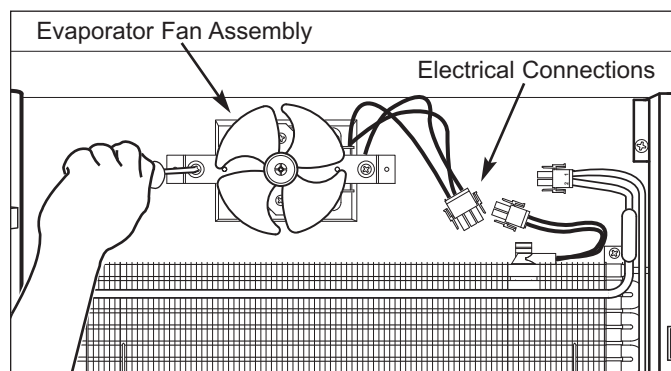


Figure 7-31. Fan Assy Removal, 736TCI

Defrost Terminator Removal (736TFI & 736TCI)

The defrost terminator is attached to the second tubing pass from the top of the evaporator.

To access and remove the defrost terminator, first remove drawers, left side drawer slides, heat exchanger cover, evaporator cover and the evaporator fan shroud, then (See Figure 7-32):

1. Extract screws from top of evaporator, then pull top of the evaporator forward slightly.
2. Disconnect defrost terminator electrical leads.
3. Pull terminator toward back of unit so that clip disengages from evaporator tubing.

NOTE: When reinstalling the defrost terminator, it must be attached to the second tubing pass of the evaporator. Installing terminator on the first pass will place it too close to the defrost heater, causing shortened defrost times which will lead to incomplete defrost.

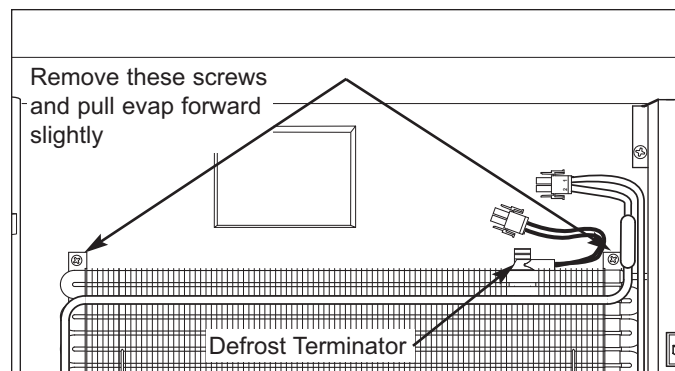


Figure 7-32. Defrost Terminator, TC/I-3, TF/I-3

Defrost Heater Removal (73600TFI & 736TCI)

The defrost heater is pressed into the evaporator fins at the front. Heater clips are then hooked from one evaporator tube to another, over the heater.

To access and remove the defrost heater, first remove drawers, left side drawer slides, heat exchanger cover, evaporator cover and the evaporator fan shroud, then (See Figure 7-33):

1. Disconnect defrost heater electrical leads.
2. Grab the return bend of heater clips with a needle-nose pliers and pull that end of clip away from evaporator. Unhook other end of heater clip from evaporator tubing.
3. Cut heater wire near electrical connector and pull heater from evaporator.

NOTE: When installing replacement heater, do not place heater clips over top heater pass. Doing so will interfere with evaporator fan shroud.

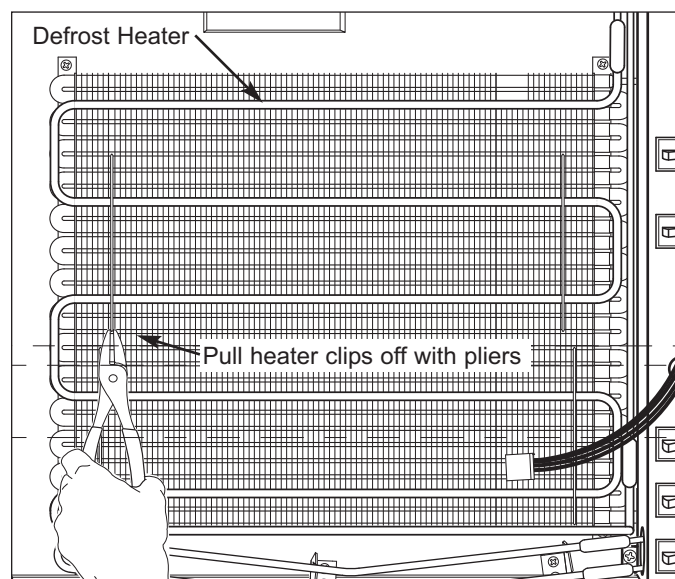


Figure 7-33. Defrost Heater, TC/I-3, TF/I-3

Switch Enclosure Assembly Removal (All Models)

Lower switch enclosure assemblies are held at the back right corner of the compartment with screws at the top and bottom left corners, and depending on the model, one or two along the right side.

To access and remove the switch enclosure assembly, first remove drawers, left side drawer slides, heat exchanger cover, evaporator cover, as well as the drain trough heater on applicable models, then (See Figure 7-34):

1. Disconnect all electrical leads at the top left side of enclosure.
2. On applicable models, the fill tube and fill tube heater assembly will need to be pulled from the right wall.
3. Extract the switch enclosure mounting screws and pull the assembly from back wall.

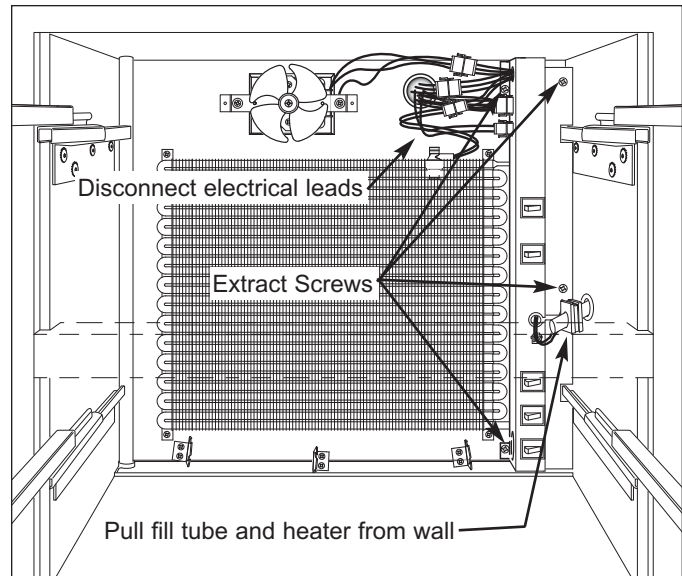


Figure 7-34. Switch Enclosure Removal
TC/I-3, TF/I-3

Lower Evaporator Thermistor Removal (736TFI & 736TCI)

A screw secures the lower evaporator thermistor to the right side of the evaporator, just behind the top tubing passes.

To access and remove the lower evaporator thermistor, first remove drawers, left side drawer slides, heat exchanger cover, lower evaporator cover and the switch enclosure, then (See Figure 7-35):

1. Extract screw from clamp holding thermistor to the right evaporator bracket.
2. Cut thermistor's wire leads six (6) to twelve (12) inches from the back wall, then pull thermistor from compartment.

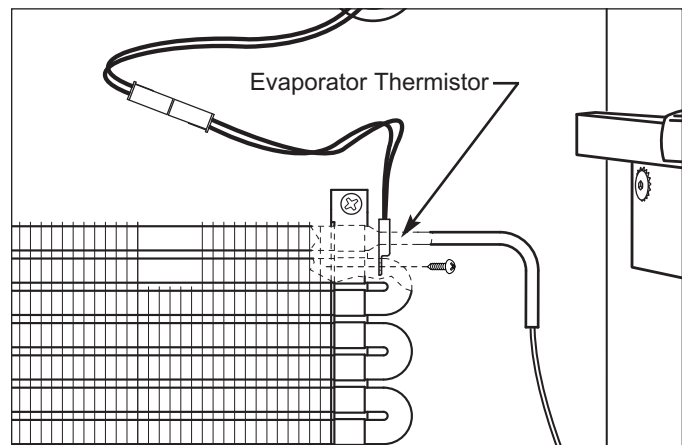


Figure 7-35. Evaporator Thermistor, TC/I-3, TF/I-3,

Lower Compartment Thermistor Removal (736TFI & 736TCI)

The lower compartment thermistor in these models is attached to the back wall with a screw.

To access and remove the lower compartment thermistor, first remove drawers, left side drawer slides, heat exchanger cover, lower evaporator cover and the switch enclosure, then (See Figure 7-36):

1. Extract screw from clamp holding thermistor to the back wall.
2. Cut thermistor's wire leads six (6) to twelve (12) inches from the back wall, then pull thermistor from compartment.

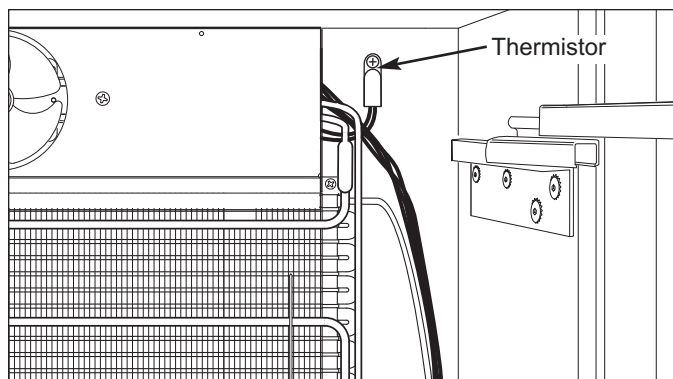


Figure 7-36. Lower Compartment Thermistor TC/I-3, TF/I-3

Fill Tube Heater Removal (736TFI & 736TCI)

The fill tube heater wraps around the fill tube. The heater electrical connections are behind the switch enclosure.

To access and remove the fill tube heater, first remove drawers, left side drawer slides, heat exchanger cover, lower evaporator cover and the switch enclosure, then (See Figure 7-37)

1. Disconnect the heater's electrical leads.
2. Push the wire grommet from hole in switch enclosure and pull heater wiring through slot in side of switch enclosure.
3. Pull heater off of fill tube.

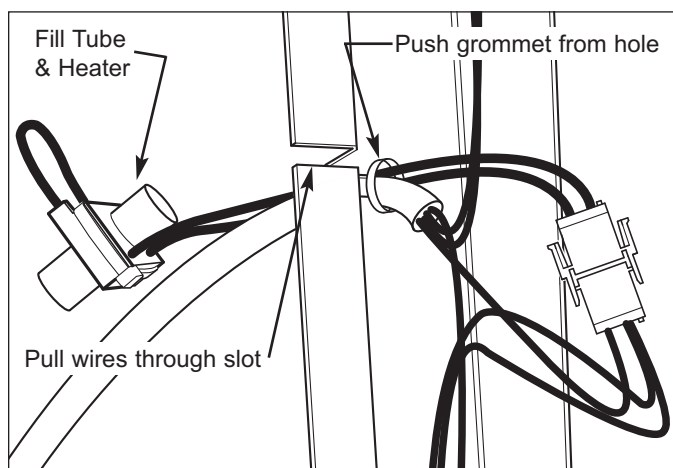


Figure 7-37. Fill Tube Heater, TC/I-3, TF/I-3

Lower Compartment Light / Fan / Icemaker Switch Removal (All Models)

The light switches, fan switches and icemaker switch in the lower compartment are mounted to the switch enclosure. The switches are held in place by tabs on the sides of the switches.

To access and remove a switch, first remove drawers, left side drawer slides, heat exchanger cover, lower evaporator cover and the switch enclosure, then (See Figure 7-38):

1. Disconnect electrical leads from switch being removed.
2. Depress tab on side of switch and push switch out from enclosure.

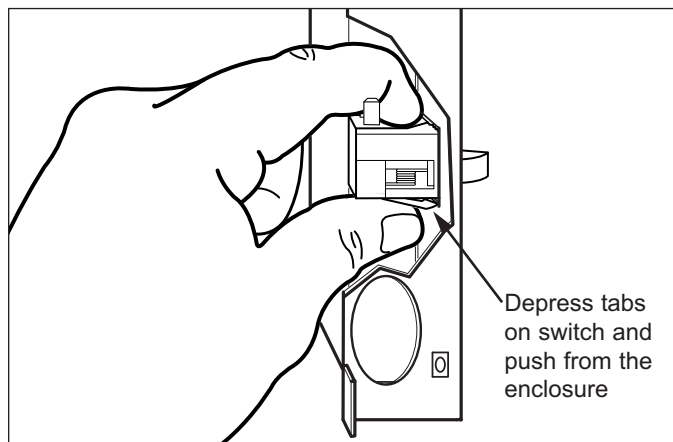


Figure 7-38. Lower Compartment Switch Removal

COMPRESSOR AREA ELECTRICAL AND MECHANICAL COMPONENTS

Icemaker Water Valve Removal (736TFI & 736TCI)

The icemaker water valve assembly is located at the right side of the compressor area next to the condenser, and is attached to the valve bracket with screws.

NOTE: Before accessing the icemaker water valve, turn off water supply to the unit.

To remove the water valve, the kickplate/grill will need to be removed first and the unit tray slid out. To slide the unit tray out, extract the two screws that secure the tray to the unit, located at the front right and left corners. Grab the front flange of the tray and pull forward. (See Figure 7-39), then (See Figure 7-40):

1. Disconnect inlet water tube from the valve inlet by pushing collar around tube toward valve, while pulling inlet water tube away from valve.
2. With a Phillips screwdriver, remove screws from valve bracket.
3. Lower valve and pull forward.
4. Disconnect valve electrical leads.
5. Disconnect outlet tube from the valve outlet by pushing collar around tube toward valve, while pulling outlet water tube away from valve.

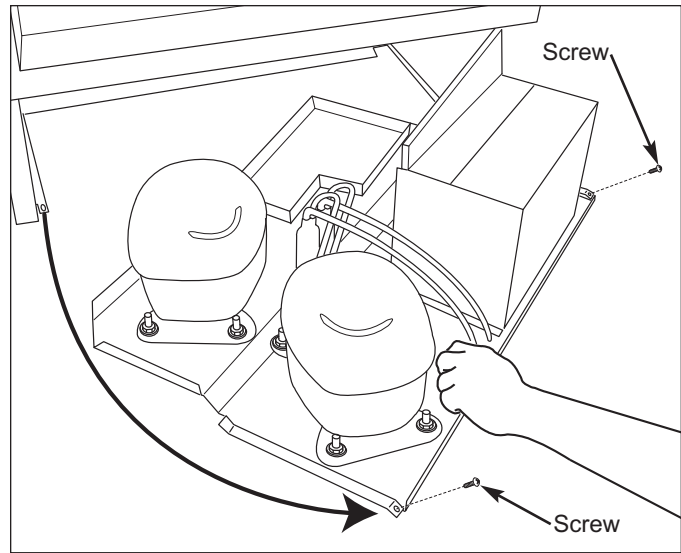


Figure 7-39. Sliding Unit Tray Out

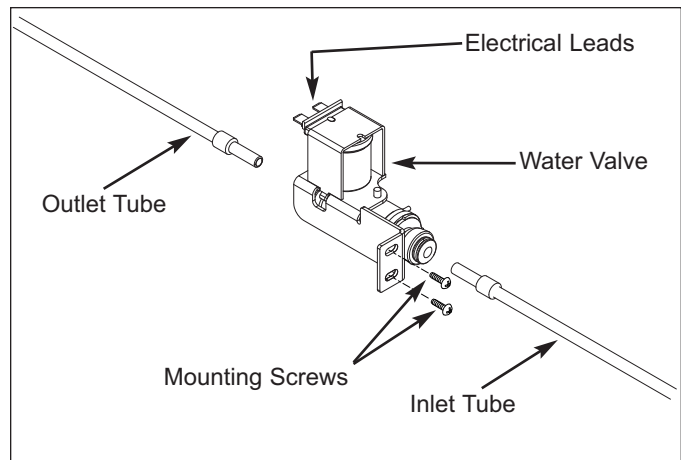


Figure 7-40. Water Valve Removal, TC/I-3,TF/I-3

Condenser Fan Assembly Removal

The condenser fan shroud sets on top of two pegs protruding from the unit tray and two screws at the top of the shroud secure it to the condenser. The condenser fan is mounted to the condenser fan shroud. Three fan mounting brackets are hooked into grommets 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 access and remove the condenser fan assembly, the kickplate/grille will need to be removed first and the unit tray will need to be slid out. To slide the unit tray out, extract the two screws that secure the tray to the unit, located at the front right and left corners. Grab the front flange of the tray and pull forward. (See Figure 7-41)

NOTE: It may be necessary to disconnect the compressor electrical leads in order to pull the tray out far enough to access the condenser fan assembly.

1. Disconnect condenser fan motor electrical leads. (See Figure 7-42)
2. Extract screws at the top of the fan shroud and lift the shroud with motor, up off of the pegs located on unit tray. (See Figure 7-42)
3. Remove condenser fan from shroud by extracting the screws securing the motor to the brackets. The brackets will unhook from the grommets in the condenser fan shroud after the screws are removed. (See Figure 7-43)
4. To remove fan blade from the fan motor, grab the blade and motor while turning the nut counterclockwise. Then pull the blade from motor shaft. (See Figure 7-43)

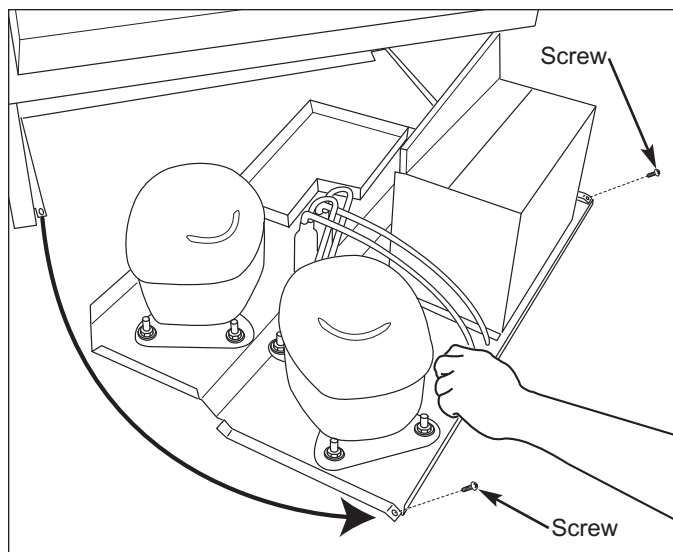


Figure 7-41. Sliding Unit Tray Out

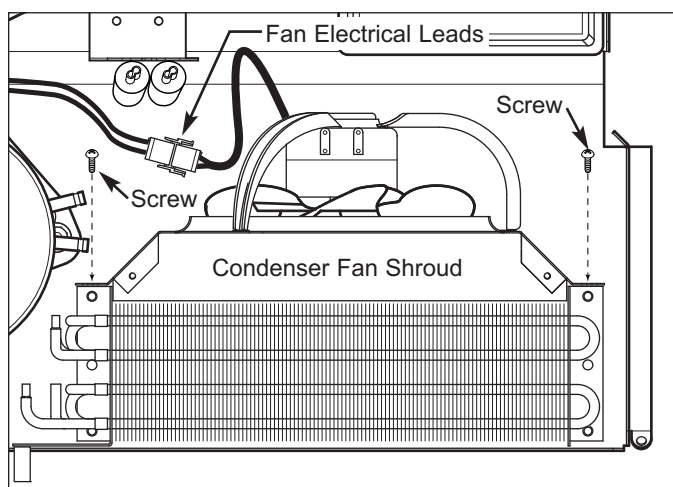


Figure 7-42. Condenser Fan Shroud Removal

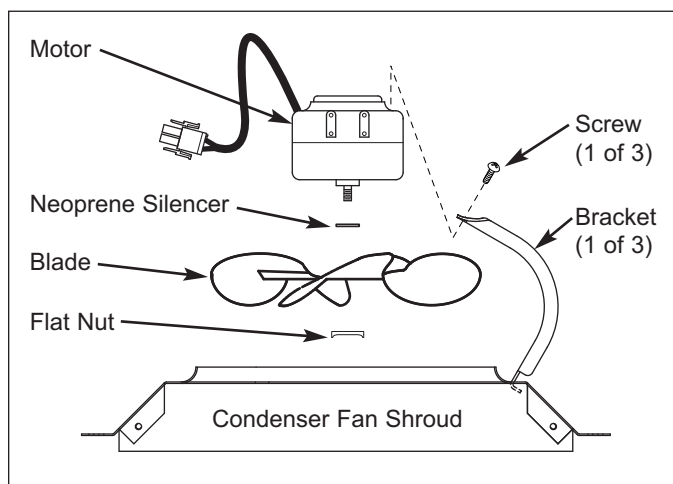


Figure 7-43. Condenser Fan Assembly

SEALED SYSTEM COMPONENTS

Upper Refrigerator Compartment Evaporator Removal (All Models except 736TFI)

The upper evaporator is attached to the back wall with screws.

NOTE: Before attempting to remove the evaporator, evacuate the refrigerant from the sealed system.

To access and remove the upper evaporator, first remove the light diffuser and evaporator cover, then (See Figure 7-44):

1. Extract screws securing evaporator to the back wall.
2. With a tube cutter, cut inlet tube approximately one inch from the end and cut the outlet tube approximately two inches from the end.

NOTE: Sweating the joints apart is not recommended as this may induce moisture into the sealed system and could cause a solder restriction in the capillary tube.

NOTE: When installing a new evaporator, be sure to thoroughly clean the tubing before brazing. After brazing and inspecting the joint for leaks, it is recommended to apply an acrylic-based paint to the joints to protect the exposed metals from oxidation.

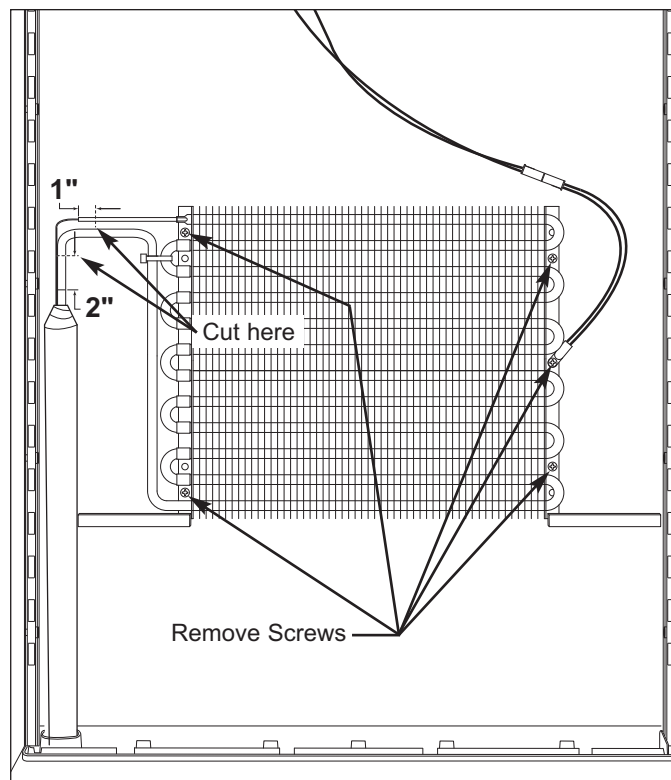


Figure 7-44. Upper Evaporator Removal

Lower Compartment Evaporator Removal

The lower evaporator is attached to the back wall with screws.

NOTE: Before attempting to remove the evaporator, evacuate the refrigerant from the sealed system.

To access and remove the lower evaporator, first remove the heat exchanger cover, evaporator cover and switch enclosure. In the model 736TCI, the evaporator fan shroud will also need to be removed, then (See Figure 7-45):

1. Extract screws securing evaporator to back wall.
2. With a tube cutter, cut the inlet tube approximately one inch from the end and cut the outlet tube approximately two inches from the end.

NOTE: Sweating the joints apart is not recommended as this may induce moisture into the sealed system and could cause a solder restriction in the capillary tube.

NOTE: If reusing the existing defrost heater, defrost terminator and evaporator thermistor, they can be removed from the evaporator after it is removed from the unit.

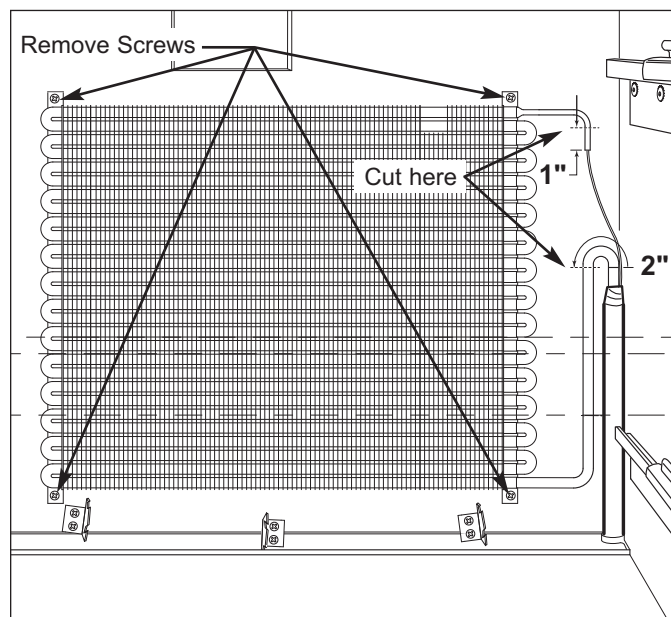


Figure 7-45. Lower Evaporator Removal

High-Side Filter-Drier Removal

The high-side filter-driers are located in the center of the unit tray, behind the condenser and are attached to the drier bracket with a cable tie.

NOTE: Before attempting to remove a filter drier, evacuate the refrigerant from the sealed system.

To access and remove a high-side filter-drier, the kick-plate/grille will need to be removed first and the unit tray will need to be slid out. To slide the unit tray out, extract the two screws that secure the tray to the unit, located at the front right and left corners. Grab the front flange of the tray and pull forward. (See Figure 7-46)

NOTE: It may be necessary to disconnect the compressor electrical leads in order to pull the tray out far enough to access the filter-driers.

1. Remove a filter-drier by cutting the cable tie which secures filter-driers to the bracket. (See Figure 7-47)
2. With file edge, score a line around capillary tube approximately one inch from filter-drier outlet, then fatigue capillary tube at this line until it separates.
3. With a tube cutter, cut the inlet tube approximately one inch from filter-drier.

NOTE: Sweating the joints apart is not recommended as this may induce moisture into the sealed system and could cause a solder restriction in the capillary tube.

NOTE: Check the end of the remaining capillary tube for internal burrs. If burrs exist, re-score a line around the capillary tube (approximately one inch from the end) and fatigue the capillary tube at this new line until it separates.

NOTE: When installing the replacement filter-drier, insert the capillary tube until it touches the screen, then pull the capillary tube approximately 3/8" away from the screen before brazing. (See Figure 7-48) When installing a new filter-drier, be sure to thoroughly clean the tubing before brazing.

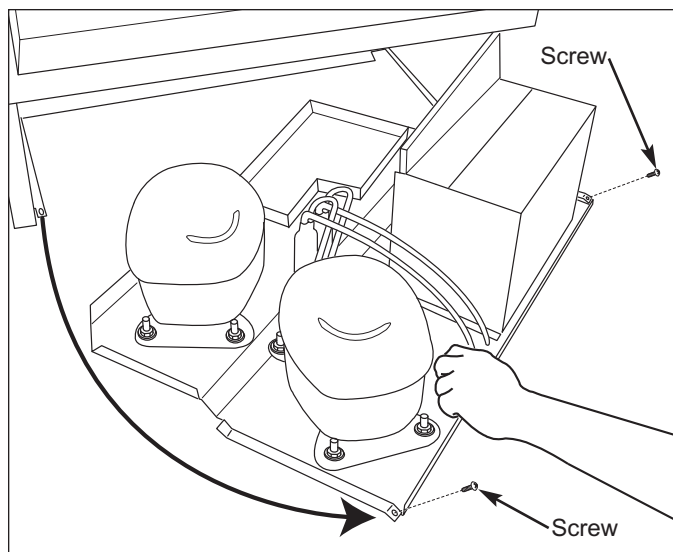


Figure 7-46. Sliding Unit Tray Out

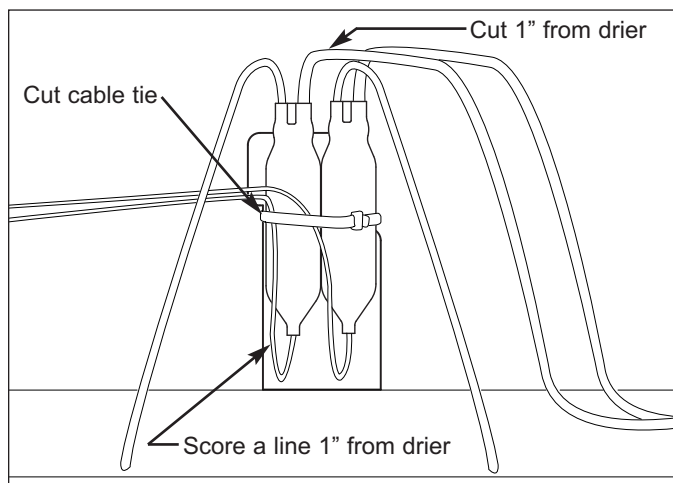


Figure 7-47. Filter-Drier Removal

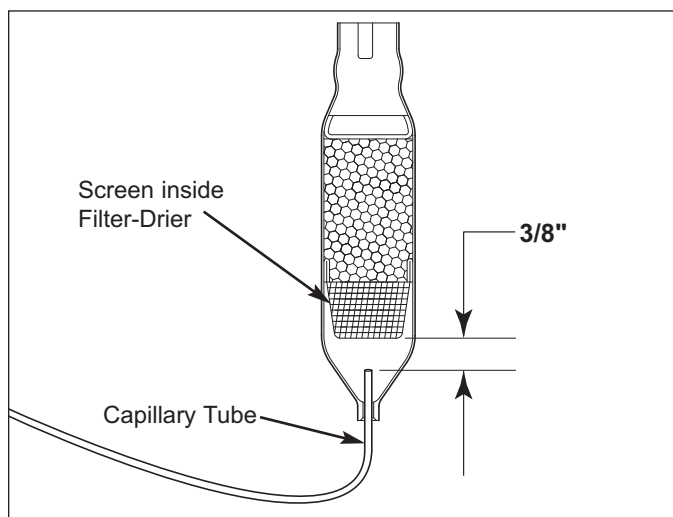


Figure 7-48. Filter-Drier Cut-Away View

Compressor Removal

The compressors have four rubber compressor grommets inserted into their base. Cylindrical metal spacers are placed over threaded studs that are pressed into the unit tray. The compressor grommets fit over the spacers and a washer sets on top of the grommet and spacer. A nut is then installed on the threaded stud and tightened down on the washer and spacer.

NOTE: Before attempting to remove a compressor, evacuate the refrigerant from the sealed system.

To access and remove a compressor, the kickplate/grille will need to be removed first and the unit tray will need to be slid out. To slide the unit tray out, extract the two screws that secure tray to the unit, located at the front right and left corners. Grab the front flange of tray and pull forward.

1. Use a flat-blade screwdriver to remove compressor electrical cover.
2. Disconnect electrical leads from compressor. (See Figure 7-49)
3. Remove compressor by cutting the inlet and outlet tubing with a tube cutter, approximately one inch from the compressor ports. (See Figure 7-50)
4. Extract nuts and washers from the threaded studs, then lift compressor off of studs. (See Figure 7-50)

NOTE: Sweating the joints apart is not recommended as this may induce moisture into the sealed system.

NOTE: The high-side filter-drier must be replaced whenever servicing the sealed system.

NOTE: When installing a compressor, be sure to thoroughly clean the tubing before brazing.

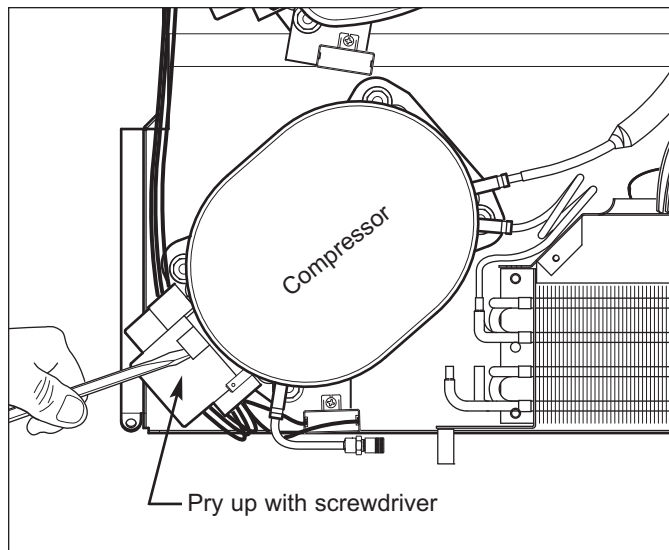


Figure 7-49. Removing Compressor Electrical Cap

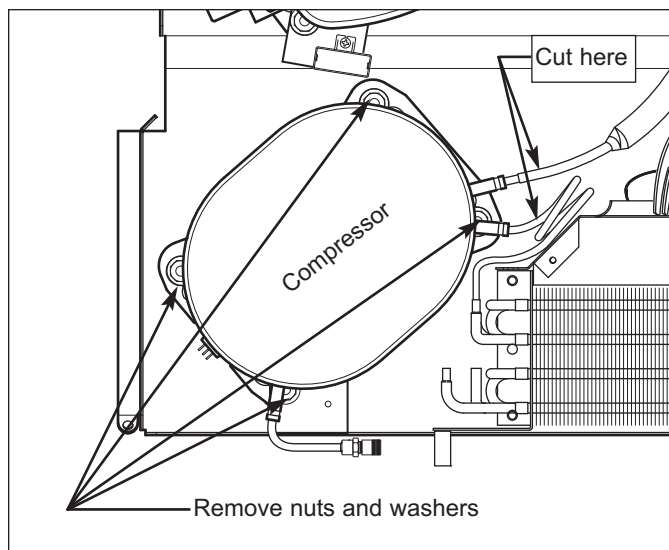


Figure 7-50. Compressor Removal

Condenser Removal

The condenser is secured to the unit tray by four rivets that pass up through the unit tray into the condenser side brackets.

NOTE: Before attempting to remove the condenser, evacuate the refrigerant from the sealed system(s).

To access the condenser, the kickplate/grille will need to be removed first and the unit tray will need to be slid out. To slide the unit tray out, extract the two screws that secure tray to the unit, located at the front right and left corners. Grab the front flange of tray and pull forward. (See Figure 7-51)

NOTE: It will be necessary to disconnect compressor electrical leads in order to pull the tray out far enough to remove the condenser.

1. Remove condenser by cutting the inlet and outlet tubes to and from the condenser, approximately one inch from the weld joints.
2. Prop front of the unit tray up and drill out the rivets securing condenser to unit tray. (See Figure 7-52)

NOTE: Sweating the joints apart is not recommended as this may induce moisture into the sealed system.

NOTE: The high-side filter-drier(s) must be replaced whenever replacing the condenser.

NOTE: To reattach the condenser to the unit tray, use #10-24 X 3/8" bolts (#6200020) passing up through the unit tray and condenser brackets with #10-24 Hex nuts (#6150030) tightened down on top.

NOTE: When installing the replacement condenser, be sure to thoroughly clean the tubing before brazing.

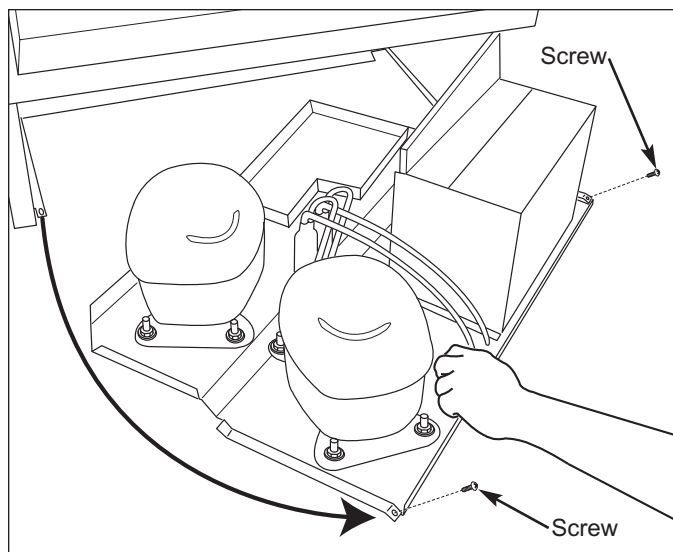


Figure 7-51. Sliding Unit Tray Out

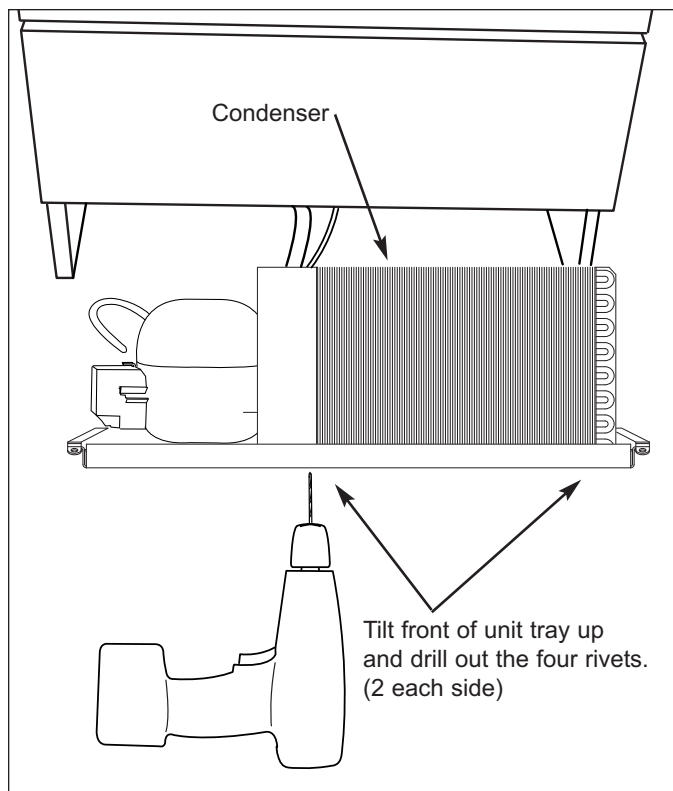


Figure 7-52. Condenser Removal

Upper Compartment Heat Exchanger Removal

The upper compartment heat exchanger passes down through a hole in the back left corner of the mullion. The heat exchanger then passes down through the lower compartment behind the heat exchanger cover, and through a hole in the back left corner of lower compartment floor.

NOTE: Before attempting to remove a heat exchanger, evacuate the refrigerant from the sealed system.

To access and remove the upper compartment heat exchanger, the following components must first be removed: the upper light diffuser, upper evaporator cover, both drawer assemblies, left side drawer slides, heat exchanger cover in the lower compartment and the kickplate/grille. The unit tray will also need to be slid out.

NOTE: It will be necessary to disconnect the compressor electrical leads in order to pull the tray out far enough to access and remove the heat exchanger.

1. Begin removing heat exchanger by cutting the inlet and outlet tubes at evaporator. (See Figure 7-53)
2. Cut suction line approximately two inches from compressor. (See Figure 7-54)
3. Since the filter-drier will be replaced at the same time, cut drier inlet tube approximately one inch from drier, leaving capillary tube attached. (See Figure 7-55)
4. The heat exchanger will be scrapped, so use a tin snips or similar tool to cut heat exchanger near hole in mullion and hole in floor of the lower compartment. (See Figure 7-53)
5. Pull the pieces of heat exchanger out and clear the Hot-Melt away from holes.

NOTE: To avoid damaging the unit from the brazing torch flame, remove the evaporator from the compartment and attach the new heat exchanger to the evaporator outside of the unit.

NOTE: Applying dish soap on the tubing insulation of the heat exchanger and around the holes in the mullion and lower compartment floor, will assist in working the heat exchanger through the holes.

NOTE: When installing replacement heat exchanger, be sure to thoroughly clean the tubing before brazing.

NOTE: Apply a bead of silicone around the heat exchanger where it passes through the holes in the mullion and lower compartment.

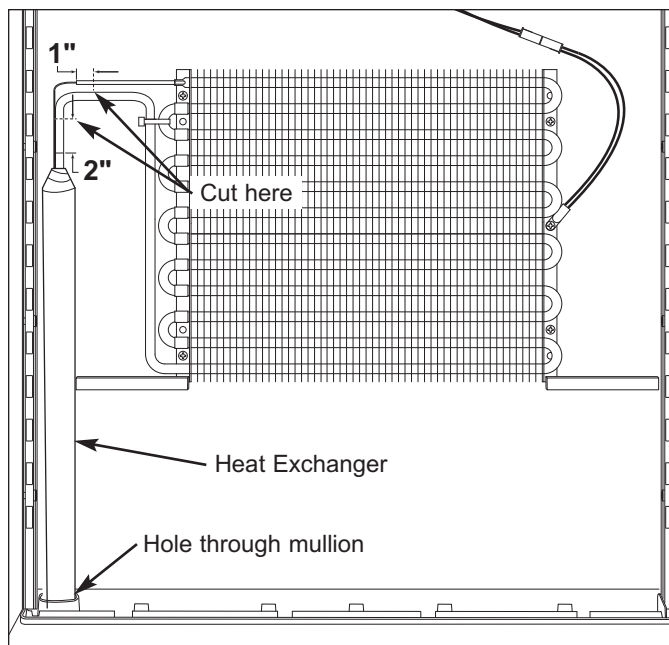


Figure 7-53. Cut Inlet and Outlet at Evaporator

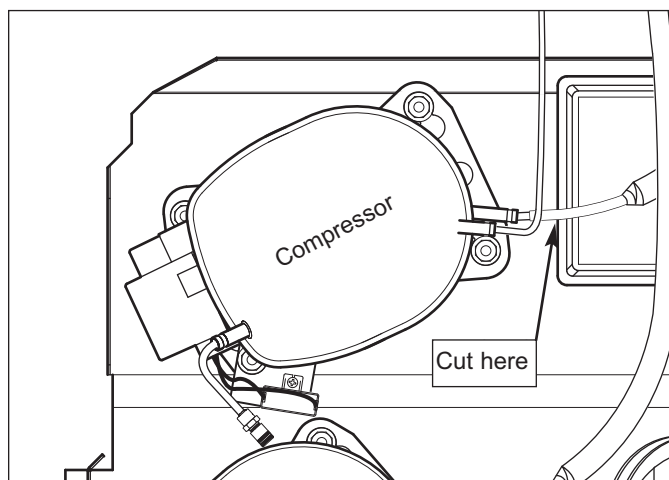


Figure 7-54. Cut Suction line at compressor

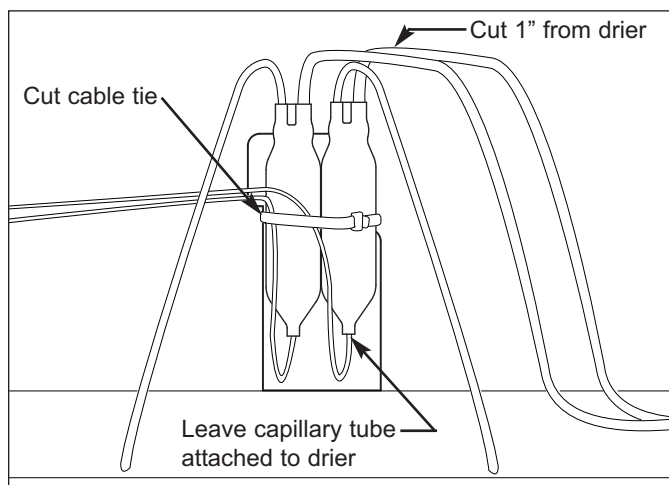


Figure 7-55. Cut Inlet to Filter-Drier

Lower Compartment Heat Exchanger Removal

The lower compartment heat exchanger is behind the switch enclosure and passes down through a hole in the back right corner of the lower compartment floor.

NOTE: Before attempting to remove a heat exchanger, evacuate the refrigerant from the sealed system.

To access and remove the lower compartment heat exchanger, the following components must first be removed: both drawer assemblies, left side drawer slides, heat exchanger cover, lower evaporator cover, switch enclosure and the kickplate/grille. The unit tray will also need to be slid out.

NOTE: It will be necessary to disconnect the compressor electrical leads in order to pull the tray out far enough to access and remove the heat exchanger.

1. Begin removing heat exchanger by cutting the inlet and outlet tubes at evaporator. (See Figure 7-56)
2. Cut the suction line approximately two inches from compressor. (See Figure 7-57)
3. Since the filter-drier will be replaced at the same time, cut drier inlet tube approximately one inch from drier, leaving capillary tube attached. (See Figure 7-58)
4. The heat exchanger will be scrapped, so use a tin snips or similar tool to cut heat exchanger near hole in floor of the lower compartment.
5. Pull the pieces of heat exchanger out and clear the Hot-Melt away from hole.

NOTE: To avoid damaging the unit from the brazing torch flame, remove the evaporator from the compartment and attach the new heat exchanger to the evaporator outside of the unit.

NOTE: Applying dish soap on the tubing insulation of the heat exchanger and around the holes in the lower compartment floor will assist in working the heat exchanger through the hole.

NOTE: When installing replacement heat exchanger, be sure to thoroughly clean the tubing before brazing.

NOTE: Apply a bead of silicone around the heat exchanger where it passes through the hole in the lower compartment.

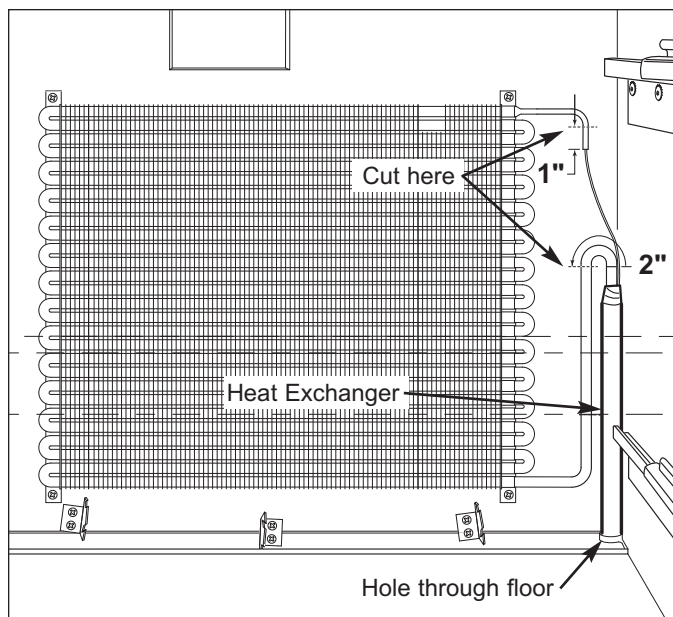


Figure 7-56. Cut Inlet and Outlet at Evaporator

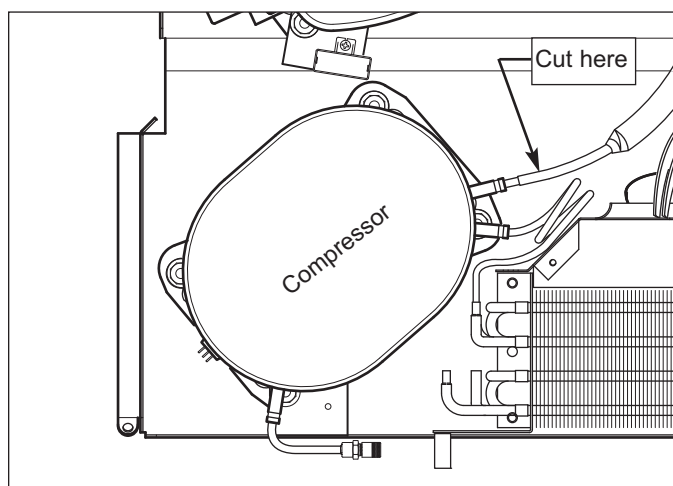


Figure 7-57. Cut Suction line at compressor

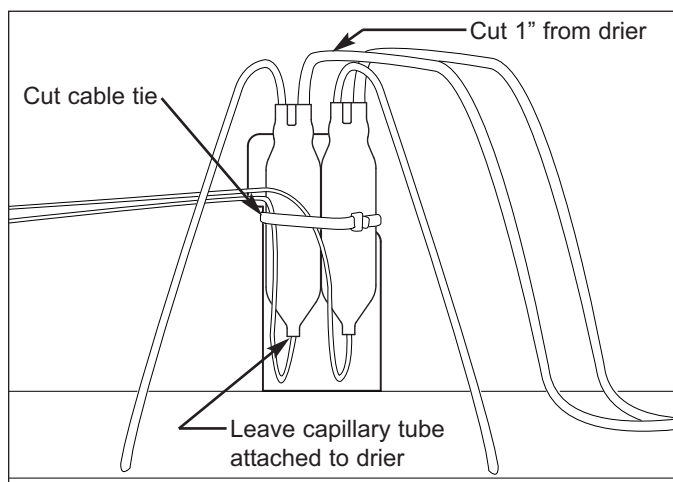


Figure 7-58. Cut Inlet at Filter-Drier

