



SECTION 6

COMPONENT REMOVAL

COMPONENT ACCESS AND REMOVAL:

This section explains how to access and remove components on / in a 400 Series unit. Due to the diversity of the 400 Series, this section is divided into three sub-sections with the model 424 being covered first, followed by the models 427 and 427R, and the third sub-section covers the model 430. In each of the three sub-sections you will find access and removal instructions for the external cosmetic and mechanical components, followed by the interior cosmetic components, the interior mechanical components and the sealed system components.

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.

▲ WARNING

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.

▲ WARNING

WHEN REMOVING A DOOR FROM A UNIT, REMEMBER THAT DOORS ARE HEAVY. IF A DOOR WERE TO FALL , IT COULD CAUSE SERIOUS PERSONAL INJURY.

▲ CAUTION

When removing or disconnecting door closers and/or hinge assemblies, remember they are spring loaded and may recoil quickly when released.

▲ CAUTION

To avoid static electric damage to the control board, always handle the board by the edges.

▲ CAUTION

When working in the compressor area, remember that compressor and tubing could be hot.

▲ CAUTION

When working on or around evaporator or condenser, remember evaporator and condenser fins are sharp.

MODEL 424

MODEL 424 EXTERIOR COSMETIC AND MECHANICAL COMPONENT REMOVAL:

An attempt has been made to arrange these instructions 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 removal procedure towards the front of this section.

Kickplate Removal (Model 424)

To remove the kickplate, extract the mounting screws located at each end of the kickplate and pull the kickplate forward. (See Figure 6-1)

Door Closer Removal (Model 424)

NOTE: See *DOOR CLOSER CAUTION* at beginning of this section.

To remove the door closer you will need to pull the unit approximately 6" out of the rough-in opening. (See *TIPPING WARNING* at beginning of this section)

NOTE: If removing a model 424 from its installation, an anti-tip bracket and a countertop bracket may have been used to make a solid installation. (See Figures 2-2 is section 2) If the brackets were not used, shims may have been wedged along the sides and top.

After pulling the unit from its installation, extract the two mounting screws securing the door closer to the side of unit base. Then, slide the door closer down off of the bottom door hinge pin. (See Figure 6-2)

NOTE: It may be necessary to lean the unit back slightly to create enough clearance between the hinge pin and the floor.

NOTE: When reinstalling a door closer on a model 424 keep in mind that there are slots in the cam of the door closer that must line-up with the ribs on the hinge pin. Also, the cams may be in "full-closed position" or "full-open position." It is easiest to install a door closer onto the hinge pin with the door closed and the cams in the "full-open position." Then, after the closer is on the hinge pin, rotate the closer to the closed position and install the screws.

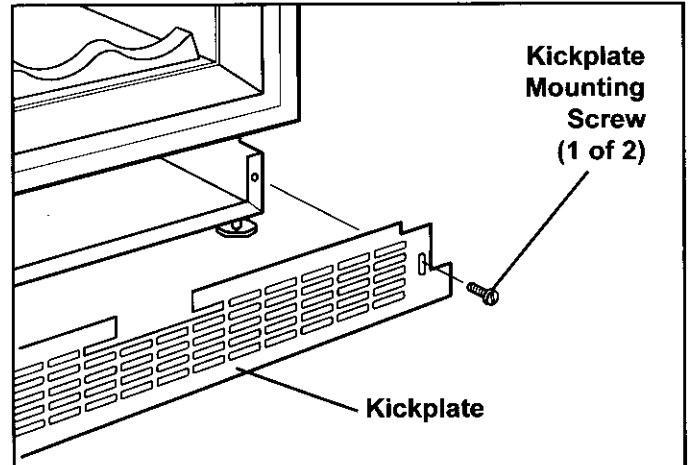


Figure 6-1. Kickplate Removal

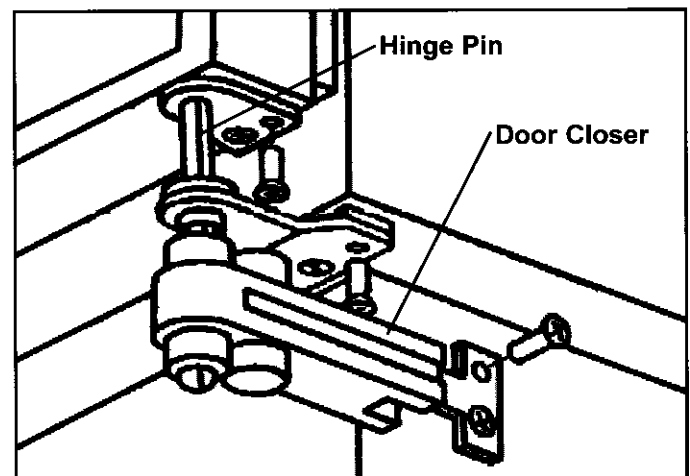


Figure 6-2. Door Closer Removal

Door Removal (Model 424)

To remove the door you will need to pull the unit approximately 6" out of the rough-in opening and remove the door closer first. (See TIPPING WARNING at beginning of this section)

NOTE: If removing a model 424 from its installation, an anti-tip bracket and a countertop bracket may have been used to make a solid installation. (See Figures 2-2) If the brackets were not used, shims may have been wedged along the sides and top.

After removing the door closer, open the door and extract the two screws from the top door hinge. (See figure 6-3) Lean the door away from the unit slightly and lift the door out of the bottom cabinet hinge.

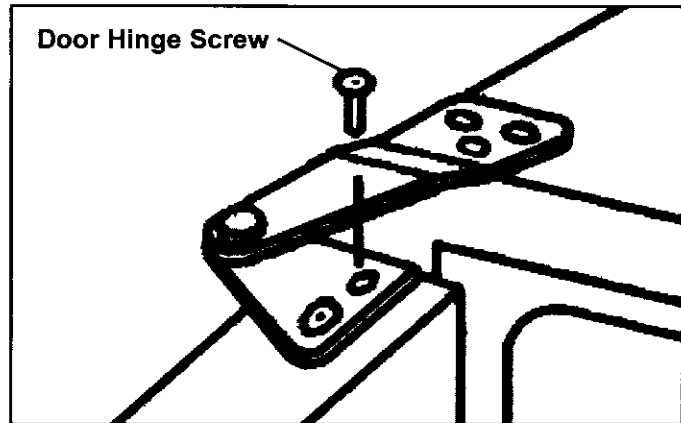


Figure 6-3. Top Door Hinge

Light and Fan Switch access and Removal (Model 424)

The light and fan switches are attached to a switch bracket, and covered by a switch guard. The switch bracket and guard are held in place by two Phillips head screws that pass up through holes in the switch bracket and slots in the switch guard on the backside.

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

To access and remove a fan or light switch, extract the two Phillips head screws on the backside of the switch bracket, using an offset Phillips screwdriver. (See Figure 6-4) Pull the switch guard and bracket forward. Disconnect the electrical leads from the switch being removed. Depress the tabs on the side of the switch being removed and push the switch out of the bracket.

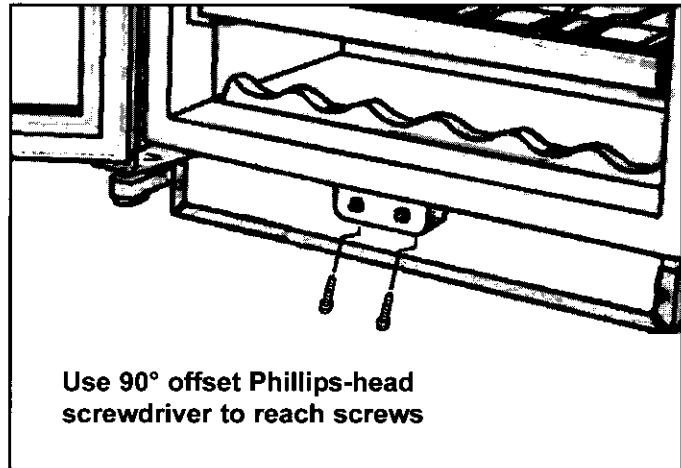


Figure 6-4. Light and Fan Switch

Exterior Wrap Components (Model 424FS ONLY)

Stainless Steel Base Cover Assemblies - The base cover assemblies are stuck to the sides of the unit base with double-stick tape. Screws passing through the ends of the kickplate and the base cover front flanges secure the kickplate and covers to the unit base. On the hinge side of the unit, screws pass through the door closer bracket and the base cover into the door closer mounting holes in the unit base.

To remove the base cover assemblies, first remove the kickplate. If a door closer is mounted on the side of the base cover being removed, remove the door closer too. Then, at the back of the unit, insert a flat-blade screwdriver between the base cover and unit base and pry the base cover off. (See Figure 6-5)

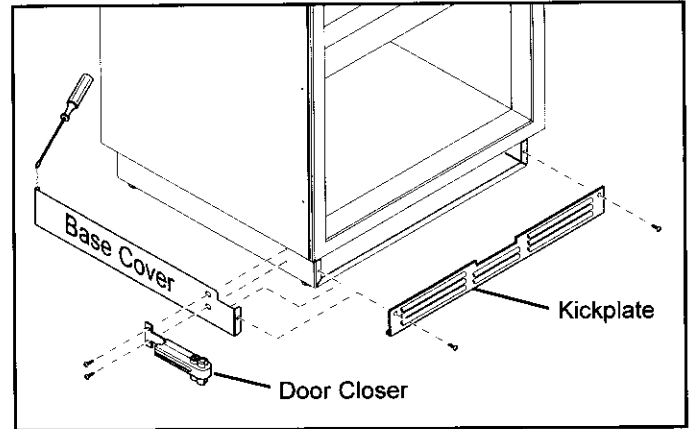


Figure 6-5. Base Cover Removal

Stainless Steel Overlay Unit Wrap - There are brackets riveted at the front of the top and sides of the unit. Flanges at the front of the unit wrap hook over these brackets. Brackets at the back of the unit hook under the back flanges of the unit wrap. When the mounting screws are tightened down on the back brackets, the brackets pull the wrap backward, which holds the wrap tight between the front and back brackets.

To remove the unit wrap, extract the back bracket mounting screws and remove the back brackets, then slide the wrap forward to disengage the front brackets and lift the wrap up and off of the unit. (See Figure 6-6)

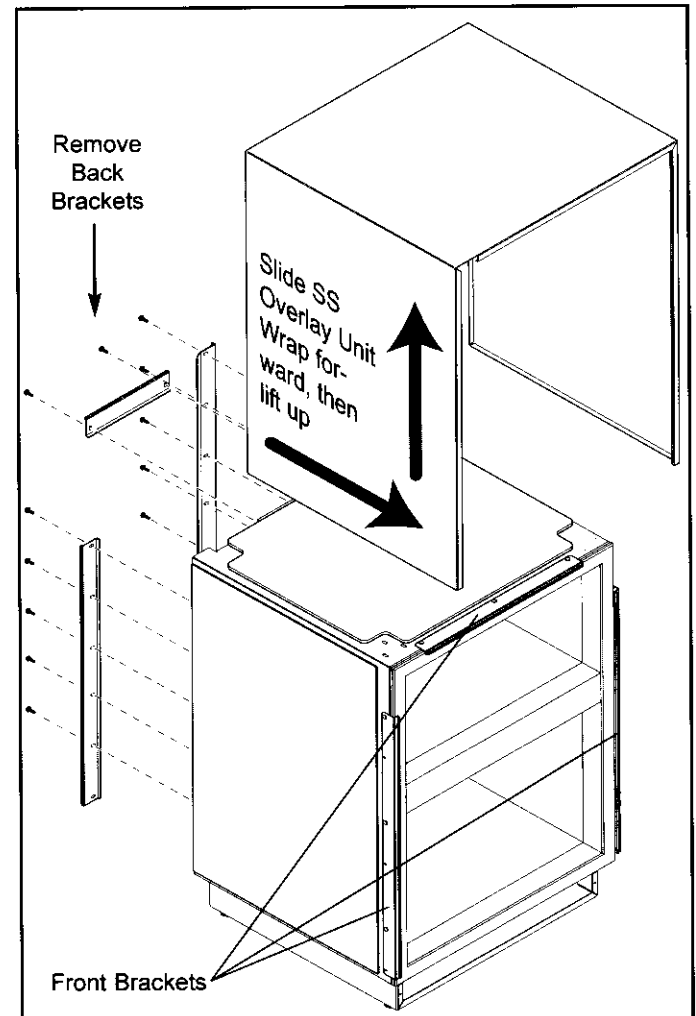


Figure 6-6. SS Unit Wrap Removal

Condenser Fan Assembly Access and Removal (Model 424)

To access the condenser fan, the unit will need to be pulled from its installation. (See TIPPING WARNING at beginning of this section.)

NOTE: If removing a model 424 from its installation, an anti-tip bracket and a countertop bracket may have been used to make a solid installation. (See Figures 2-2) If the brackets were not used, shims may have been wedged along the sides and top.

Remove the access panel from the bottom back of the unit, disconnect the fan electrical leads, and extract the grounding screw from the ground wire.

The condenser fan bracket is secured to the unit tray by screws passing up from under the unit tray into threaded stand-offs. (See figure 6-7) Lean the unit to the front or side and extract the bracket mounting screws and lift fan assembly from the unit tray.

The fan motor can now be removed from the fan bracket by extracting the fan mounting screws. The fan blade can be removed from the fan motor by turning the flat-nut on the fan motor shaft counterclockwise, then pull the blade from the shaft.

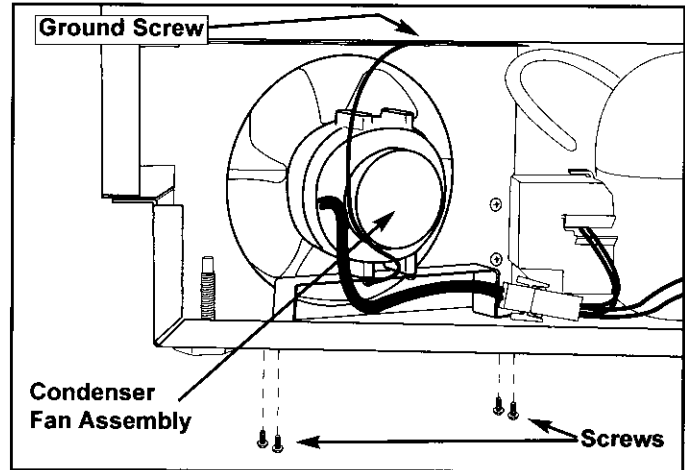


Figure 6-7. Condenser Fan Assembly

Refrigerant Valve Solenoid Access and Removal (Model 424)

To access the refrigerant valve solenoids, the unit will need to be pulled from its installation. (See TIPPING WARNING at beginning of this section.)

NOTE: If removing a model 424 from its installation, an anti-tip bracket and a countertop bracket may have been used to make a solid installation. (See Figures 2-2) If the brackets were not used, shims may have been wedged along the sides and top.

Remove the access panel from the bottom back of the unit. Remove the door closer (See DOOR CLOSER WARNING at beginning of this section.) Extract the four screws securing the unit tray to the cabinet on the left side, and loosen the four screws on the right side. Separate the unit tray from the cabinet by leaning the cabinet to the right, then insert a spacer between the cabinet and unit tray. (A small piece of 2x4 lumber works well.) (See Figure 6-8) Disconnect the electrical leads to the solenoid being removed. (See ELECTRICAL SHOCK WARNING at beginning of this section.) The solenoid is secured to the refrigerant valve with a screw at the top. Remove the screw and lift the solenoid up off the valve.

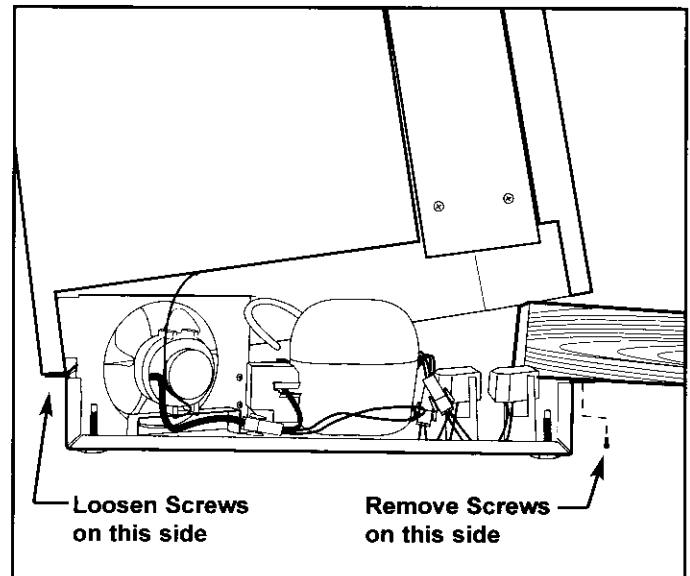


Figure 6-8. Unit Tray Component Access

MODEL 424 INTERIOR COSMETIC COMPONENT ACCESS AND REMOVAL

An attempt has been made to arrange these instructions 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 removal procedure towards the front of this section.

Wine Rack Assembly Removal (Model 424)

To remove a wine rack assembly, pull the rack forward until it stops. Remove any wine bottles on the rack. Now, lift the front of the rack up while pulling forward. After the indentations on the wine rack clear the rollers on the cabinet slides, lower the front of the wine rack while continuing to pull forward, then lift the rear of the rack up and out. (See Figure 6-9)

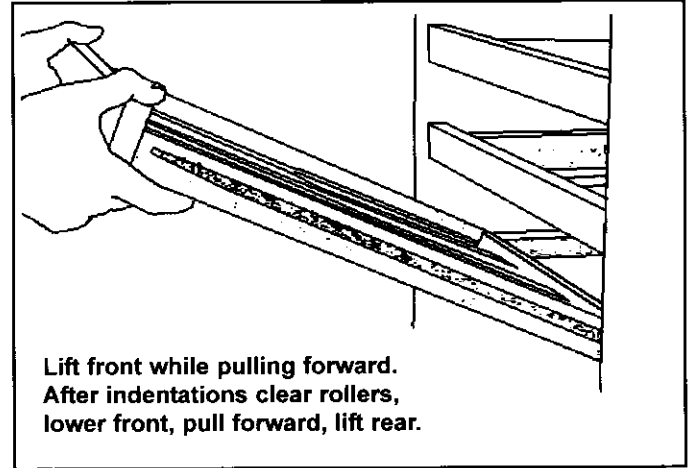


Figure 6-9. Wine Rack Assembly Removal

Cabinet Slide, Slide Spacer and Slide Support Spacer Removal (Model 424)

Cabinet slides are attached to the side walls of the wine compartments with screws. If the cabinet slide is attached to the handle side of the compartment, a small plastic slide spacer is placed between the front of the slide and the side wall. If the cabinet slide is attached to the handle side, a wide plastic slide support spacer is placed between the slide and the wall.

To remove a cabinet slide, you must first remove the wine rack. Then, extract the Phillips head cabinet slide mounting screws and pull the cabinet slide and slide spacer or slide support spacer from the wall. (See Figure 6-10)

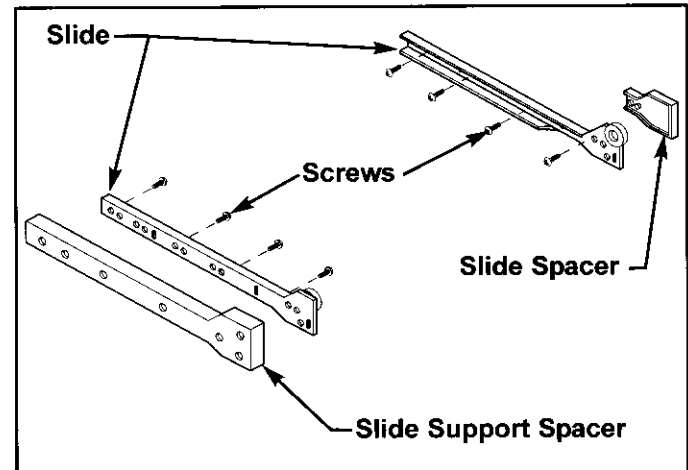


Figure 6-10. Cabinet Slide, Slide Support Spacer & Slide Spacer Removal

Upper Light Strip Access and Removal (Model 424)

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

The light strip is held in the channel of the light strip housing. To remove the upper light strip, remove the top wine rack assembly first. Then, extract the two light strip housing mounting screws securing the housing to the ceiling. Lower the light strip housing down, disconnect the light strip electrical leads and extract the screw securing the ground wire to the housing. Now, slide the light strip out the end of the channel. (See Figure 6-11)

NOTE: When reinstalling the light strip housing, care must be taken to ensure that all wire leads are tucked back behind the light strip housing before resealing it to the ceiling.

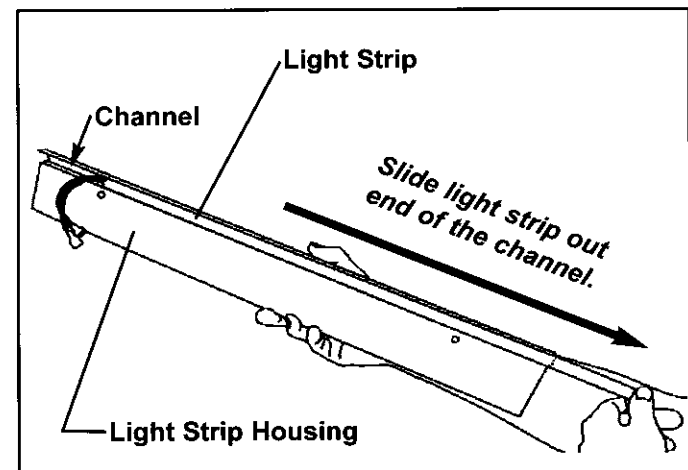


Figure 6-11. Upper Light Strip Removal

Upper and Lower Evaporator Fan Cover Access and Removal (Model 424)

There are two access holes in the front of the evaporator fan cover. The back flanges of the evaporator fan cover have slots that line up with the access holes. Screws inside these access holes pass through slots in the back flanges and through holes in the evaporator cover into screw grommets, securing the fan cover.

To remove the evaporator fan cover, extract the two mounting screws from the access holes and pull the fan cover forward. (See Figure 6-12)

NOTE: When reinstalling the fan cover, first insert one of the two mounting screws through the evaporator cover, into the screw grommet, but do not fully tighten. Then, slide the corresponding slot in the rear flange of the fan cover over the screw and rotate the fan cover up until the other access hole lines up with the other mounting hole. Insert the second screw and tighten both screws.

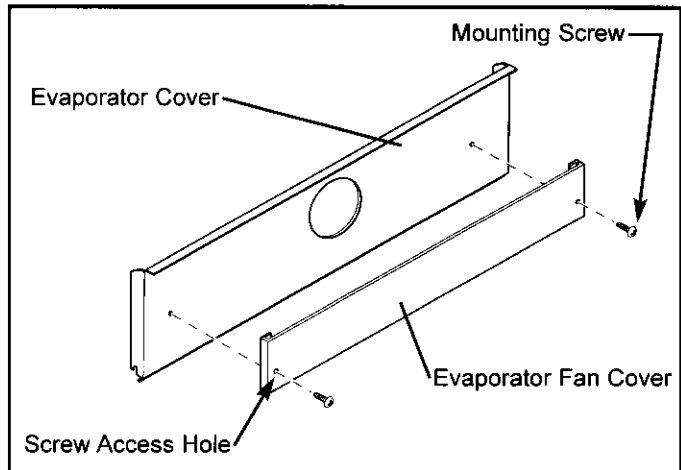


Figure 6-12. Evap Fan Cover Removal

Upper Evaporator Cover Removal (Model 424)

To remove the upper evaporator cover, first remove the two wine racks and all cabinet slides, cabinet slide spacers and cabinet slide support spacers in the upper compartment. Then, remove the evaporator fan cover mounting screws and the evaporator fan cover. Pull the evaporator cover forward slightly. Push the thermistor leads and grommet out of the slot on the left-hand side of the evaporator cover. There is a ground wire riveted to the back of the evaporator cover, and the other end of the ground wire has a screw securing it to the rear wall. Extract the ground screw and pull the evaporator cover out. (See Figures 6-12 & 6-13)

NOTE: When reinstalling the evaporator cover, the ground wire must be reattached to the rear wall with the ground screw.

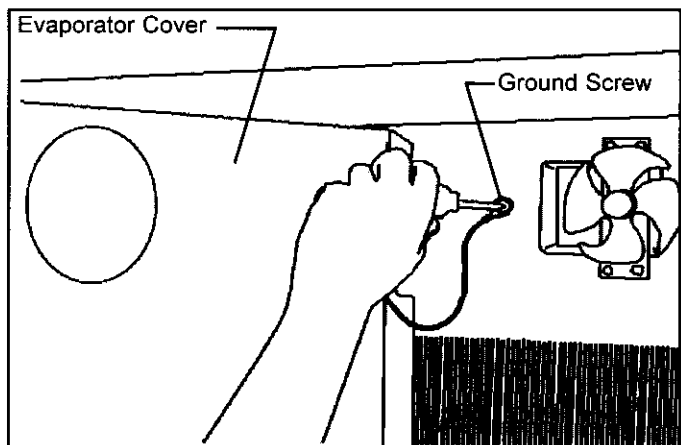


Figure 6-13. Ground Screw Wire & Screw

Lower Evaporator Cover Removal (Model 424)

To remove the lower evaporator cover, first remove the three wine racks in the lower compartment. Then, remove the evaporator fan cover mounting screws and the evaporator fan cover. Pull the top of the evaporator cover forward and lift off of pegs at bottom. You'll find a ground wire riveted to the back of the evaporator cover, and the other end has a screw securing it to the rear wall. Extract the ground screw and pull the evaporator cover out. (See Figures 6-12, 6-13 & 6-14)

NOTE: When reinstalling the evaporator cover, the ground wire must be reattached to the rear wall with the ground screw.

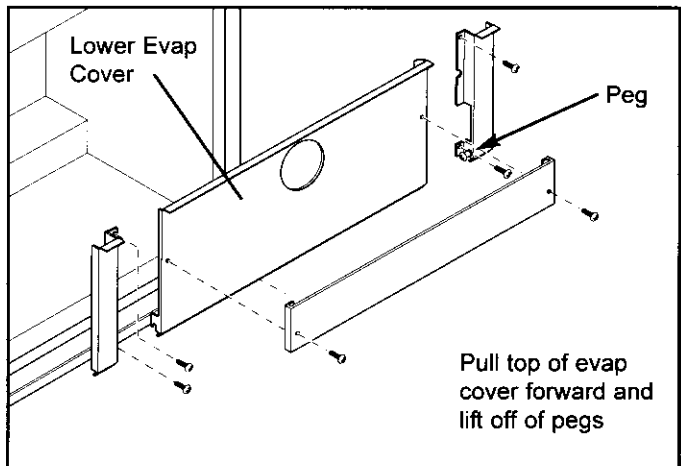


Figure 6-14. Lower Evaporator Cover Removal

Evaporator Support Cover Access and Removal (Model 424)

The evaporator support covers are narrow covers to the left and right of the lower evaporator cover. The left cover hides the upper compartment drain line and the right cover is over the evaporator thermistor. These covers are held in place by screws under the lower evaporator cover.

To remove the evaporator support covers, you must first remove the three wine racks, all cabinet slides, cabinet slide spacers and cabinet slide support spacers in the lower compartment. Then, remove the evaporator fan cover mounting screws, the evaporator fan cover and the lower evaporator cover. Extract the evaporator support cover mounting screws and pull the evaporator support cover out. (See Figure 6-15)

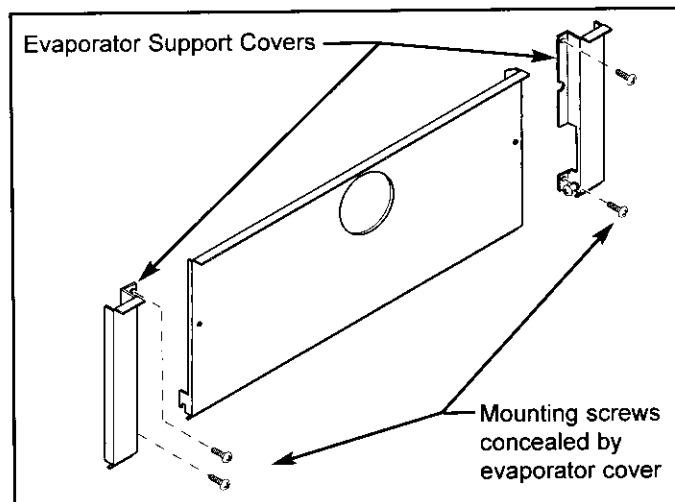


Figure 6-15. Evaporator Support Cover Removal

MODEL 424 INTERIOR MECHANICAL COMPONENT ACCESS AND REMOVAL:

An attempt has been made to arrange these instructions 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 removal procedure towards the front of this section.

Control Board Access and Removal (Model 424)

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section. Also see *STATIC ELECTRICITY CAUTION* at beginning of this section.

The control board is located on the bottom side of the compartment divider, directly behind the control panel, and is concealed by an access panel. The control board is held in place by four tabs, one at each corner of the board.

To get to the control board you will need to extract the two screws at the back of the access panel, then lower the back of the access panel and pull it towards the rear of the unit. (See Figure 6-16)

To remove the control board, disconnect the LED ribbon cable, the membrane switch ribbon cable, and all other electrical leads attached to the control board. Expand the tabs to release the control board, then pull down and out. (See Figure 6-17)

NOTE: When re-connecting electrical leads to the control board, be sure the the silver area on the membrane switch ribbon cable terminal is facing away from the control board.

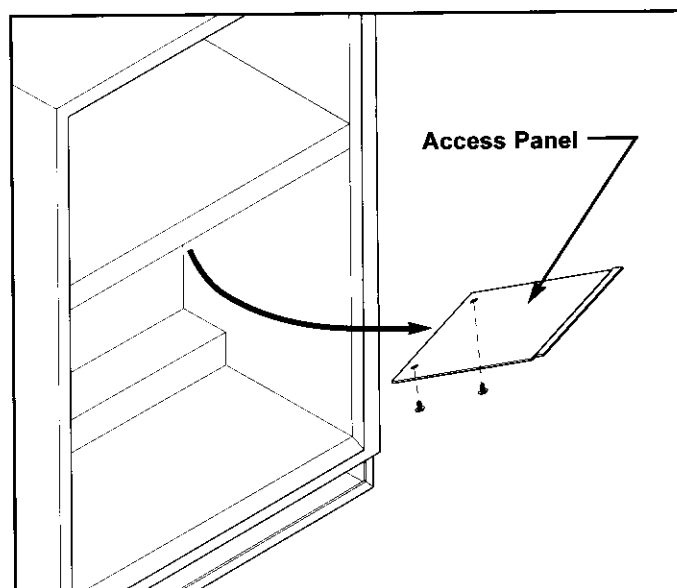


Figure 6-16. Control Board Access Panel

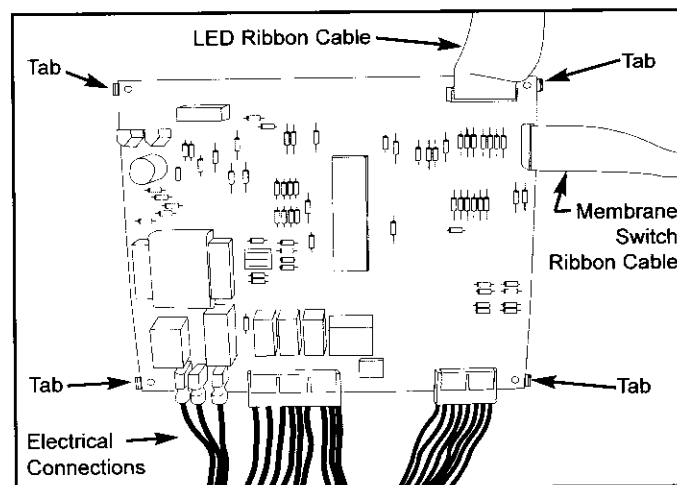


Figure 6-17. Control Board

Control Panel Assembly Removal (Model 424)

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

The control panel assembly is set at the front of the compartment divider and is secured by six screws at the bottom, and a silicone seal under the top flange. Tabs at the bottom and a concealed tab at the top center of the control panel housing help to position the control panel assembly.

To remove the control panel assembly, first access the control board and disconnect the LED ribbon cable and the membrane switch ribbon cable. Then, extract the six screws at the bottom of the control panel. Now, slide the blade of a putty knife under and along the top flange of the control panel housing to break loose the silicone seal. (See Figure 6-18)

NOTE: Do not lift the top flange of the control panel housing too vigorously. Doing so will break the concealed tab at the top center.

After breaking the silicone seal loose, pull the control panel assembly forward and out.

NOTE: When reinstalling the control panel assembly, you must reapply a bead of silicone along the inside of the top flange.

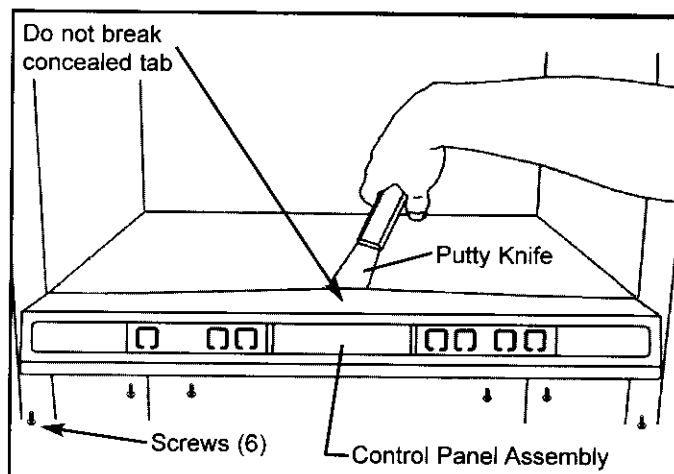


Figure 6-18.
Control Panel Assembly Removal

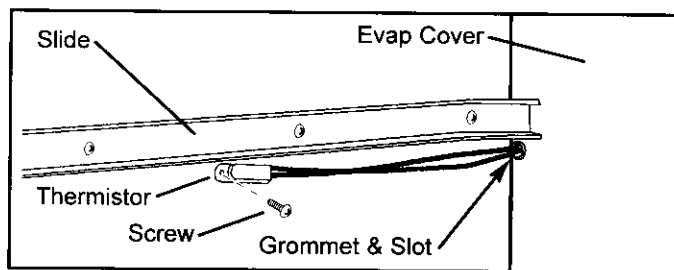


Figure 6-19.
Upper Compartment Thermistor

Upper Compartment Thermistor Access and Removal (Model 424)

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

The upper compartment thermistor is attached to the left side wall with a Phillips-head screw. The electrical leads of the thermistor are routed through a notch in the left-hand side of the evaporator cover and guarded by a wire grommet.

To remove the upper compartment thermistor, first remove the two wine racks, all cabinet slides, cabinet slide spacers and cabinet slide support spacers in the upper compartment. Then, remove the evaporator fan cover mounting screws and the evaporator fan cover. Pull the evaporator cover out while pushing the thermistor leads and grommet out of the slot on the left-hand side of the evaporator cover. Then disconnect the thermistor electrical leads and extract the thermistor mounting screw. (See Figure 6-19)

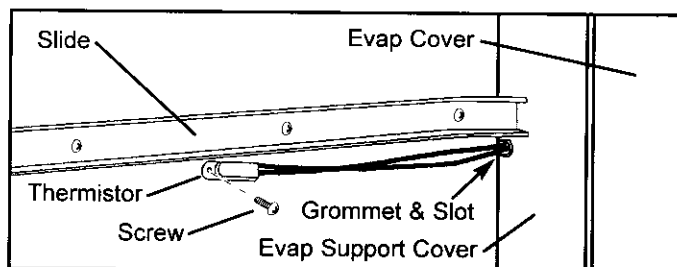


Figure 6-20.
Lower Compartment Thermistor

Lower Compartment Thermistor Access and Removal (Model 424)

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

The lower compartment thermistor is attached to the left

side wall with a Phillips-head screw. The electrical leads of the thermistor are routed through a notch in the left-hand evaporator support cover and guarded by a grommet. (See Figure 6-20)

To remove the lower compartment thermistor, first remove the three wine racks, all cabinet slides, cabinet slide spacers and cabinet slide support spacers in the lower compartment. Then, remove the evaporator fan cover mounting screws, the evaporator fan cover and the lower evaporator cover. Extract the evaporator support cover mounting screws and pull the evaporator support cover out while pushing the thermistor leads and grommet out of the slot on the left-hand side. Extract thermistor mounting screw and disconnect the thermistor electrical leads.

Upper Evaporator Thermistor Access and Removal (Model 424)

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

The upper evaporator thermistor is attached to the right side evaporator bracket with a Phillips-head screw.

To remove the upper evaporator thermistor, first remove the two wine racks, all cabinet slides, cabinet slide spacers and cabinet slide support spacers in the upper compartment. Then, remove the evaporator fan cover mounting screws, the evaporator fan cover and the evaporator cover. Extract the screw from the thermistor, and the screw from the P-clamp holding the thermistor electrical leads. Now, disconnect the thermistor electrical leads. (See Figure 6-21)

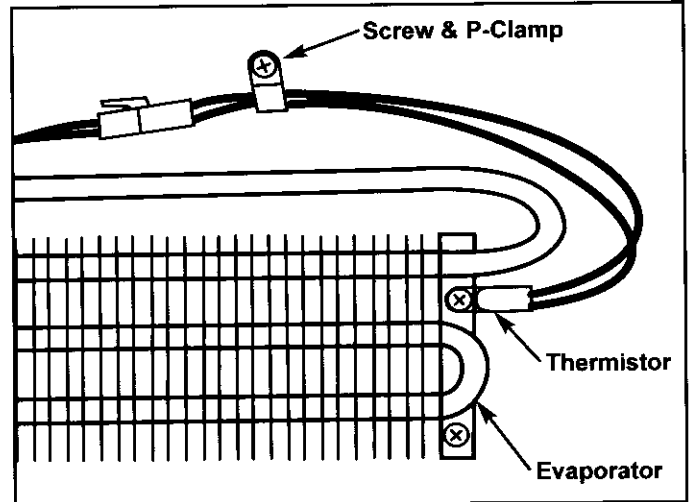


Figure 6-21. Evaporator Thermistor

Lower Evaporator Thermistor Access and Removal (Model 424)

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

The lower evaporator thermistor is attached to the right side evaporator bracket with a Phillips-head screw.

To remove the lower evaporator thermistor, first remove the three wine racks in the lower compartment. Then, remove the evaporator fan cover mounting screws, the evaporator fan cover and the lower evaporator cover. Extract the mounting screws from the right side evaporator support cover and pull the evaporator support cover out. Extract the screw from the thermistor, and the screw from the P-clamp holding the thermistor electrical leads. Now, disconnect the thermistor electrical leads. (See Figure 6-22)

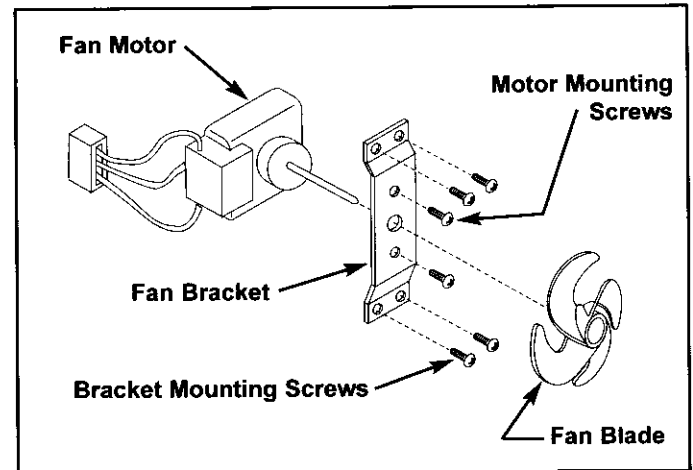


Figure 6-22. Evaporator Fan Assembly

Upper Evaporator Fan Assembly Access and Removal (Model 424)

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

The upper evaporator fan assembly is attached to the rear wall by four Phillips-head screws.

To remove the upper evaporator fan assembly, first remove the two wine racks, all cabinet slides, cabinet slide spacers and cabinet slide support spacers in the upper compartment. Then, remove the evaporator fan cover mounting screws, the evaporator fan cover and the evaporator cover. Pull the fan blade from the fan motor shaft. Extract the screw from the P-clamp holding the fan wires. Then remove the four screws from the fan bracket and disconnect the fan motor electrical leads. (See Figure 6-22)

Lower Evaporator Fan Assembly Access and Removal (Model 424)

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

The lower evaporator fan assembly is attached to the rear wall by four Phillips-head screws.

To remove the lower evaporator fan assembly, first remove the three wine racks, all cabinet slides, cabinet slide spacers and cabinet slide support spacers in the lower compartment. Then, remove the evaporator fan cover mounting screws, the evaporator fan cover and the lower evaporator cover. Pull the fan blade from the fan motor shaft. Extract the screw from the P-clamp holding the fan wires. Then remove the four screws from the fan bracket and disconnect the fan motor electrical leads. (See Figure 6-22)

MODEL 424 SEALED SYSTEM COMPONENT ACCESS AND REMOVAL:

An attempt has been made to arrange these instructions 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 removal procedure towards the front of this section.

NOTE: To access and remove any sealed system component on a Model 424, the unit will need to be pulled from its installation. See **TIPPING WARNING** at beginning of this section. If removing a model 424 from its installation, an anti-tip bracket and a countertop bracket may have been used to make a solid installation. (See Figures 2-2) If the brackets were not used, shims may have been wedged along the sides and top. Also see **HOT COMPRESSOR & TUBING CAUTION** and **SHARP FINS CAUTION** at beginning of this section.

NOTE: Always replace the filter-drier when servicing the sealed system.

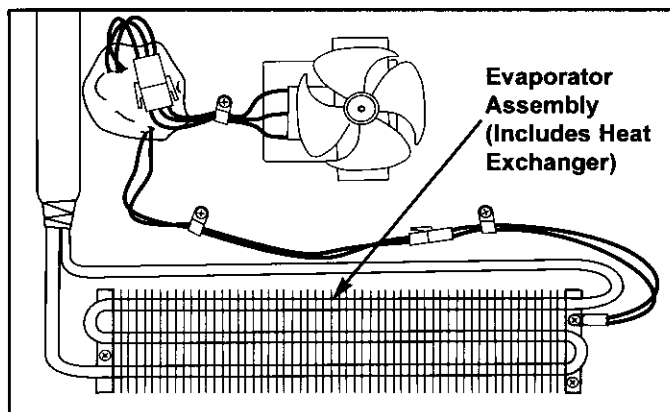


Figure 6-23. Evaporator

Upper Evaporator Assembly Access and Removal (Model 424)

The evaporator assembly consists of the evaporator and heat exchanger. The evaporator is mounted to the rear wall with Phillips-head screws, and the heat exchanger is routed out the back wall down to the unit tray where the capillary tube is attached to the refrigerant valve, and the suction line is attached to a "T" connection that runs to the compressor suction port. (See Figures 6-23, 6-24, 6-25)

After evacuating the refrigerant from the sealed system, begin the access and removal procedure inside the unit by removing the two wine racks, all cabinet slides, cabinet slide spacers and cabinet slide support spacers in the upper compartment. Then, remove the evaporator fan cover mounting screws, the evaporator fan cover and the evaporator cover. Extract the evaporator mounting screws. Now, remove the access panel from the bottom back of the unit and the heat exchanger duct cover. Remove the door closer (See **DOOR CLOSER WARNING** at beginning of this section.) Extract the four screws securing the unit tray to the cabinet on the left side, and loosen the four screws on the right side. Separate the unit tray from the cabinet by leaning the cabinet to the right, then insert a spacer between the cabinet and unit tray. (A small piece of 2x4 lumber works well.) (See Figure 6-8) Cut the cap tube from the outlet port of the refrigerant valve and cut the suction line from the "T" connector. Then, pull the evaporator assembly from the front of the unit.

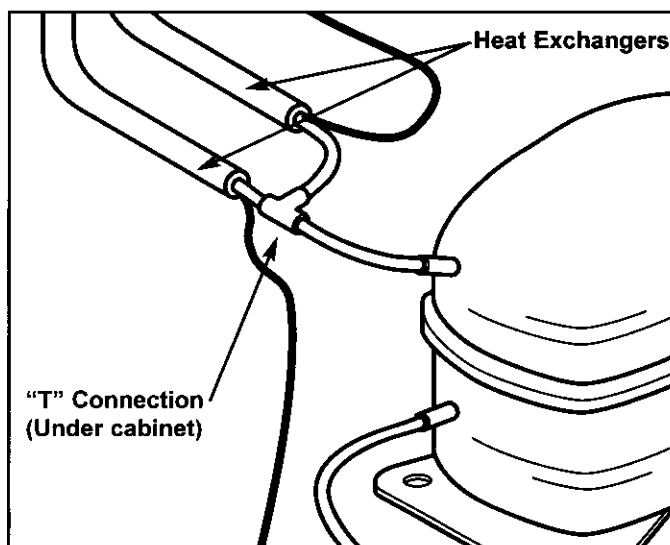


Figure 6-24. Suction "T" Connection

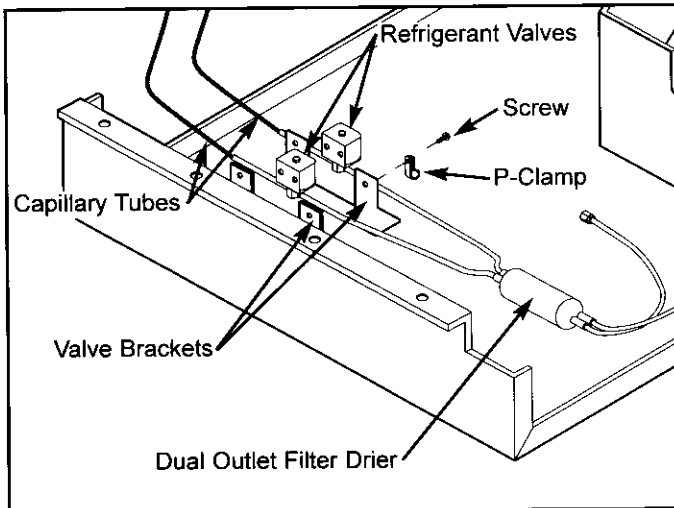


Figure 6-25. Capillary Tube, Refrigerant Valve, Filter-Drier

Lower Evaporator Assembly Access and Removal (Model 424)

The evaporator assembly consists of the evaporator and heat exchanger. The evaporator is mounted to the rear wall with Phillips-head screws, and the heat exchanger is routed out the back wall down to the unit tray where the capillary tube is attached to the refrigerant valve, and the suction line is attached to a "T" connection that runs to the compressor suction port. (See Figures 6-23, 6-24, 6-25)

After evacuating the refrigerant from the sealed system, begin the access and removal procedure inside the unit by removing the three wine racks, all cabinet slides, cabinet slide spacers and cabinet slide support spacers in the lower compartment. Then, remove the evaporator fan cover mounting screws, the evaporator fan cover, the evaporator cover and the evaporator support covers. Extract the evaporator mounting screws. Now, remove the access panel from the bottom back of the unit. Remove the door closer (See DOOR CLOSER WARNING at beginning of this section.) Extract the four screws securing the unit tray to the cabinet on the left side, and loosen the four screws on the right side. Separate the unit tray from the cabinet by leaning the cabinet to the right, then insert a spacer between the cabinet and unit tray. (*A small piece of 2x4 lumber works well.*) (See Figure 6-8) Cut the cap tube from the outlet port of the refrigerant valve and cut the suction line from the "T" connector. Then, pull the evaporator assembly from the front of the unit.

Refrigerant valve access and removal (Model 424)

The refrigerant valves are attached to the valve brackets with screws and tube clamps, at the back left of the unit tray. (See Figure 6-25) The upper compartment valve is the farthest left.

After evacuating the refrigerant from the sealed system, begin the access and removal procedure by removing the access panel from the bottom back of the unit. Remove the door closer (See DOOR CLOSER WARNING at beginning of this section.) Extract the four screws securing the unit tray to the cabinet on the left side, and loosen the four screws on the right side. Separate the unit tray from the cabinet by leaning the cabinet to the right, then insert a spacer between the cabinet and unit tray. (*A small piece of 2x4 lumber works well.*) (See Figure 6-8) Remove the screws securing the valve to the valve bracket and pull the valve upward slightly. Cut the cap tube from the outlet port of the refrigerant valve and cut the filter-drier stub from the inlet port of the valve.

Filter-Drier Access and Removal (Model 424)

The filter-drier is located on the left-hand side of the unit tray. The filter-drier used on the 400 Series has dual outlet ports that connect to both refrigerant valves. (See Figure 6-25)

After evacuating the refrigerant from the sealed system, begin the access and removal procedure by removing the access panel from the bottom back of the unit. Remove the door closer (See DOOR CLOSER WARNING at beginning of this section.) Extract the four screws securing the unit tray to the cabinet on the left side, and loosen the four screws on the right side. Separate the unit tray from the cabinet by leaning the cabinet to the right, then insert a spacer between the cabinet and unit tray. (*A small piece of 2x4 lumber works well.*) (See Figure 6-8) Cut the filter-drier outlet ports leading to both refrigerant valves and the filter-drier inlet tube coming from the condenser.

Compressor Access and Removal (Model 424)

The compressor is located at the back of the unit tray. (See Figure 6-26)

After evacuating the refrigerant from the sealed system, begin the access and removal procedure by removing the access panel from the bottom back of the unit. Remove the door closer (See **DOOR CLOSER WARNING** at beginning of this section.) Extract the four screws securing the unit tray to the cabinet on the left side, and loosen the four screws on the right side. Separate the unit tray from the cabinet by leaning the cabinet to the right, then insert a spacer between the cabinet and unit tray. (A small piece of 2x4 lumber works well.) (See Figure 6-8) Disconnect the compressor electricals from the compressor. Remove the four nuts from the compressor mounting studs. Cut the suction tube and discharge tube approximately 1-1/2" from the compressor and lift the compressor off of the mounting studs.

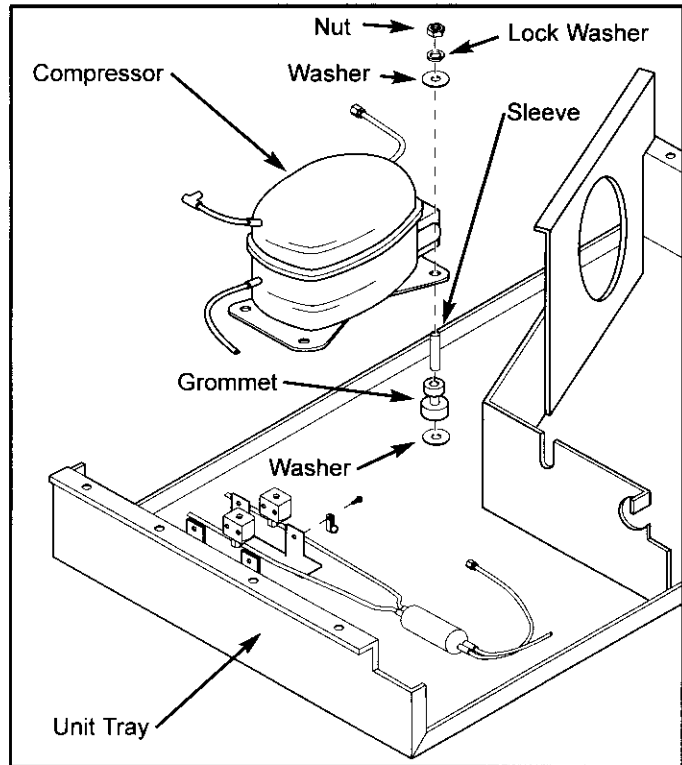


Figure 6-26. Compressor

Condenser Access and Removal (Model 424)

The condenser is located at the front right of the unit tray, and is held in place with screws passing up from under the unit tray into the condenser brackets. (See Figure 6-27)

After evacuating the refrigerant from the sealed system, begin the access and removal procedure by removing the access panel from the bottom back of the unit. Remove the door closer (See **DOOR CLOSER WARNING** at beginning of this section.) Extract the four screws securing the unit tray to the cabinet on the right side, and loosen the four screws on the left side. Separate the unit tray from the cabinet by leaning the cabinet to the left, then insert a spacer between the cabinet and unit tray. (A small piece of 2x4 lumber works well.) (See Figure 6-8) Remove the condenser mounting screws. Cut the inlet tube and outlet tube approximately 3" from the condenser and lift the condenser up and out.

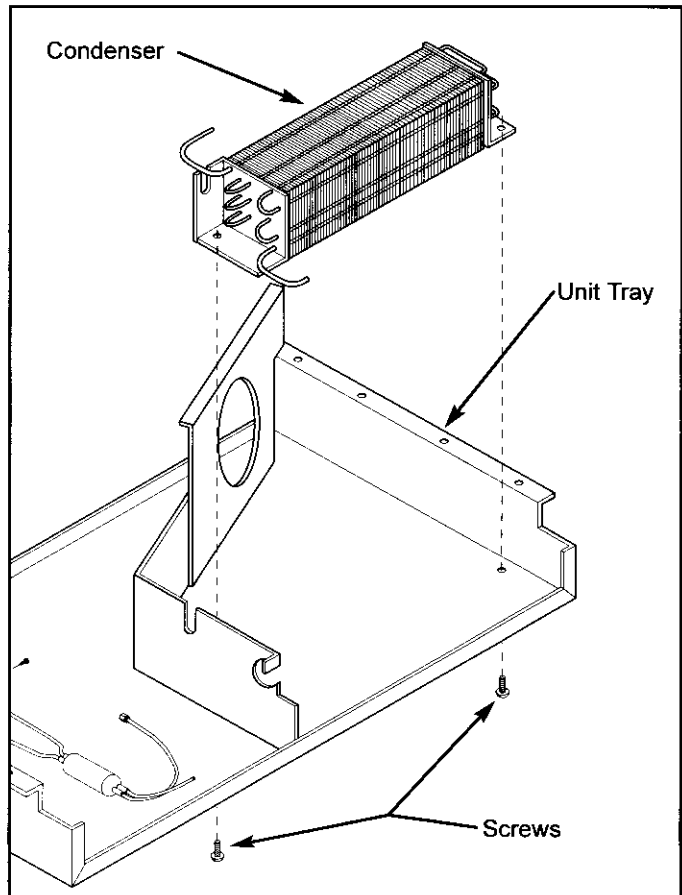


Figure 6-27. Condenser

MODELS 427 & 427R

NOTE: Since the models 427 and 427R are similar, the access and removal section for these models has been grouped together. The model(s) covered will be listed between brackets after the heading.

MODEL 427 & 427R EXTERIOR COSMETIC AND MECHANICAL COMPONENT REMOVAL:

An attempt has been made to arrange these instructions 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 removal procedure towards the front of this section.

Kickplate/Grille Removal (Models 427 & 427R)

The kickplate/grille is held in place by four screws passing through it into adjustable kickplate brackets. To remove the kickplate/grille, extract the four screws, two on each side, and pull the kickplate grille forward. (See Figure 6-28)

NOTE: For the 427R, it may be necessary to remove the bottom drawer to gain access to the kickplate/grille.

Wine Compartment Light and Fan Switches Access and Removal (Models 427 & 427R)

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

NOTE: See **ELECTRIC SHOCK WARNING** at beginning of this section.

To access and remove a light and/or fan switch, you will need to remove the side molding strips. Now, remove the top molding by pulling the top of the molding forward, then lift up. Remove the two screws from the switch bracket and pull the bracket forward. (See Figure 6-29) Disconnect the electrical leads from the switch being removed. Depress the tabs on the side of the switch being removed and push the switch out of the bracket.

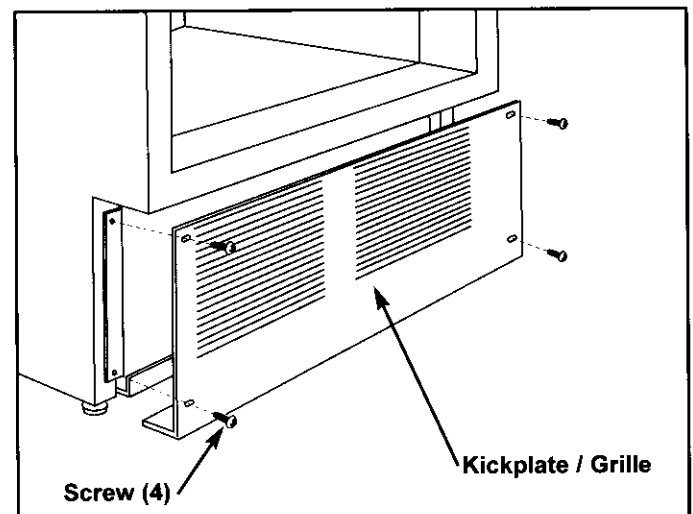


Figure 6-28. Kickplate/Grille Removal

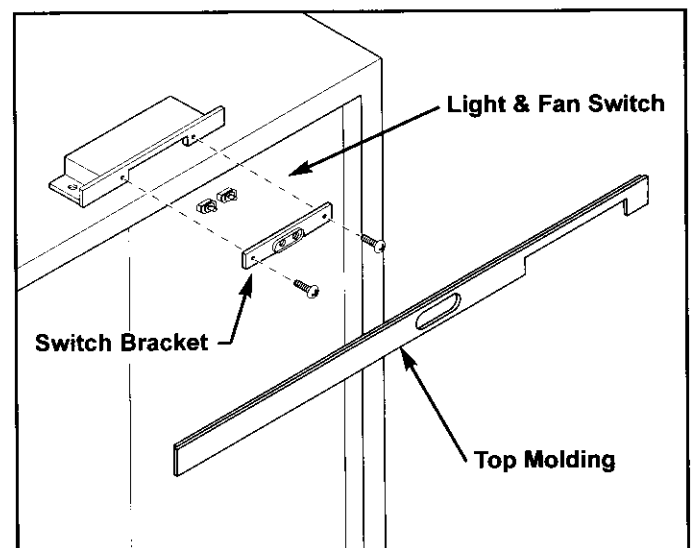


Figure 6-29. Light Switch & Fan Switch Access

Door Assembly Removal (Models 427 & 427R)

The door 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 into the door frame. 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: See *HEAVY DOOR WARNING* at beginning of this section.

To remove a door, begin by opening the door and removing both hinge covers. With an Allen-head wrench, extract the two inner-most door mounting screws from the top and bottom hinge arms, leaving the two outer-most screws in place. Now, close the door and remove the outer-most door mounting screws from the bottom hinge arm, then remove the two outer-most door mounting screws from the top hinge arm, and lift the door from the unit. (See Figure 6-30)

NOTE: On the model 427R you will need to remove the top drawer to access the door mounting screws at the bottom hinge when the door is closed. (See *Drawer Assembly Removal (427R ONLY)* below.)

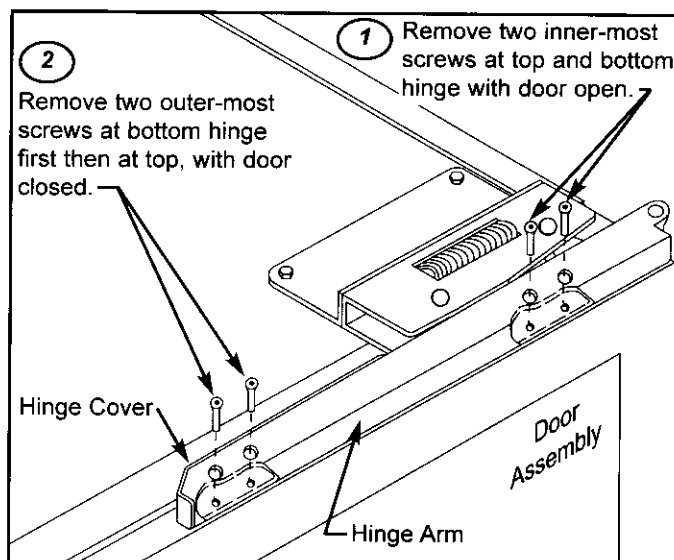


Figure 6-30. Door Assembly Removal

Drawer Assembly Removal (Model 427R ONLY)

There are channels on both sides of a drawer tub in a 427R that rest on telescoping drawer slide assemblies. A pin at the front of each drawer slide fits into a hole in the drawer tub to hold the drawer assembly in place. (See Figure 6-31)

NOTE: See *HEAVY DOOR WARNING* and *ELECTRIC SHOCK WARNING* at beginning of this section.

The top drawer has a control cable that must be disconnected before drawer removal. To remove the top drawer assembly, pull top drawer forward 6" to 10", lift it up off of the pins at front and push the slides in. Carefully place the drawer assembly face down directly in front of unit. Then, disconnect the display cable at interior left rear of the unit by turning the collar counterclockwise and unplugging the pins from the socket. (See Figure 6-32)

To remove the bottom drawer assembly, open the drawer and lift the front of the drawer up off of the pins at the end of the drawer slides. Then, pull the drawer assembly forward and out.

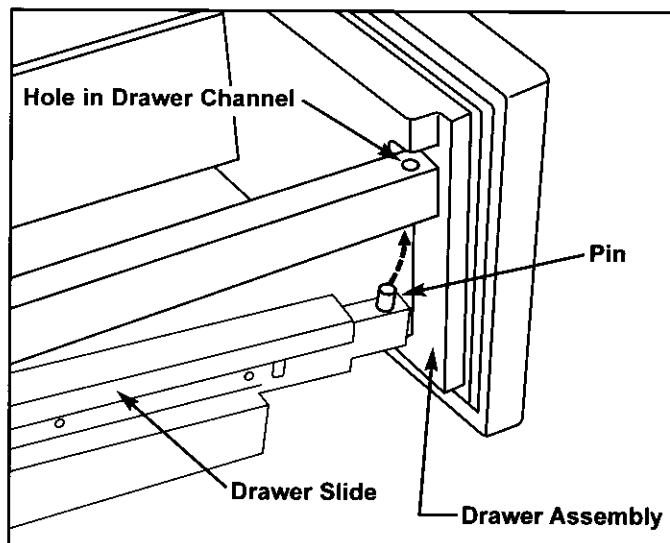


Figure 6-31. 427R Drawer Removal

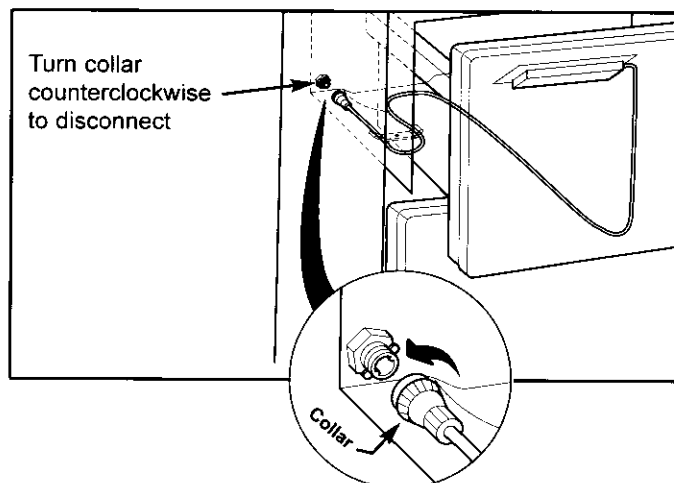


Figure 6-32. 427R Ref. Control Cable

Upper and Lower Hinge Assembly Removal (Models 427 & 427R)

The hinge assemblies are attached to the door with Allen-head screws, and to a hinge mounting bracket with Allen-head bolts. (See Figure 6-33)

NOTE: See *HEAVY DOOR WARNING* and *DOOR CLOSER CAUTION* at beginning of this section.

To remove a hinge assembly, you will need to remove the door first. Begin by opening the door and removing both hinge covers. Then, with an Allen-head wrench, remove the four door mounting screws from the top hinge. Now, close the door and remove the four door mounting screws from the bottom hinge, and lift the door from the unit. (See Figure 6-30)

NOTE: On the model 427R you will need to remove the top drawer to access the door mounting screws at the bottom hinge. (See *Drawer Assembly Removal - 427R ONLY*, on previous page.)

Now, extract the Allen-head bolts from the appropriate hinge mounting bracket and pull the hinge from the unit. (See Figure 6-33)

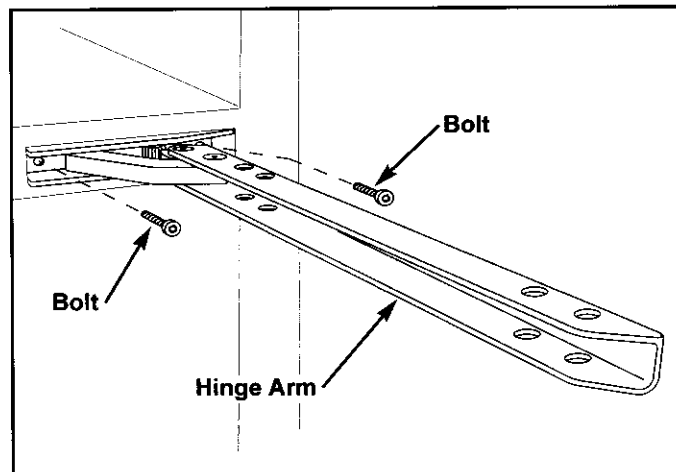


Figure 6-33. Hinge Assembly Removal

Condenser Fan Assembly Access and Removal (Models 427 & 427R)

The condenser fan motor is attached to a three legged condenser fan bracket by screws. The right leg of the fan bracket hooks over a spacer on the fan shroud. The two left legs of the fan bracket are secured to the fan shroud by screws into wellnuts.

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

To access and remove the condenser fan assembly, you will need to remove the kickplate/grille and slide the unit tray out. To slide the unit tray out, extract the two screws that secure the tray to the cabinet, located at the bottom left and right of the cabinet. Slide the unit tray out half way and disconnect the compressor, condenser fan, solenoid and ground wire electrical leads. Continue sliding the tray out while pivoting it to the right. (See Figure 6-34)

NOTE: Move tray slowly and observe the sealed system tubing. Care must be taken to not kink any of the tubing.

Now, extract the screws from the left legs of the condenser fan bracket.

NOTE: You will need to loosen the screws securing the refrigerant valve bracket and push the bracket back slightly and lift up slightly to gain access to the bottom left leg of the condenser fan bracket.

Then, unhook the right condenser fan bracket leg by pushing the assembly to the right, then lift up and out. (See Figure 6-35) The condenser fan motor can now be removed from the bracket by extracting the screws in the back side of the fan motor. The fan blade can be removed from the fan motor by turning the flat-nut on the fan motor shaft counterclockwise, then pull the nut and blade from the shaft.

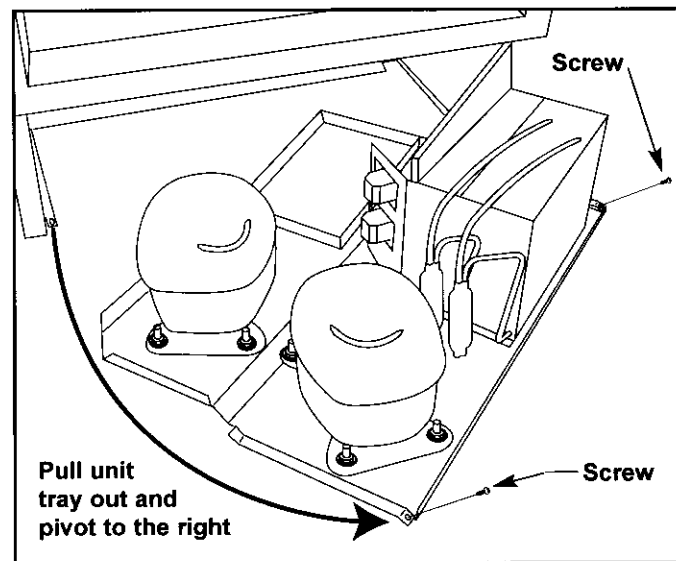


Figure 6-34. Unit Tray Removal

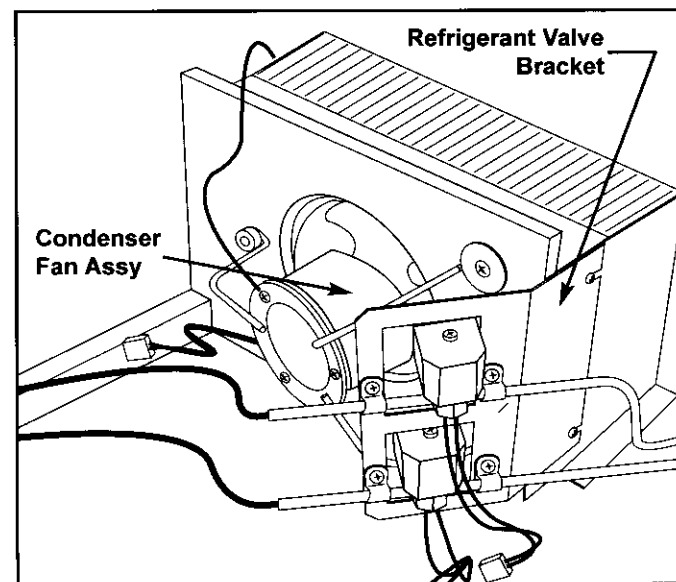


Figure 6-35. Condenser Fan Assembly

Refrigerant Valve Solenoid Access and Removal (Models 427 & 427R)

The refrigerant valve solenoids are attached to the tops of the refrigerant valves with screws. The refrigerant valves are located to the right of the compressor(s) on the unit tray, and are held to the valve bracket with P-clamps and screws. The top valve is for the upper wine storage compartment and the bottom valve is for the lower wine storage compartment.. (See Figure 6-36)

NOTE: See *ELECTRIC SHOCK WARNING* and *HOT TUBING CAUTION* at beginning of this section.

To access and remove the condenser fan assembly, you will need to remove the kickplate/grille and slide the unit tray out. To slide the unit tray out, extract the two screws that secure the tray to the cabinet, located at the bottom left and right of the cabinet. Slide the unit tray out half way and disconnect the compressor, condenser fan, solenoid and ground wire electrical leads. Continue sliding tray out while pivoting it to the right. (See Figure 6-34)

NOTE: Move tray slowly and observe the sealed system tubing. Care must be taken to not kink any of the tubing.

Now, disconnect the electrical leads of the valve solenoid being removed. Remove the screw at the top of the solenoid and lift the solenoid up off the valve.

NOTE: You may need to twist the refrigerant valve in the P-clamps slightly to allow the solenoid to be removed.

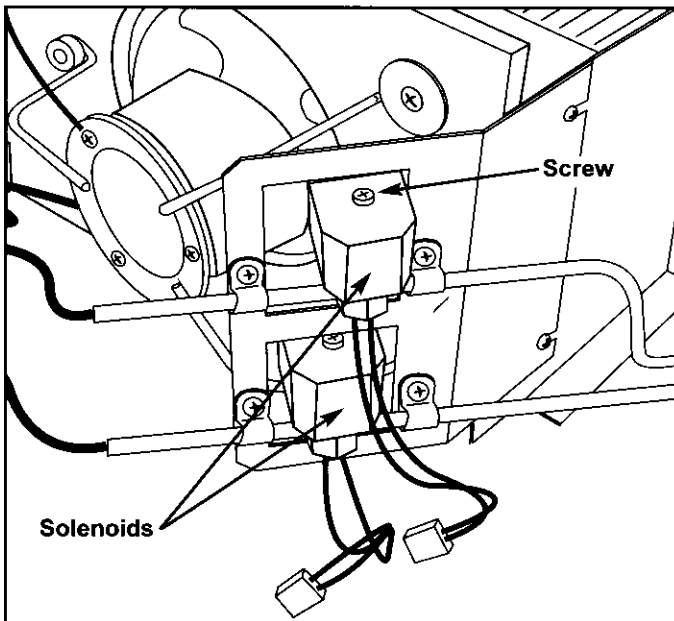


Figure 6-36.
Refrigerant Valve Solenoid

MODEL 427 & 427R INTERIOR COSMETIC COMPONENT ACCESS AND REMOVAL:

An attempt has been made to arrange these instructions 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 removal procedure towards the front of this section.

Wine Rack Assembly removal (Models 427 & 427R)

To remove a wine rack assembly, pull the rack forward until it stops. Remove any wine bottles on the rack. Lift the front of the wine rack up while pulling forward. After the indentations on the wine rack clear the rollers on the cabinet slides, lower the front of the wine rack while continuing to pull forward, then lift the rear of the rack up and out. (See Figure 6-37)

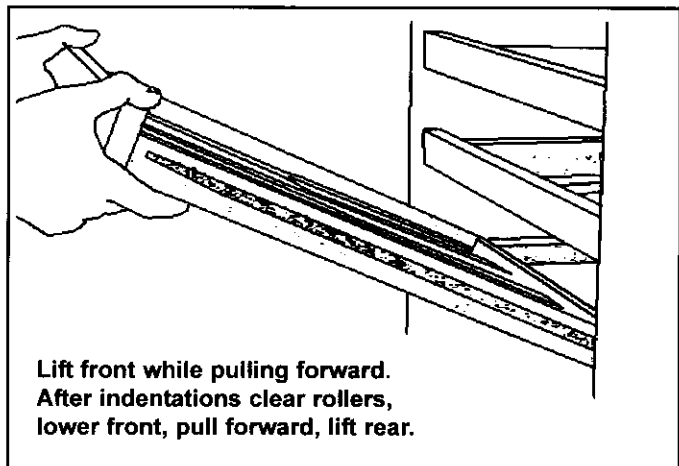


Figure 6-37. Wine Rack Assembly Removal

Wine Storage Cabinet Slide and Slide Spacer Removal (Models 427 & 427R)

Cabinet slides in the wine storage compartments are attached to the side wall and false wall of the wine compartments with screws. If the cabinet slide is attached to the handle side of the compartment, a small plastic slide spacer is placed between the front of the slide and the side wall. If the cabinet slide is on the hinge side, it is attached directly to the false wall.

To remove a cabinet slide from a wine storage compartment, you must first remove the wine rack. Then, extract the mounting screws and pull the cabinet slide (and slide spacer if on handle side) from the wall. (See Figure 6-38)

Refrigerator Section Drawer Slide Assembly Removal (Model 427R ONLY)

The drawer slide assemblies in the refrigerator section of the 427R are attached to the side walls with Allen-head screws passing through the drawer slide bracket, and into blind threaded inserts.

To remove a refrigerator section drawer slide assembly, remove the drawer first.

NOTE: The top drawer has a control cable that must be disconnected before drawer removal. To remove the top drawer assembly, pull top drawer forward 6" to 10", lift it up off of the pins at front and push the slides in. Carefully place the drawer assembly face down directly in front of unit. Then, disconnect the display cable at interior left rear of the unit by turning the collar counter-clockwise and unplugging the pins from the socket. (See Figure 6-32)

To remove the bottom drawer assembly, open the drawer and lift the front of the drawer up off of the pins at the end of the drawer slides. Then, pull the drawer assembly forward and out.

Now, extract the drawer slide mounting screws with a 5/32" Allen-head wrench, and pull the drawer slide assembly out. (See Figure 6-39)

Drawer Closer Removal (Model 427R ONLY)

The drawer closer assemblies are attached to the right side of the refrigerator compartment with two screws.

To remove a drawer closer assembly, remove the drawer first.

NOTE: The top drawer has a control cable that must be disconnected before drawer removal. To remove the top drawer assembly, pull top drawer forward 6" to 10", lift it up off of the pins at front and push the slides in. Carefully place the drawer assembly face down directly in front of unit. Then, disconnect the display cable at interior left rear of the unit by turning the collar counter-clockwise and unplugging the pins from the socket. (See Figure 6-32)

To remove the bottom drawer assembly, open the drawer and lift the front of the drawer up off of the pins at the end of the drawer slides. Then, pull the drawer assembly forward and out.

Now, extract the two screws that secure the drawer closer to the wall, and pull the drawer closer assembly out. (See Figure 6-40)

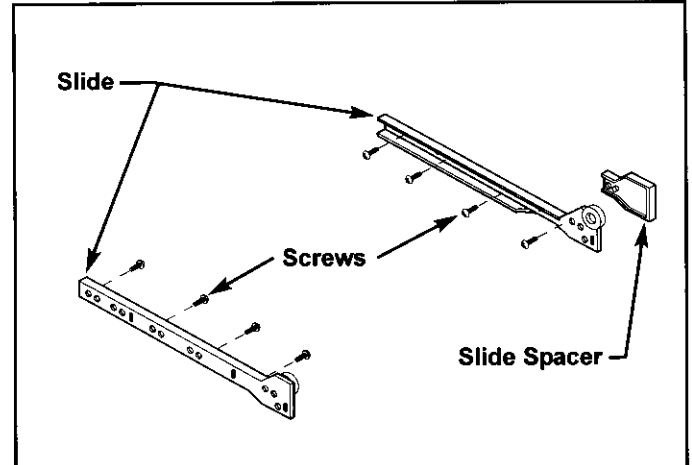


Figure 6-38. Wine Compartment Cabinet Slide & Slide Spacer

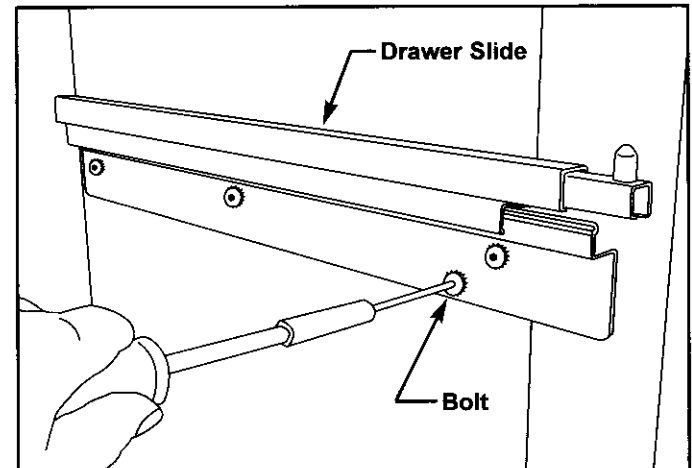


Figure 6-39. Model 427R Drawer Slide

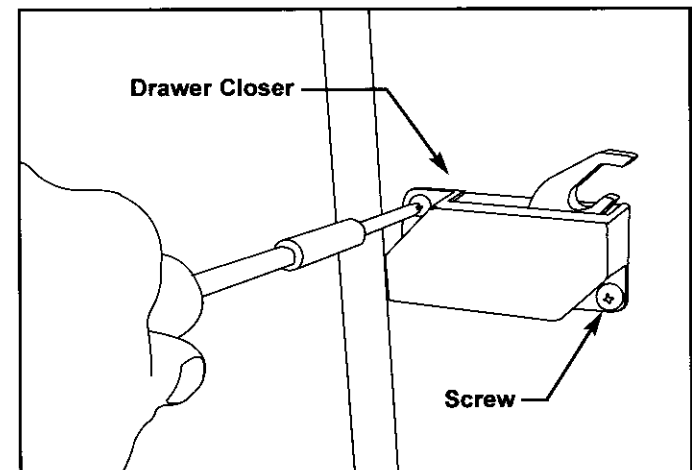


Figure 6-40. Model 427R Drawer Closer

Upper Light Strip Access and Removal (Models 427 & 427R)

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

The upper light strip is held in the channel of the light strip housing at the top of the upper wine storage compartment. To remove the upper light strip, you will need to remove the top wine rack assembly first. Then, extract the two light strip housing mounting screws. Lower the end of the light strip housing opposite the false wall down while pulling forward, and disconnect the light strip electrical leads. Now, slide the light strip out the end of the channel. (See Figure 6-41)

NOTE: When reinstalling the light strip housing, care must be taken to ensure that all wire leads are tucked behind the light strip housing before re-securing it.

NOTE: Since the lower light strip housing is attached to the control panel assembly in the models 427 and 427R, the complete control panel assembly must be removed in order to gain access to the lower light strip. See *Lower Light Strip Access and Removal* instructions in the *MODELS 427 & 427R INTERIOR MECHANICAL COMPONENT ACCESS AND REMOVAL* section of this manual.

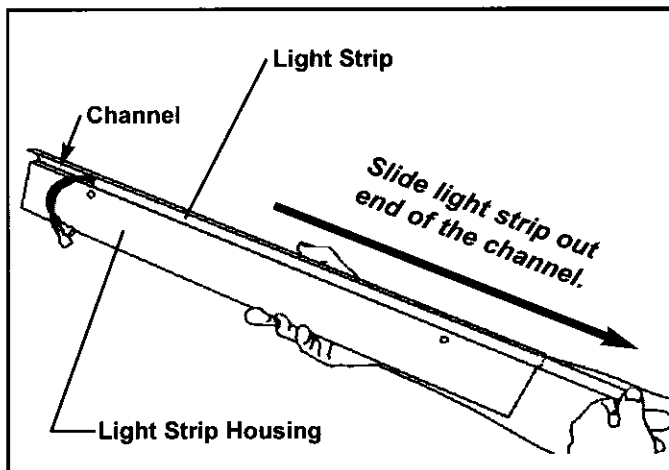


Figure 6-41. Upper Light Strip Removal

Refrigerator Section Lighting Access and removal (Model 427R ONLY)

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

The refrigerator section has two light bulbs, one in the ceiling of the refrigerator section, and one at the bottom of the divider between the two drawers. To remove these light bulbs, simply unscrew them from the socket. (See Figure 6-42)

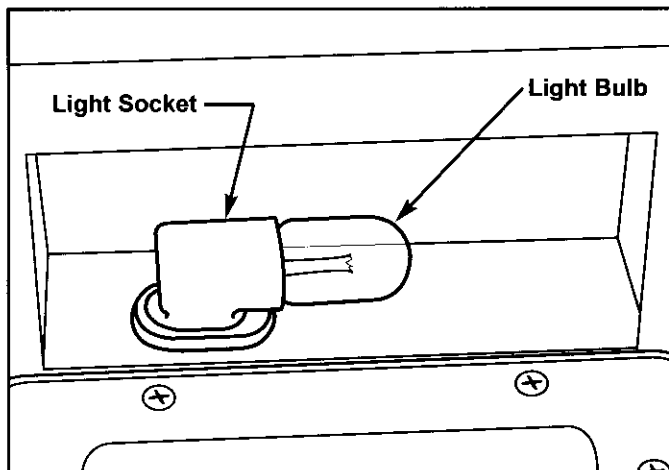


Figure 6-42. 427R Refrigerator Lighting

Reed Switch Removal (Model 427R ONLY)

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

The Reed switches in the refrigerator section control the refrigerator compartment lighting and evaporator fan.

NOTE: The upper Reed switch also contains the refrigerator compartment thermistor.

The Reed switches are attached the evaporator cover with a screw. (See Figure 6-43) To remove a Reed switch, extract the screw. Lean the top of the Reed switch forward, disconnect the electrical leads from the back side, and pull the Reed switch out.

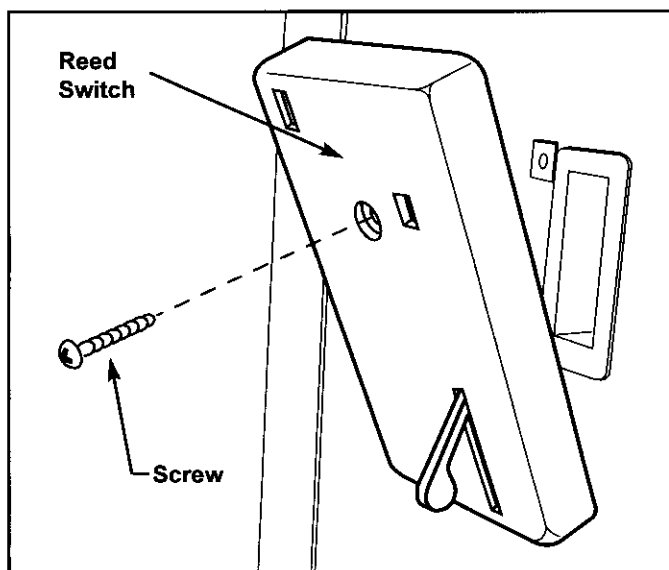


Figure 6-43. 427R Reed Switches

**Evaporator Fan Cover Removal
(Models 427 & 427R)**

There are two access holes in the front of the evaporator fan covers. The back flanges of the evaporator fan cover have slots that line up with the access holes. Screws inside these access holes pass through slots in the back flanges and through holes in the evaporator cover into screw grommets, securing the fan cover.

To remove the evaporator fan cover, extract the two mounting screws from the access holes and pull the fan cover forward. (See Figure 6-44)

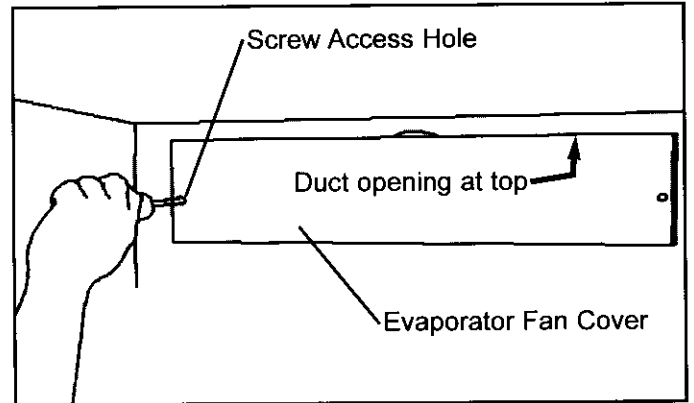


Figure 6-44. Evap Fan Cover Removal

Upper and Lower Wine Storage Evaporator Cover Access and Removal (Model 427 & 427R)

The wine storage evaporator covers are held in place with four screws, two at the evaporator fan covers and two towards the bottom of the evaporator covers. A flange on the side of the evaporator covers hooks behind the false wall in each compartment.

To remove the wine storage evaporator covers, you must first remove the evaporator fan cover mounting screws and the evaporator fan cover. Remove the screws towards the bottom of the evaporator cover. Rotate the side of the evaporator cover farthest from the false wall out slightly. Push the thermistor electrical leads and rubber grommet from the slot in the evaporator cover. Locate the ground wire riveted to the back of the evaporator cover. Extract the ground at the other end of the ground wire. Continue rotating the side of the evaporator cover farthest from the false wall out until the flange clears the false wall. (See Figure 6-45)

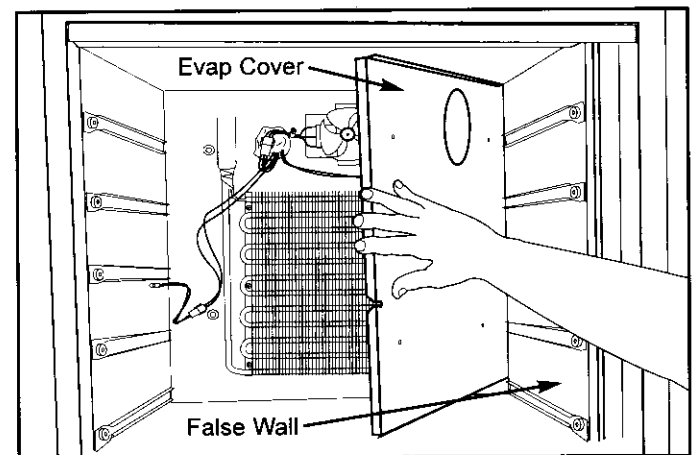


Figure 6-45. Wine Storage Evaporator Cover Removal

NOTE: When reinstalling the evaporator cover, the ground wire must be reattached with the ground screw to the rear wall.

Refrigerator Section Evaporator Cover Access and Removal (Model 427R ONLY)

The refrigerator section evaporator cover is held in place with three screws, two at the evaporator fan cover and one that secures it to a grounding bracket.

NOTE: See **ELECTRIC SHOCK WARNING** at beginning of this section.

To remove the refrigerator evaporator cover, you must first remove the evaporator fan cover mounting screws and the evaporator fan cover. Then, extract the grounding screw towards the top right, and remove both Reed switches. Pull the top of the evaporator cover forward and lift off of pegs at bottom. (See Figure 6-46)

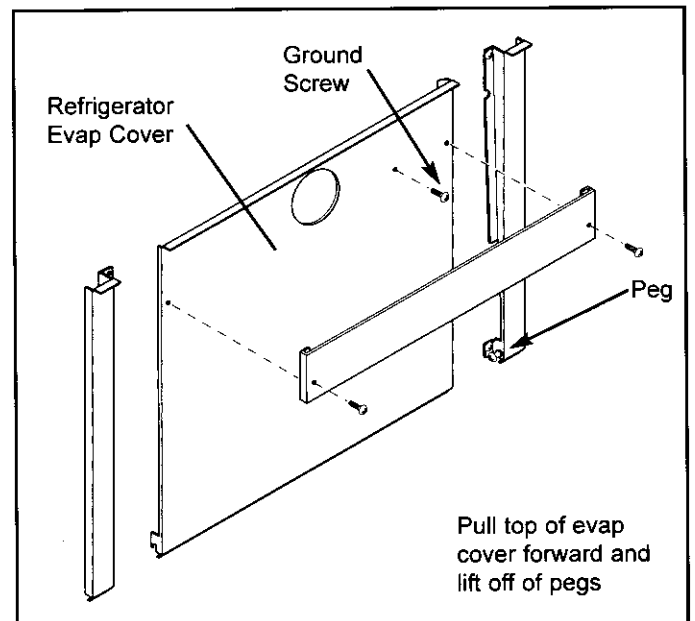


Figure 6-46. Refrigerator Evaporator Cover Removal

NOTE: When reinstalling the evaporator cover, the ground wire must be reinserted.

Refrigerator Section Evaporator Support Cover Access and Removal (Model 427R ONLY)

The evaporator support covers are narrow covers to the left and right of the refrigerator evaporator cover. The left cover holds the control cable connector. These covers are held in place by screws under the refrigerator evaporator cover.

To remove the evaporator support covers, you must first remove the drawer slides and both drawer closers. Then, remove the evaporator fan cover mounting screws, the evaporator fan cover and the refrigerator evaporator cover. Extract the evaporator support cover mounting screws and pull the evaporator support cover out. (See Figure 6-47)

NOTE: If removing the left evaporator support cover, the control cable connector must be disconnected as you remove the cover.

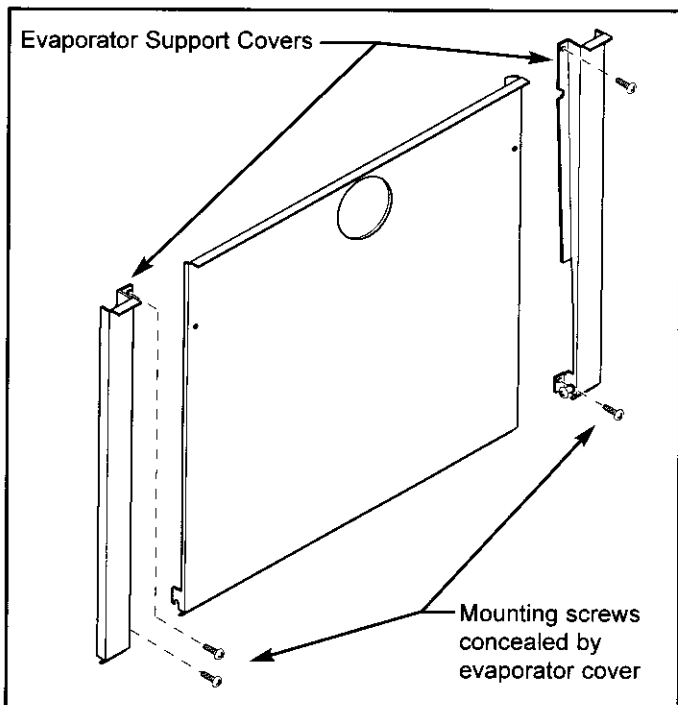


Figure 6-47. Refrigerator Evaporator Support Cover Removal

MODELS 427 & 427R INTERIOR MECHANICAL COMPONENT ACCESS AND REMOVAL:

An attempt has been made to arrange these instructions 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 removal procedure towards the front of this sub-section.

Wine Storage Control Board Access and Removal (Models 427 & 427R)

The control board is located at the bottom of the compartment divider, behind the control panel, and is concealed by an access panel. The control board is held in place by four tabs, one at each corner of the board.

NOTE: See *ELECTRIC SHOCK WARNING* and *STATIC ELECTRICITY CAUTION* at beginning of this section.

To get to the control board you will need to extract the two screws at the back of the access panel, then lower the back of the access panel and pull it towards the rear of the unit. (See Figure 6-48)

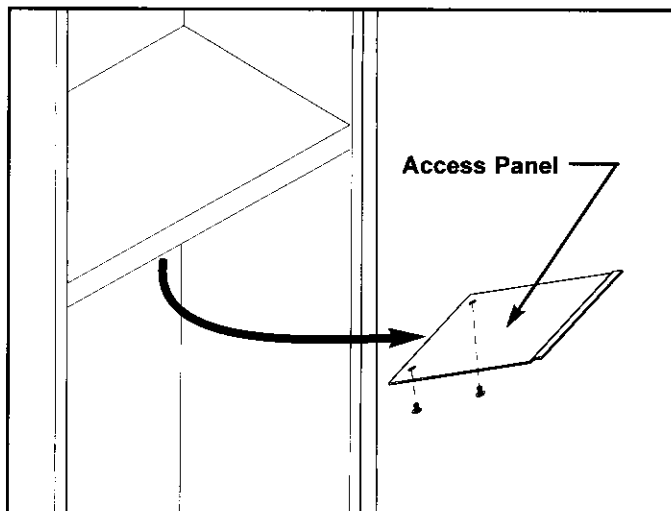


Figure 6-48. Wine Storage Control Board Access Panel

To remove the control board, disconnect the LED ribbon cable, the membrane switch ribbon cable, and all other electrical leads attached to the control board. Expand the tabs to release the control board, then pull down and out. (See Figure 6-49)

NOTE: When re-connecting electrical leads to the control board, be sure the silver area on the membrane switch ribbon cable terminal is facing away from the control board.

Refrigerator Section Control Board Access and Removal (Model 427R ONLY)

The refrigerator section control board is attached to a control board cover, located in the ceiling of the refrigerator section. The control board cover is held in place with seven screws.

NOTE: The eighth hole in the control board cover is in line with the wire channel. **DO NOT** insert a screw in this hole. Doing so could short out the unit and/or cause electrical shock. See **ELECTRIC SHOCK WARNING** and **STATIC ELECTRICITY CAUTION** at beginning of this section.

To access and remove the refrigerator control board, remove the top drawer first.

NOTE: The top drawer has a control cable that must be disconnected before drawer removal. To remove the top drawer assembly, pull top drawer forward 6" to 10", lift it up off of the pins at front and push the slides in. Carefully place the drawer assembly face down directly in front of unit. Then, disconnect the display cable at interior left rear of the unit by turning the collar counterclockwise and unplugging the pins from the socket. (See Figure 6-32)

Now, extract the screws that secure the control board cover to the ceiling and let the cover drop down. Disconnect all electrical lead attached to the control board and pull the control board and cover out. (See Figure 6-50)

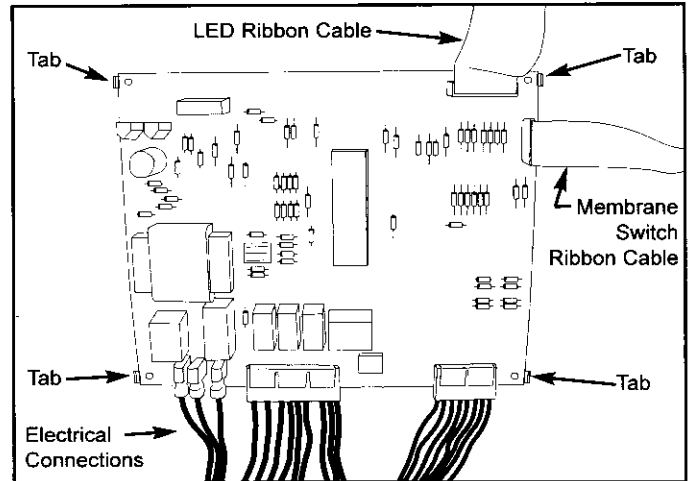


Figure 6-49.
Wine Storage Control Board

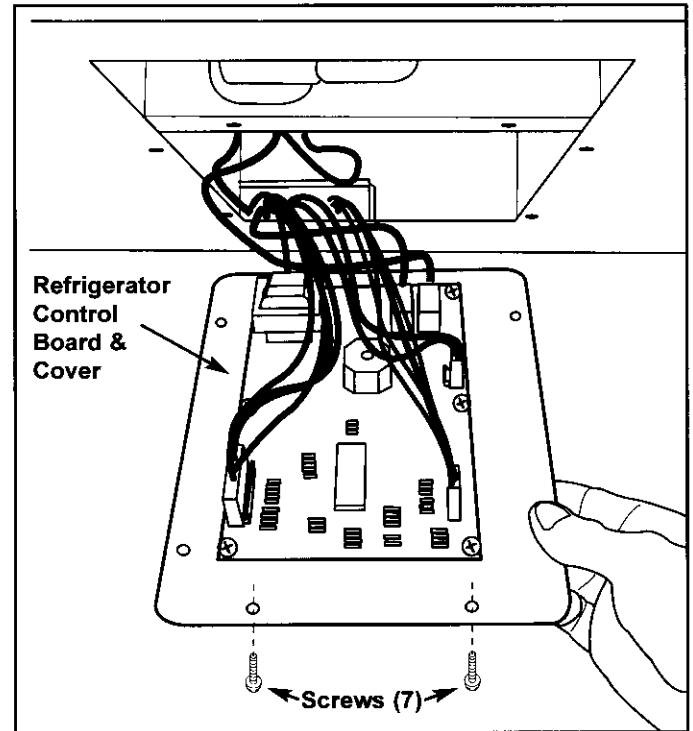


Figure 6-50.
Refrigerator Section Control Board

Wine Storage Control Panel Assembly Removal (Models 427 & 427R)

The control panel assembly is set at the front of the wine compartment divider and is secured by six screws at the bottom, and a silicone seal under the top flange. Tabs at the bottom and a concealed tab at the top center of the control panel housing help to position the control panel assembly.

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

To remove the control panel assembly, first access the control board and disconnect the lower light strip electrical leads, LED ribbon cable and the membrane switch ribbon cable. Then, extract the six screws at the bottom of the control panel. Now, slide the blade of a putty knife under and along the top flange of the control panel housing to break the silicone seal. (See Figure 6-51)

NOTE: Do not lift the top flange of the control panel housing too vigorously. Doing so will break the concealed tab at the top center.

After breaking the silicone seal, pull the control panel assembly forward and disconnect the ground wire.

NOTE: When reinstalling the control panel assembly, you must reapply a bead of silicone along the inside of the top flange.

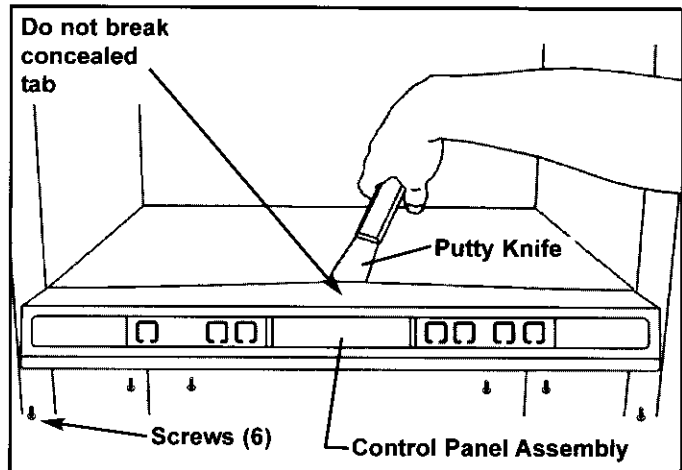


Figure 6-51.
Wine Storage Control Panel Assembly

Lower Light Strip Access and Removal (Models 427 & 427R)

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

The lower light strip is held in the channel of the light strip housing, which attached to the control panel assembly. To remove the lower light strip, you will first need to remove the control panel assembly. Now, slide the light strip housing off of the control panel assembly. Then, slide the light strip out the end of the channel in the housing. (See Figure 6-52)

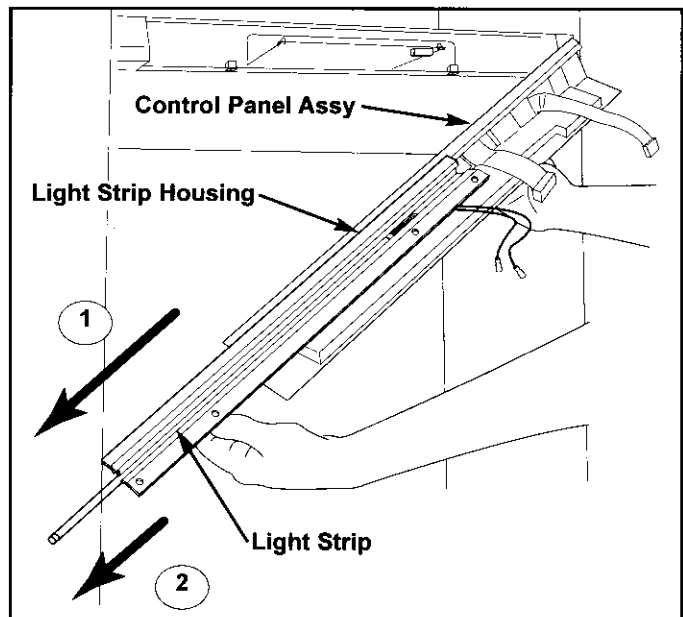


Figure 6-52. Lower Light Strip

Refrigerator Section Control Panel Assembly Removal (Model 427R ONLY)

The refrigerator control panel assembly is attached to the inside of the top drawer with three screws.

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

To remove the refrigerator control panel assembly, extract the three screws and tilt the control panel back towards the drawer tub. (See Figure 6-53) Now, disconnect the power supply to the control panel assembly and lift the control panel assembly up and out.

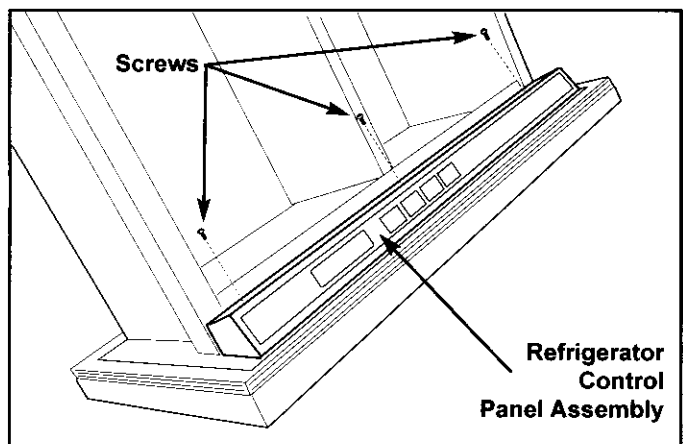


Figure 6-53.
Refrigerator Control Panel Assembly

Wine Storage Compartment Thermistors Access and Removal (Models 427 & 427R)

The upper and lower wine compartment thermistors are attached to the wall of both compartments with Phillips-head screws, and the electrical leads of the thermistors are routed through notches in the side of the evaporator covers and guarded by a wire grommets. (See Figure 6-54)

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

To remove a compartment thermistor, you must first remove the wine racks in the appropriate compartment. Then, remove the screw from the compartment thermistor. Remove the evaporator fan cover mounting screws and the evaporator fan cover. Remove the mounting screws towards the bottom of the evaporator cover. Rotate the side of the evaporator cover farthest from the false wall out slightly and push the thermistor electrical leads and rubber grommet from the slot in the evaporator cover. Now, reach behind the evaporator cover and disconnect the thermistor electrical leads and remove the thermistor mounting screw. (See Figure 6-54)

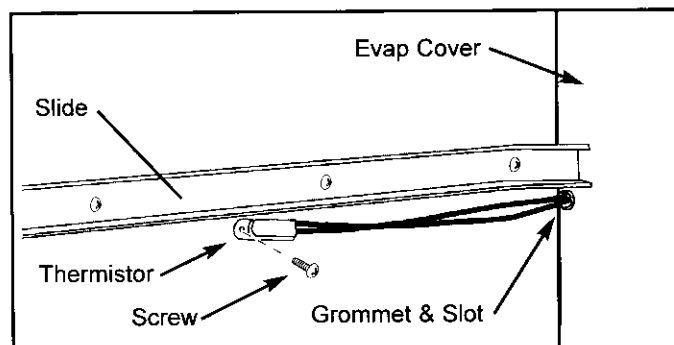


Figure 6-54.
Wine Storage Compartment Thermistors

Wine Storage Evaporator Thermistors Access and Removal (Models 427 & 427R)

The upper and lower wine storage evaporator thermistors are attached to the right side evaporator brackets of both evaporators with Phillips-head screws. (See Figure 6-55)

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

To access and remove a wine storage evaporator thermistor, you must first remove the wine racks in the appropriate compartment. Then, remove the evaporator fan cover mounting screws and the evaporator fan cover. Remove the evaporator cover mounting screws towards the bottom of the evaporator cover. Rotate the side of the evaporator cover farthest from the false wall out slightly and push the compartment thermistor electrical leads and grommet from the slot in the evaporator cover. You'll find a ground wire riveted to the back of the evaporator cover, and the other end of the ground wire has a screw securing it to the rear wall. Extract the ground screw and continue rotate the side of the evaporator cover farthest from the false wall out until the flange clears the false wall. Pull the evaporator cover out. Remove the screw from the evaporator thermistor, disconnect the thermistor electrical leads and pull the evaporator thermistor out. (See Figure 6-55)

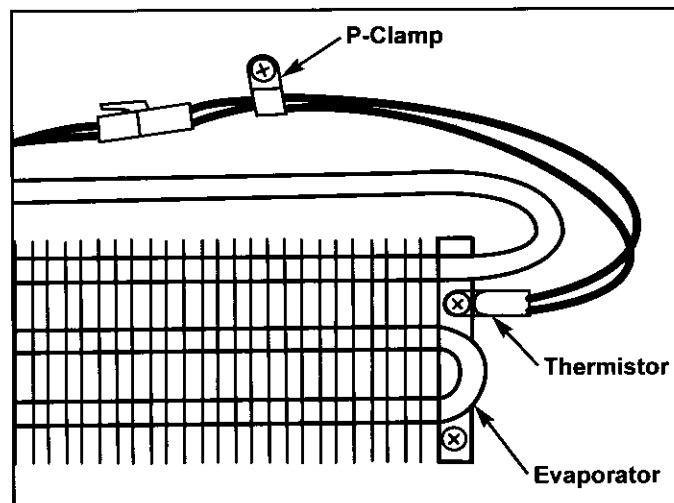


Figure 6-55.
Wine Storage Evaporator Thermistors

Refrigerator Compartment Thermistor Access and Removal (Model 427R ONLY)

The compartment thermistor in the refrigerator section is located behind the upper drawer, inside the top Reed switch assembly, and is considered part of the top Reed switch assembly. To replace the compartment thermistor, the complete top Reed switch must be replaced (See Figure 6-56)

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

To access and remove the top Reed switch assembly, extract the Reed switch mounting screw. Lean the top of the Reed switch forward, disconnect the electrical leads from the back side, and pull the Reed switch out.

NOTE: When reinstalling a Reed switch, plug in the electrical leads. Place the bottom flange of the switch housing into the opening in the evaporator cover. Then, rotate the top back and insert the screw.

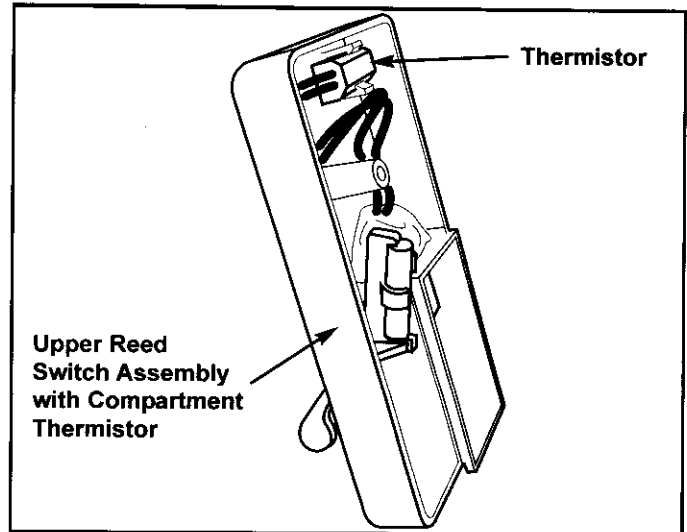


Figure 6-56. 427R Refrigerator Compartment Thermistor / Reed Switch

Refrigerator Evaporator Thermistor Access and Removal (Model 427R ONLY)

The refrigerator section evaporator thermistor is attached to the right side evaporator brackets with a Phillips-head screw. (See Figure 6-57)

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

To access the refrigerator evaporator thermistor, you must first remove the evaporator fan cover mounting screws and the evaporator fan cover. Extract the grounding screw towards the top right, and remove both Reed switches. Pull the top of the evaporator cover forward and down and lift off of pegs at bottom. Remove the screw from the evaporator thermistor and disconnect the evaporator thermistor electrical leads.

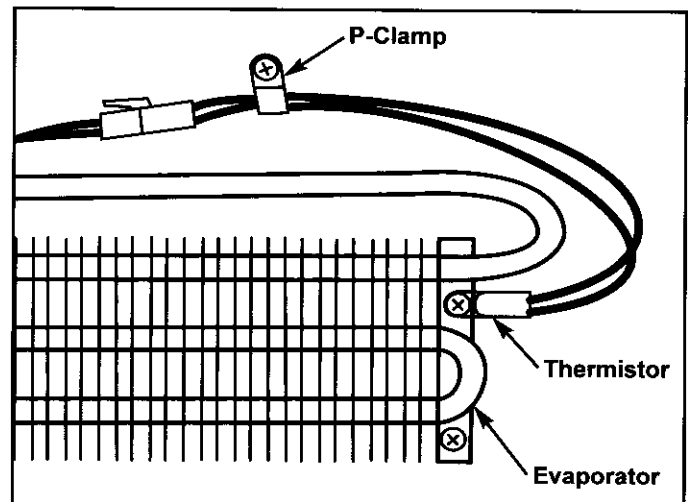


Figure 6-57. 427R Refrigerator Evaporator Thermistor

Upper and Lower Wine Storage Evaporator Fan Assembly Access and Removal (Model 427 & 427R)

The wine storage evaporator fan assemblies are attached to the rear wall of each wine compartment with four Phillips-head screws. (See Figure 6-58)

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

To access and remove a wine storage evaporator fan assembly, you must first remove the wine racks in the appropriate compartment. Then, remove the evaporator fan cover mounting screws and the evaporator fan cover. Remove the evaporator cover mounting screws towards the bottom of the evaporator cover. Rotate the side of the evaporator cover farthest from the false wall out slightly and push the compartment thermistor elec-

trical leads and rubber grommet from the slot in the evaporator cover. You will find a ground wire riveted to the back of the evaporator cover. The other end of the ground wire has a screw securing it to the rear wall. Extract the ground screw and continue rotate the side of the evaporator cover farthest from the false wall out until the flange behind the false wall clears the false wall. Pull the evaporator cover out. Pull the fan blade from the fan motor shaft. Extract the screw from the P-clamp holding the fan wires. Then remove the four screws from the fan bracket and disconnect the fan motor electrical leads.

Refrigerator Section Evaporator Fan Assembly Access and Removal (Model 427R ONLY)

The refrigerator evaporator fan assembly is attached to the rear wall of the compartment with four Phillips-head screws. (See Figure 6-58)

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

To access and remove the refrigerator evaporator fan assembly, you must first remove the evaporator fan cover mounting screws and the evaporator fan cover. Extract the grounding screw towards the top right, and remove both Reed switches. Pull the top of the evaporator cover forward and down and lift off of pegs at bottom. Pull the fan blade from the fan motor shaft. Extract the screw from the P-clamp holding the fan wires. Then remove the four screws from the fan bracket and disconnect the fan motor electrical leads. (See Figure 6-58)

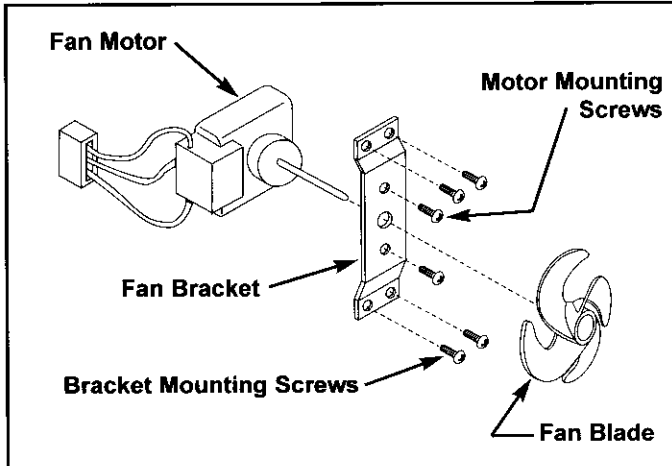


Figure 6-58. Evaporator Fan Assembly

MODELS 427 AND 427R SEALED SYSTEM COMPONENT ACCESS AND REMOVAL:

An attempt has been made to arrange these instructions 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 removal procedure towards the front of this section.

NOTE: Always replace the filter-drier when servicing the sealed system.

Upper and Lower Wine Storage Evaporator Access and Removal (Models 427 & 427R)

The wine storage evaporators are mounted to the rear wall in each wine storage compartment with Phillips-head screws. (See Figures 6-59)

NOTE: See *SHARP EVAPORATOR FINS CAUTION* at beginning of this section.

Before accessing and removing a wine storage evaporator, evacuate the refrigerant from the sealed system. Then, remove the wine racks. Remove the evaporator fan cover mounting screws and the evaporator fan cover. Remove the evaporator cover mounting screws towards the bottom of the evaporator cover. Rotate the side of the evaporator cover farthest from the false wall out slightly and push the compartment thermistor electrical leads and rubber grommet from the slot in the evaporator cover. Locate the ground wire riveted to the back of the evaporator cover with a screw securing it to the rear wall. Extract the ground screw and continue rotating the side of the evaporator cover farthest from the false wall out until the flange behind the false wall clears the false wall. Pull the evaporator cover out, and extract the evaporator mounting screws. Now, cut the evaporator inlet and outlet tubing and pull the evaporator out.

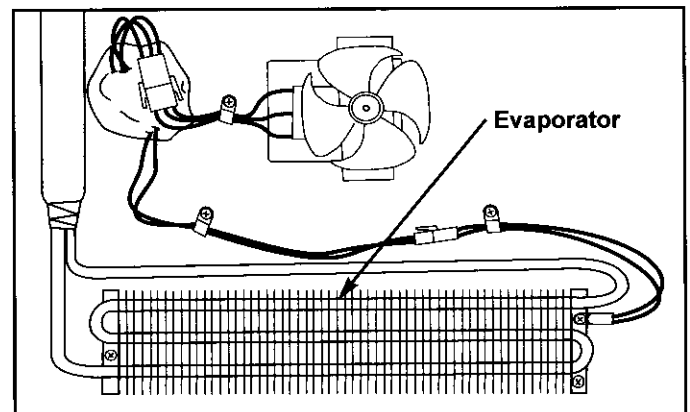


Figure 6-59. Evaporator

Refrigerator Section Evaporator Access and Removal (Model 427R ONLY)

The refrigerator evaporator is mounted to the rear wall of the refrigerator section with Phillips-head screws. (See Figures 6-60)

NOTE: See *SHARP EVAPORATOR FINS CAUTION* at beginning of this section.

Before accessing and removing the refrigerator evaporator, evacuate the refrigerant from the sealed system. Then, remove the four drawer slides and both drawer closers. Remove the evaporator fan cover mounting screws and the evaporator fan cover. Remove both Reed switches and remove the mounting screws towards the bottom of the evaporator cover. Rotate the top of the evaporator cover forward and pull it out. Remove both evaporator support covers. Extract the evaporator mounting screws. Now, cut the evaporator inlet and outlet tubing and pull the evaporator out.

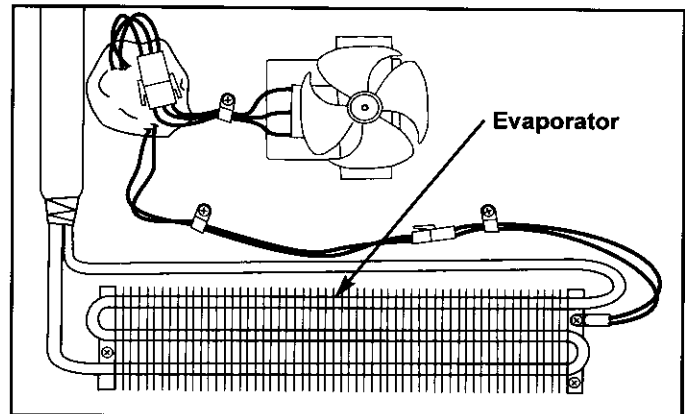


Figure 6-60. Evaporator

Wine Storage Refrigerant Valve Access and Removal (Models 427 & 427R)

The refrigerant valves are located to the right of the compressor(s) on the unit tray, and are held to the valve bracket with P-clamps and screws. The top valve is for the upper wine storage compartment and the bottom valve is for the lower wine storage compartment. (See Figure 6-61)

NOTE: See *HOT COMPRESSOR & TUBING CAUTION* at beginning of this section.

After evacuating the refrigerant from the sealed system, you will need to slide the unit tray out. (See Figure 6-34)

NOTE: Move tray slowly and observe the sealed system tubing. Care must be taken to not kink any of the tubing.

Now, cut the capillary tube approximately 1" from the refrigerant valve, and cut the valve inlet tube approximately 3" from the refrigerant valve. (See Figure 6-61)

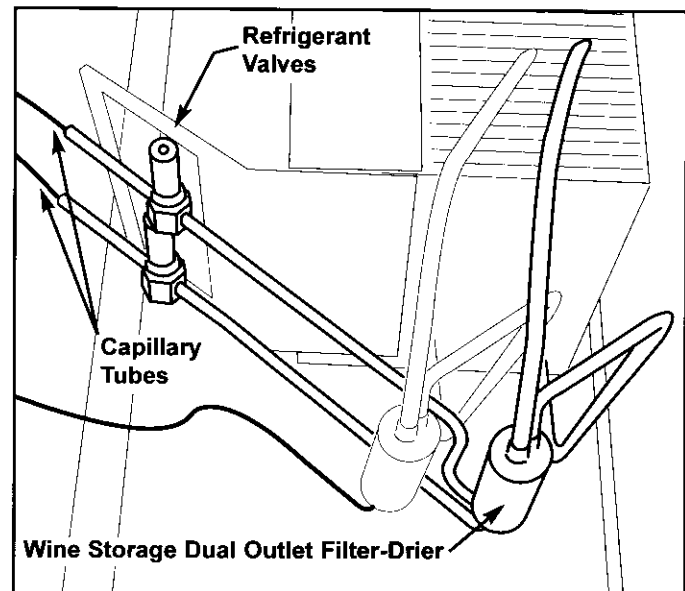


Figure 6-61. Capillary Tubes, Refrigerant Valves, Dual Outlet Filter-Drier

Wine Storage Filter-Drier Access and Removal (Models 427 & 427R)

The wine storage filter-drier, which has two outlet tubes, is located to the left of the condenser on the unit tray. One outlet tube runs to the top refrigerant valve, and the other tube runs to the bottom refrigerant valve. (See Figure 6-61)

NOTE: See *HOT COMPRESSOR & TUBING CAUTION* at beginning of this section.

After evacuating the refrigerant from the sealed system, you'll need to slide the unit tray out. (See Figure 6-34)

NOTE: Move tray slowly and observe the sealed system tubing. Care must be taken to not kink any of the tubing.

Now, cut both outlet tubes approximately 1" from the filter-drier, and cut the drier inlet tube approximately 1" from the filter-drier. (See Figure 6-61)

Refrigerator Section Filter-Drier Access and Removal (Model 427R ONLY)

The refrigerator section filter-drier is located to the left of the condenser on the unit tray. (See Figure 6-62)

NOTE: See *HOT COMPRESSOR & TUBING CAUTION* at beginning of this section.

After evacuating the sealed system, you will need to slide the unit tray out. (See Figure 6-34)

NOTE: Move tray slowly and observe the sealed system tubing. Care must be taken to not kink any of the tubing.

Now, cut the capillary tubes approximately 1" from the filter-drier, and cut the drier inlet tube approximately 1" from the filter-drier. (See Figure 6-62)

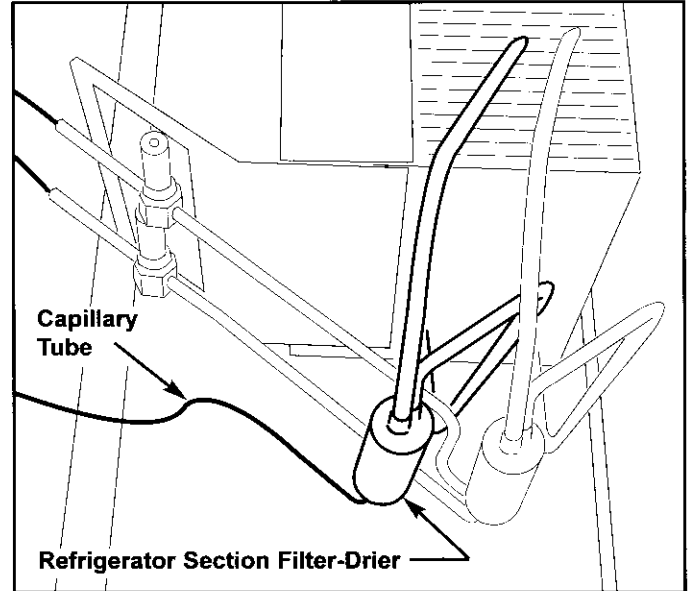


Figure 6-62. 427R Refrigerator Filter-Drier

Compressor Access and Removal (Models 427 & 427R)

The compressor(s) are attached to the unit tray with bolts. On the model 427R, the front compressor is the wine storage compressor and the back compressor is the refrigerator section compressor. (See Figure 6-63)

NOTE: See *HOT COMPRESSOR & TUBING CAUTION* at beginning of this section.

After evacuating the refrigerant from the sealed system, you will need to slide the unit tray out. (See Figure 6-34)

NOTE: Move tray slowly and observe the sealed system tubing. Care must be taken to not kink any of the tubing.

Now, cut the suction port and discharge port approximately 1" from the compressor. Disconnect the compressor electricals. Extract the four bolts from the compressor base and lift the compressor up and out.

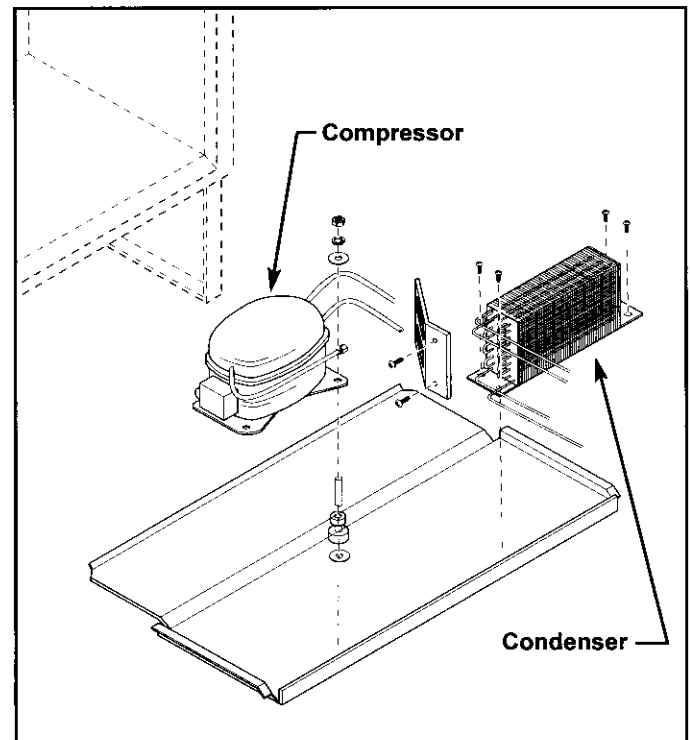


Figure 6-63. Compressor(s) & Condenser

Condenser Access and Removal (Models 427 & 427R)

The condenser is located at the front right of the unit tray, and is held in place with screws passing up from under the unit tray into the condenser brackets. The 427R has a dual condenser with the front of the condenser being part of the wine storage sealed system and the back of the condenser being part of the refrigerator sealed system. (See Figure 6-63)

NOTE: See *HOT COMPRESSOR & TUBING CAUTION* and *SHARP FINS CAUTION* at beginning of this section.

After evacuating the refrigerant from the sealed system, you will need to slide the unit tray out slightly. (See Figure 6-34)

NOTE: Move tray slowly and observe the sealed system tubing. Care must be taken to not kink any of the tubing.

Now, remove the condenser mounting screws. Cut the inlet tube(s) and outlet tube(s) approximately 2" from the condenser and lift the condenser up and out. (See Figure 6-63)

MODEL 430

MODEL 430 EXTERIOR COSMETIC AND MECHANICAL COMPONENT REMOVAL:

An attempt has been made to arrange these instructions 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 removal procedure towards the front of this section.

Kickplate Removal (Model 430)

To remove the kickplate, extract the mounting screws located at each end of the kickplate and pull the kickplate forward. (See Figure 6-64)

Drain Pan Removal (Model 430)

To access and remove the drain pan, the kickplate must first be removed. Now push the front of the drain pan back and down. (This flexes the drain pan slightly, releasing the top flange from the tab in the kickplate support.) Then, pull the drain pan forward. (See Figure 6-65)

NOTE: When reinstalling, the tapered end of drain pan must be inserted on top of the drain pan holder at rear. Then push the front of the drain pan up until the front flange engages the tab in the kickplate support. Also, make sure the drain hoses are over the drain pan, and the foam air seals which direct air over drain pan are in position and in good shape.

Door Closer Removal (Model 430)

The door closer assembly sets inside of the unit base and the door closer arm is held on the bottom door hinge stud with an E-ring.

NOTE: The procedure for "disconnecting" the door closer when removing a door is different than the door closer "removal" procedure listed below. (See DOOR CLOSER CAUTION at beginning of this section.)

With door closed, use a small straight-blade screwdriver to remove the E-ring which holds the door closer arm to the stud on the bottom door hinge. Then, pry the door closer arm down off of the door hinge stud and pull the door closer assembly from the front of the unit base. (See Figure 6-66)

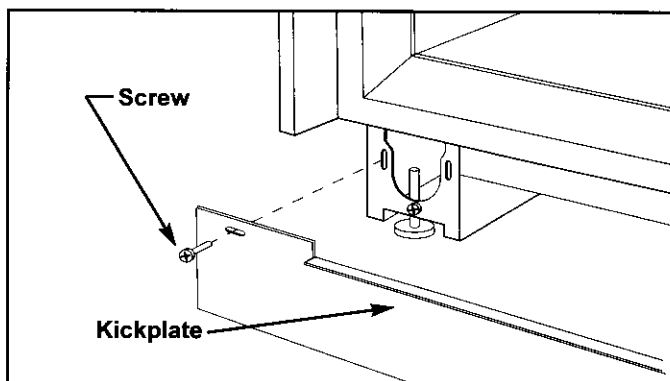


Figure 6-64. Kickplate Removal

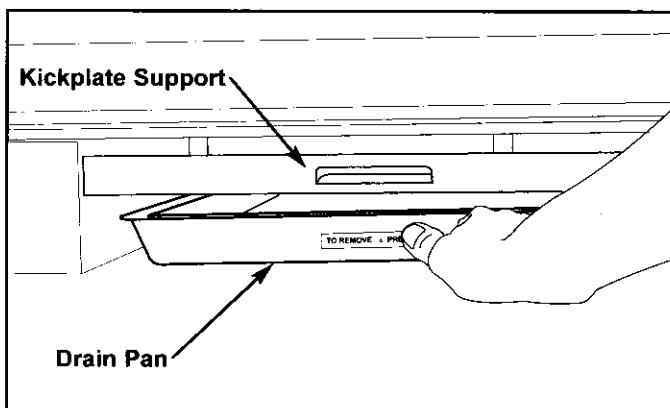


Figure 6-65. Drain Pan Removal

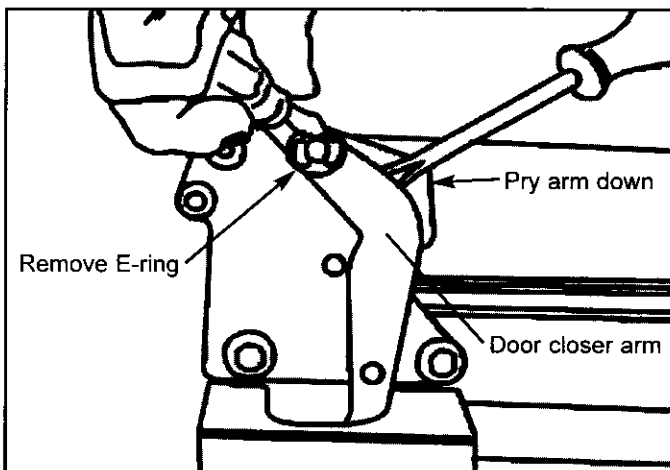


Figure 6-66. Door Closer Removal

Door Assembly Removal (Model 430)

NOTE: See *DOOR CLOSER CAUTION* at beginning of this section.

The door closer must be disconnected from the bottom door hinge in order to remove the door. Disconnect the door closer from the bottom door hinge by opening the door until the hole in the door closer arm aligns with hole in bottom cabinet hinge, then insert a stubby screwdriver (1/4" diameter or less) up into the two holes. With a small straight-blade screwdriver, remove the E-ring which holds the door closer arm to the stud on the bottom door hinge. (See Figure 6-67) Then, pry the door closer arm down off of the door hinge stud.

NOTE: The screwdriver inserted in the holes of the door closer arm and the bottom cabinet hinge will be used to pry the door closer arm back into position when reattaching the door closer to the bottom door hinge.

With the door closer disconnected, remove the hinge-side door trim and extract all screws from the top door hinge, then lift door assembly off of bottom cabinet hinge. (See Figures 6-68)

Louvered Grille Removal (Model 430)

To remove the louvered grille assembly, open unit door and extract the grille screws which pass up through the top mainframe extrusion into brackets at bottom rear of grille assembly. Now, tilt the top of grille forward and release the grille springs from the grille hooks at the back side of the grille. Then lift grille assembly off. (See Figure 6-69)

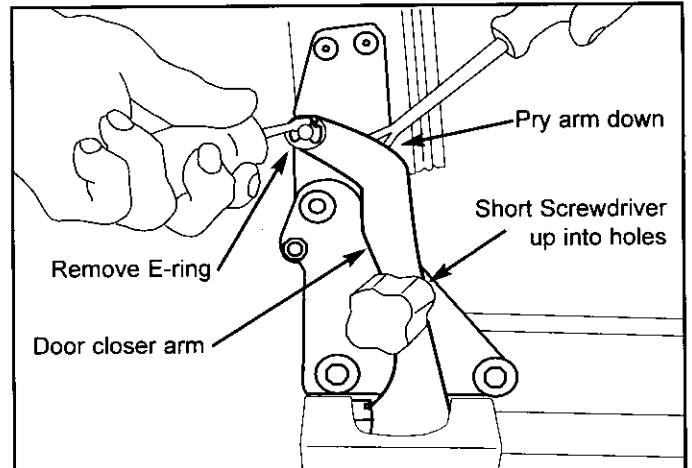


figure 6-67. Disconnecting the Door Closer

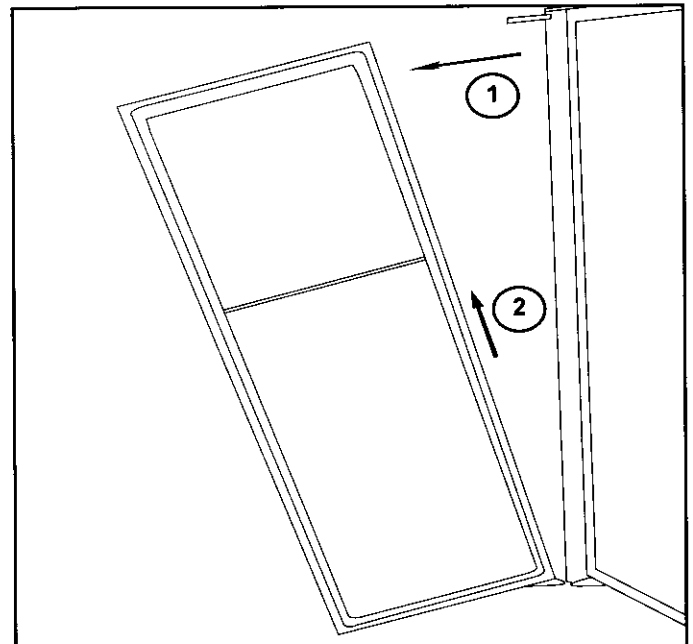


Figure 6-68. Door Assembly Removal

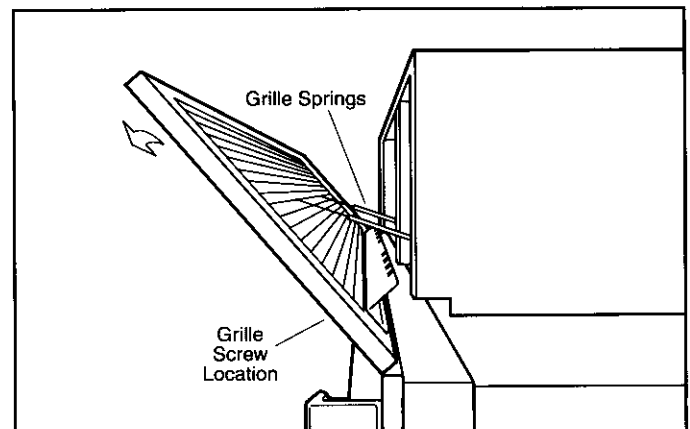


Figure 6-69. Louvered Grille Removal

Panel Grille Assembly Removal (Model 430)

The panel grille assembly consists of an outer and an inner grille frame. The outer grille frame attaches to the unit, while the inner grille frame (which accepts a decorative panel) is easily removable for condenser cleaning purposes. There are pegs on the back side of the inner grille frame which fit in key-hole slots in the outer grille frame.

To remove the inner grille frame, lift assembly up (1) and pull out of key-hole slots at the bottom (2). Then, pull down and out of key-hole slots at the top (3). (See Figure 6-70)

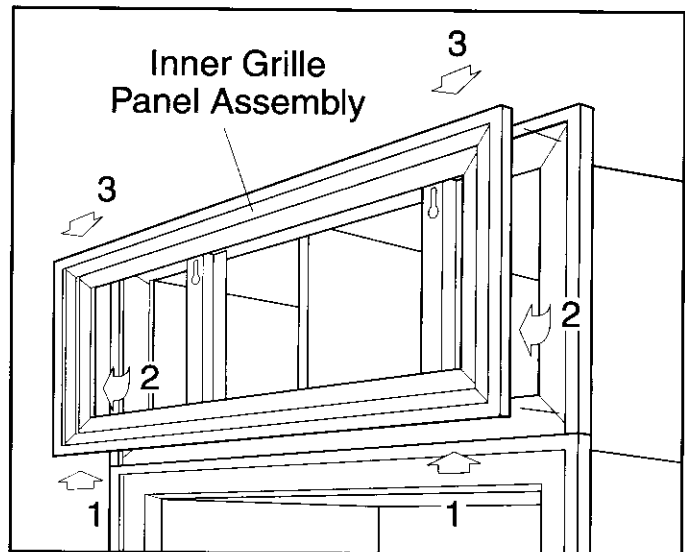


Figure 6-70. Inner Panel Grille Removal

To remove the outer grille frame, remove the inner grille frame first. Now, opening unit door(s) and extract the grille screws which pass up through the top mainframe extrusion into bottom extrusion of outer grille frame. Now, extract the screws at the top front of outer grille frame and lift frame off. (See Figure 6-71)

Light Switch and Fan Switch Access and Removal (Model 430)

The light and fan switches are mounted to the top mainframe and held in place by tabs on the sides of the switches. A switch cover over the top of the switches is held in place with a screw.

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

To access and remove the light and/or fan switch(es), the unit grille will need to be removed first. Now, remove the switch enclosure directly behind the top mainframe extrusion by extracting the retaining screw. Tilt the back of the switch enclosure forward and lift up. Now unplug the wires from the switch being removed. Open the door. Depress the tab on the side of the switch while pushing the switch down and out of the opening in the mainframe extrusion. (See Figure 6-72)

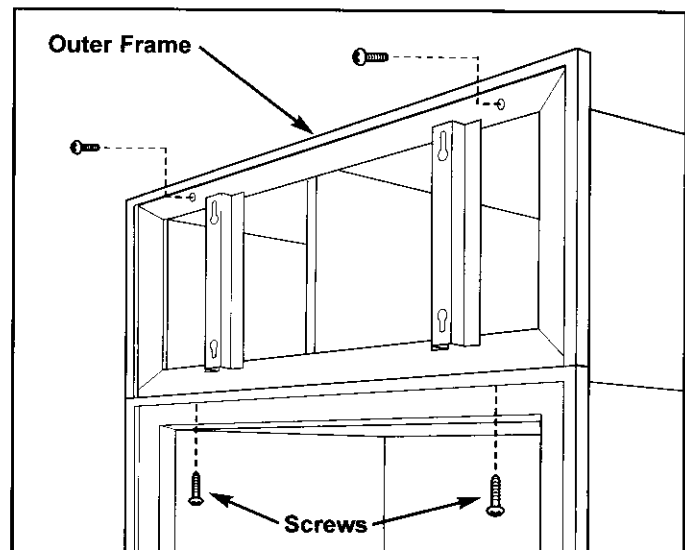


Figure 6-71. Outer Panel Grille Removal

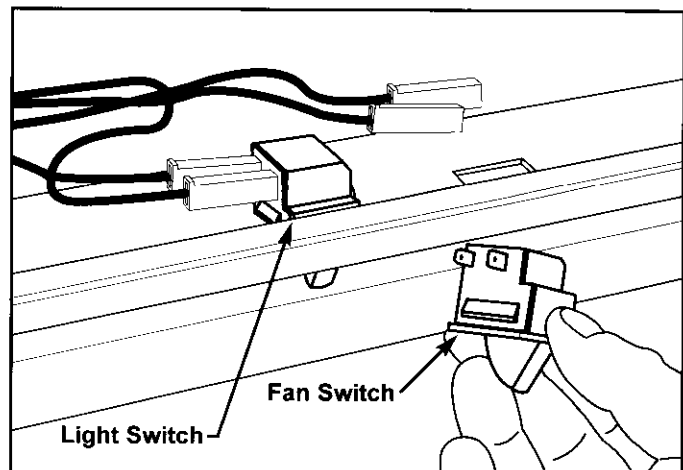


Figure 6-72. Light Switch and Fan Switch

**Condenser Fan Assembly Access and Removal
(Model 430)**

The condenser fan motor is attached to a three legged condenser fan bracket by screws. The back leg of the condenser fan bracket hooks over a spacer toward the rear of the fan shroud. The two front legs of the bracket are secured to the fan shroud by screws into wellnuts. (See Figure 6-73)

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

To access and remove the condenser fan assembly, the unit grille will need to be removed first. Then, remove compressor baffle which is secured with screws. Disconnect the fan motor electrical leads. Extract the screws from the two front legs of the fan bracket. Then, unhook the back leg by pushing the condenser fan assembly slightly to the rear, then lift up and pull it forward. The condenser fan motor can now be removed from the bracket by extracting the screws in the back side of the fan motor, and the fan blade can be removed from the fan motor by turning the flat-nut on the fan motor shaft counterclockwise, then pull the nut and blade from the shaft. (See Figure 6-73)

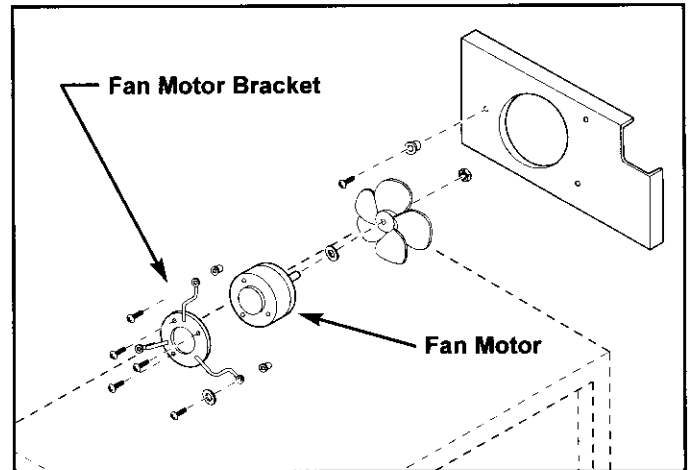


Figure 6-73. Condenser Fan Assembly

**Refrigerant Valve Solenoid Access and Removal
(Model 430)**

The refrigerant valve solenoids are attached to the tops of the refrigerant valves with screws. The refrigerant valves are located to the right of the compressor, and are held to the valve bracket with P-clamps and screws. The top valve is for the upper wine storage compartment and the bottom valve is for the lower wine storage compartment. (See Figure 6-74)

NOTE: See *ELECTRIC SHOCK WARNING* and *HOT TUBING CAUTION* at beginning of this section.

To access and remove the refrigerant valve solenoid, the unit grille will need to be removed first. Then, remove compressor baffle which is secured with screws. Disconnect the electrical leads of the solenoid being removed. Now, remove the screw at the top of the solenoid and lift the solenoid up off the valve. (See Figure 6-74)

NOTE: You may need to twist the refrigerant valve in the P-clamps slightly to allow the solenoid to be removed.

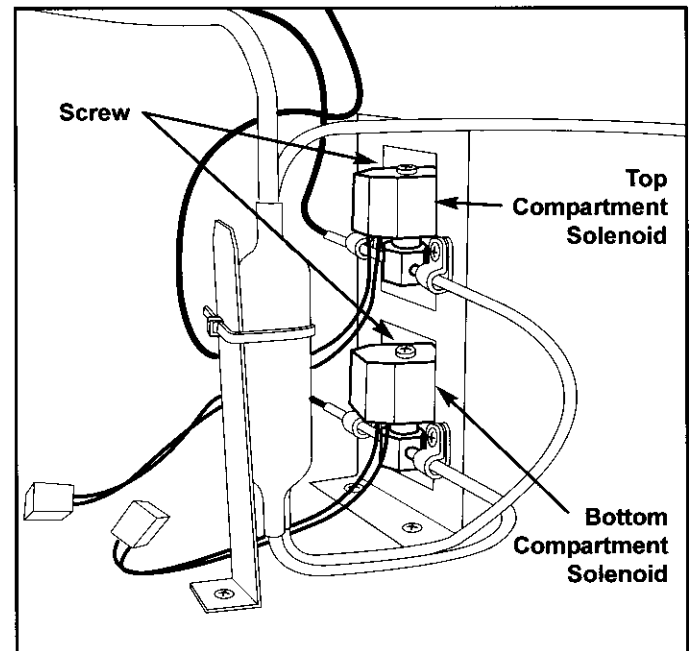


Figure 6-74. Refrigerant Solenoid Valves

MODEL 430 INTERIOR COSMETIC COMPONENT REMOVAL:

An attempt has been made to arrange these instructions 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 removal procedure towards the front of this section.

Wine Rack Assembly Removal (Model 430)

To remove a wine rack assembly, pull the rack forward until it stops. Remove any wine bottles on the rack. Lift the front of the wine rack up while pulling forward. After the indentations on the wine rack clear the rollers on the cabinet slides, lower the front of the wine rack while continuing to pull forward, then lift the rear of the rack up and out. (See Figure 6-75)

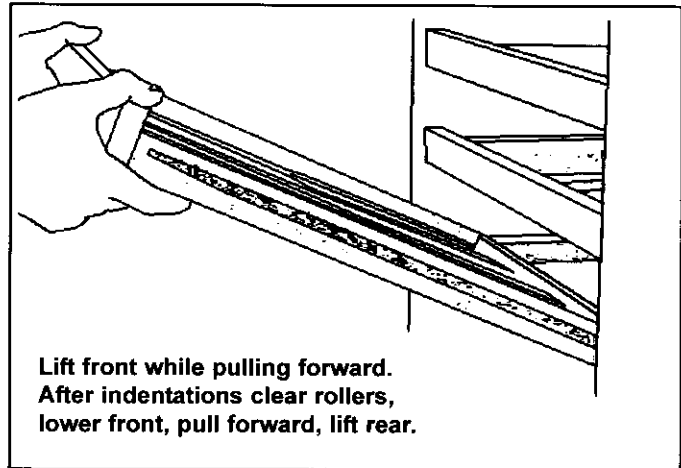


Figure 6-75. Wine Rack Assembly Removal

Upper Light Strip Access and Removal (Model 430)

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

The light strip is held in the channel of the light strip housing. To access the upper light strip, extract the two light strip housing mounting screws. Lower the light strip housing down and disconnect the electrical leads. Now, slide the light strip out the end of the channel. (See Figure 6-76)

NOTE: When reinstalling the light strip housing, care must be taken to ensure that all wire leads are tucked behind the light strip housing before resealing it.

NOTE: Since the lower light strip housing is attached to the control panel assembly in the model 430, the complete control panel assembly must be removed in order to gain access to the light strip. See *Lower Light Strip Access and Removal* instructions in the *MODEL 430 INTERIOR MECHANICAL COMPONENT ACCESS AND REMOVAL* section of this manual.

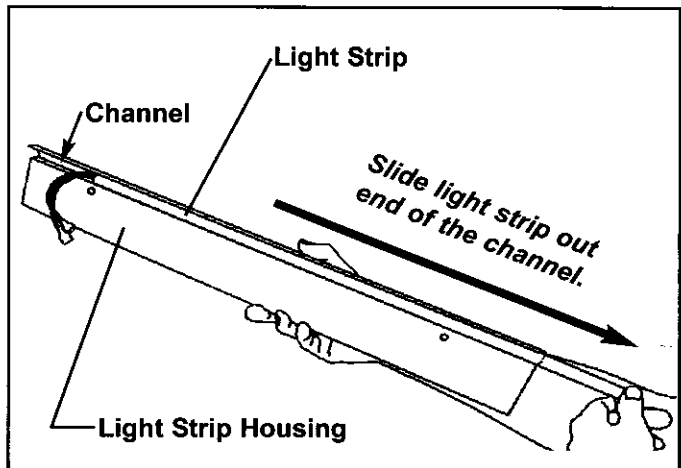


Figure 6-76. Upper Light Strip Removal

Cabinet Slide, Slide Spacer and Slide Support Spacer Removal (Model 430)

Cabinet slides are attached to the side walls of the wine compartments with screws. If the cabinet slide is attached to the handle side of the compartment, a small plastic slide spacer is placed between the front of the slide and the side wall. If the cabinet slide is attached to the handle side, a wide plastic slide support spacer is placed between the slide and the wall.

To remove a cabinet slide, first remove the wine rack. Then, extract the Phillips head cabinet slide mounting screws and pull the cabinet slide and slide spacer or slide support spacer from the wall. (See Figure 6-77)

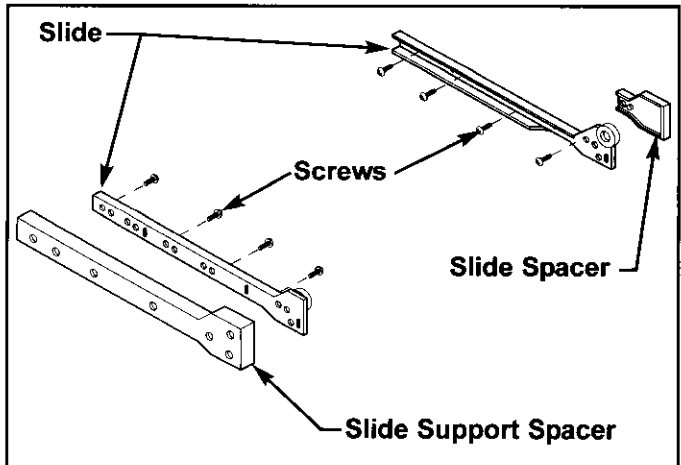


Figure 6-77. Cabinet Slide, Slide Support Spacer & Slide Spacer Removal

Upper and Lower Evaporator Fan Cover Removal (Model 430)

There are two access holes in the front of the evaporator fan cover. The back flanges of the evaporator fan cover have slots that line up with the access holes. Screws inside these access holes pass through slots in the back flanges and through holes in the evaporator cover into screw grommets, securing the fan cover.

To remove the evaporator fan cover, extract the two mounting screws from the access holes and pull the fan cover forward. (See Figure 6-78)

NOTE: When reinstalling the fan cover, first insert one of the two mounting screws through the evaporator cover, into the screw grommet, but do not fully tighten. Then, slide the corresponding slot in the rear flange of the fan cover over the screw and rotate the fan cover up until the other access hole lines up with the other mounting hole. Insert the second screw and tighten both screws.

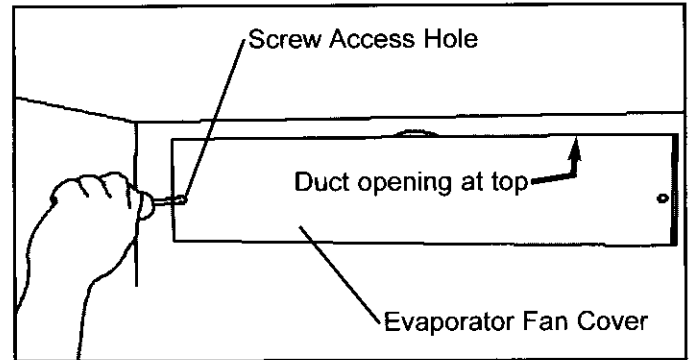


Figure 6-78. Evap Fan Cover Removal

Upper and Lower Evaporator Cover Removal (Model 430)

To remove the upper and lower evaporator covers, you must first remove the wine racks in the compartment. Then, remove the evaporator fan cover mounting screws and the evaporator fan cover. Pull the top of the evaporator cover forward and down and lift off of pegs at bottom. You'll find a ground wire riveted to the back of the evaporator cover, and the other end has a screw securing it to the rear wall. Extract the ground screw and pull the evaporator cover out.. (See Figure 6-79)

NOTE: When reinstalling the evaporator cover, the ground wire must be reattached with the ground screw to the rear wall.

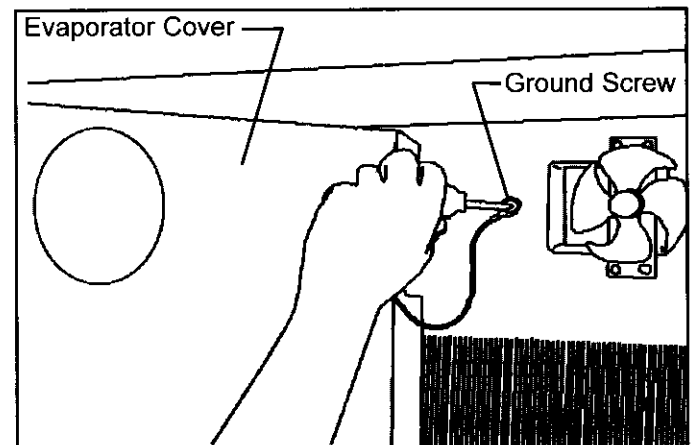


Figure 6-79. Evaporator Cover Removal

Evaporator Support Cover Removal (Model 430)

The evaporator support covers are narrow covers to the left and right of the evaporator covers. These covers are held in place by screws under the lower evaporator cover.

To remove the evaporator support covers, you must first remove the wine racks, all cabinet slides, cabinet slide spacers and cabinet slide support spacers in the compartment. Then, remove the evaporator fan cover mounting screws, the evaporator fan cover and the evaporator cover. Extract the evaporator support cover mounting screws and pull the evaporator support cover out. (See Figure 6-80)

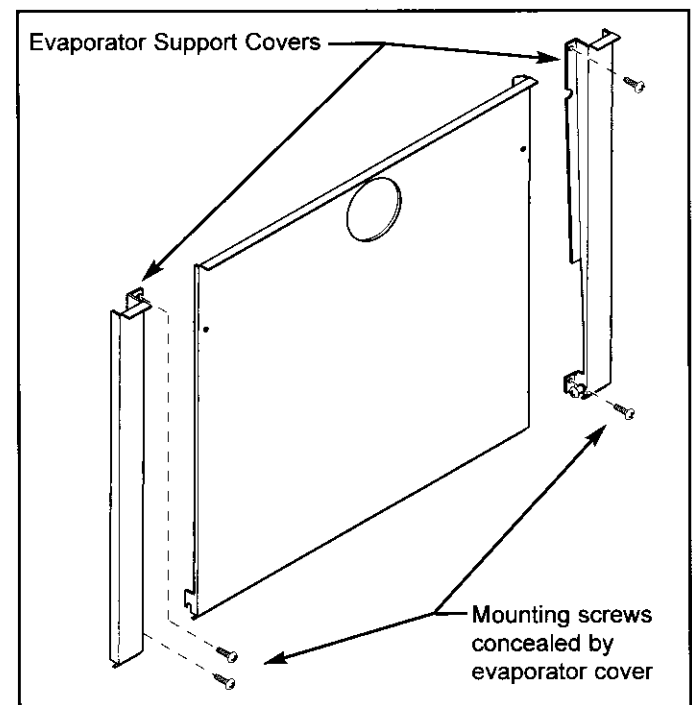


Figure 6-80. Evaporator Support Cover Removal

MODEL 430 INTERIOR MECHANICAL COMPONENT REMOVAL:

An attempt has been made to arrange these instructions 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 removal procedure towards the front of this section.

Control Board Access and Removal (Model 430)

The control board is located at the bottom of the compartment divider, behind the control panel, and is concealed by an access panel. The control board is held in place by four tabs, one at each corner of the board.

NOTE: See *ELECTRIC SHOCK WARNING* and *STATIC ELECTRICITY CAUTION* at beginning of this section.

To get to the control board you will need to extract the two screws at the back of the access panel, then lower the back of the access panel and pull it towards the rear of the unit. (See Figure 6-81)

To remove the control board, disconnect the LED ribbon cable, the membrane switch ribbon cable, and all other electrical lead attached to the control board. Expand the tabs to release the control board, then pull down and out. (See Figure 6-82)

NOTE: When re-connecting electrical leads to the control board, make sure the silver area on the membrane switch ribbon cable terminal is facing away from the control board.

Control Panel Assembly Removal (Model 430)

The control panel assembly is set at the front of the compartment divider and is secured by six screws at the bottom, and a silicone seal under the top flange. Tabs at the bottom and a concealed tab at the top center of the control panel housing help to position the control panel assembly.

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

To remove the control panel assembly, first access the control board and disconnect the lower light strip wire leads, LED ribbon cable and the membrane switch ribbon cable. Then, extract the six screws at the bottom of the control panel. Now, slide the blade of a putty knife under and along the top flange of the control panel housing to break loose the silicone seal. (See Figure 6-83)

NOTE: Do not lift the top flange of the control panel housing too vigorously. Doing so will break the concealed tab at the top center.

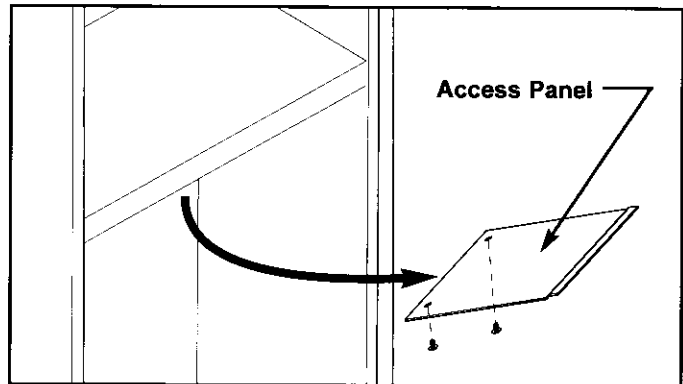


Figure 6-81. Control Board Access Panel

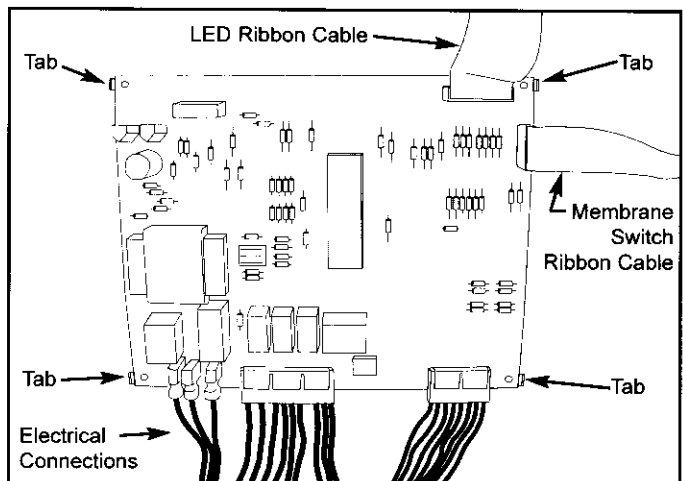


Figure 6-82. Control Board

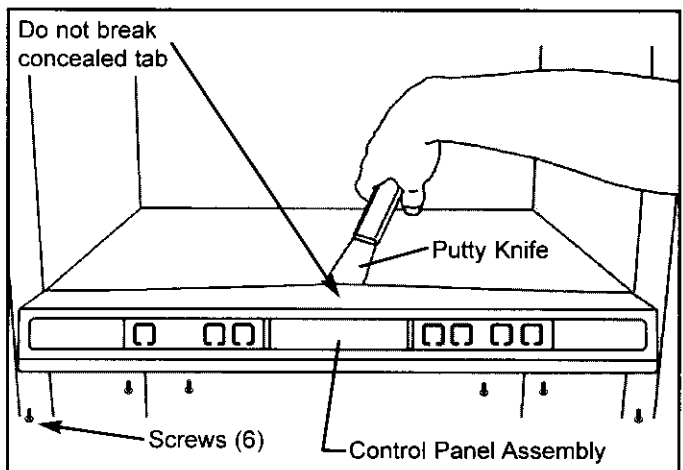


Figure 6-83.
Control Panel Assembly Removal

After breaking the silicone seal loose, pull the control panel assembly forward and disconnect the ground wire.

NOTE: When reinstalling the control panel assembly, you must reapply a bead of silicone along the inside of the top flange.

Lower Light Strip Access and Removal (Model 430)

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

The lower light strip is held in the channel of the light strip housing, which attached to the control panel assembly. To remove the lower light strip, you will first need to remove the control panel assembly. Now, slide the light strip out the end of the channel in the light strip housing. (See Figure 6-84)

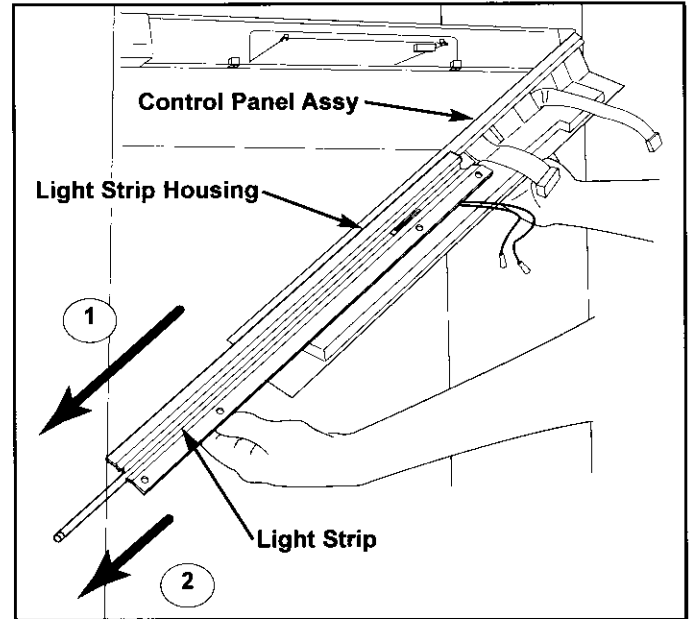


Figure 6-84. Lower Light Strip

Upper and Lower Compartment Thermistor Access and Removal (Model 430)

The compartment thermistors are attached to the left side wall with a Phillips-head screw, and the electrical leads of the thermistors are routed through a notch in the left-hand evaporator support cover and guarded by a small rubber grommet. (See Figure 6-85)

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

To remove a compartment thermistor, first remove the wine racks, all cabinet slides, cabinet slide spacers and cabinet slide support spacers in the compartment. Then, remove the evaporator fan cover mounting screws, the evaporator fan cover and the lower evaporator cover. Extract the evaporator support cover mounting screws and pull the evaporator support cover out while pushing the thermistor leads and grommet out of the slot on the left-hand side. Then disconnect the thermistor electrical leads.

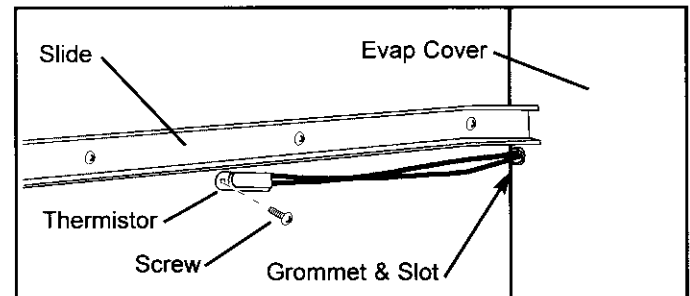


Figure 6-85. Compartment Thermistor

Upper and Lower Evaporator Thermistor Access and Removal (Model 430)

The evaporator thermistors are attached to the right side evaporator brackets with a Phillips-head screw.

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

To access an evaporator thermistor, first remove the wine racks from the compartment. Then, remove the evaporator fan cover mounting screws, the evaporator fan cover and the evaporator cover. Extract the evaporator support cover mounting screws from the right side evaporator support cover and pull the evaporator support cover out. Extract the screw from the thermistor and disconnect the thermistor electrical leads. (See Figure 6-86)

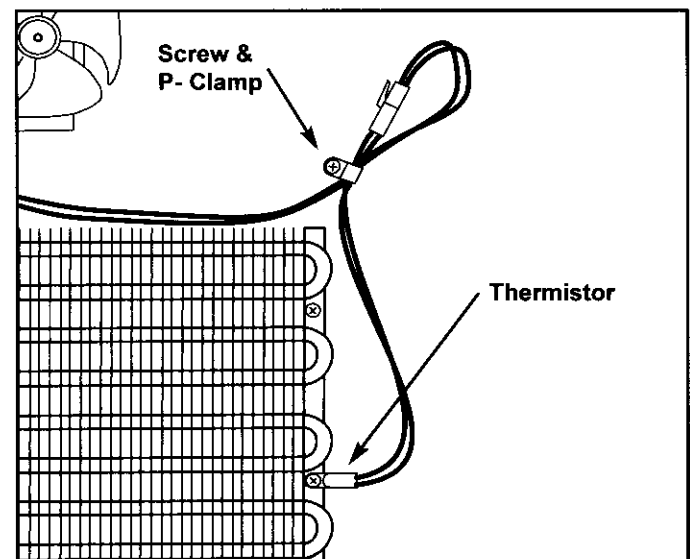


Figure 6-86. Evaporator Thermistor

Evaporator Fan Assembly Access and Removal (Model 430)

The evaporator fan assemblies are attached to the rear wall by four Phillips-head screws.

NOTE: See *ELECTRIC SHOCK WARNING* at beginning of this section.

To remove an evaporator fan assembly, first remove the wine racks in the compartment. Then, remove the evaporator fan cover mounting screws, the evaporator fan cover and the evaporator cover. Pull the fan blade from the fan motor shaft. Extract the screw from the P-clamp holding the fan wires. Then remove the four screws from the fan bracket and disconnect the fan motor electrical leads. (See Figure 6-87)

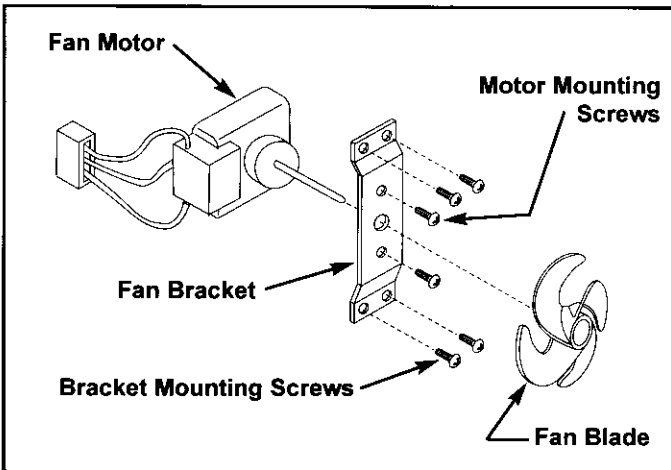


Figure 6-87. Evaporator Fan Assembly

MODEL 430 SEALED SYSTEM COMPONENT ACCESS AND REMOVAL:

An attempt has been made to arrange these instructions 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 removal procedure towards the front of this section.

NOTE: Always replace the filter-drier when servicing the sealed system.

Upper and Lower Evaporator Assembly Access and Removal (Model 430)

The wine storage evaporators are mounted to the rear wall in each wine storage compartment with Phillips-head screws.. (See Figures 6-88)

NOTE: See *SHARP EVAPORATOR FINS CAUTION* at beginning of this section.

Before accessing and removing a wine storage evaporator, evacuate the refrigerant from the sealed system. Then, remove the wine racks. Then, remove the evaporator fan cover mounting screws and the evaporator fan cover. Pull the top of the evaporator cover forward and lift off of the pegs at the bottom. Locate the ground wire riveted to the back of the evaporator cover with a screw securing it to the rear wall. Extract the ground screw, and remove the evaporator cover. Extract the evaporator mounting screws. Now, cut the evaporator inlet and outlet tubing and pull the evaporator out.

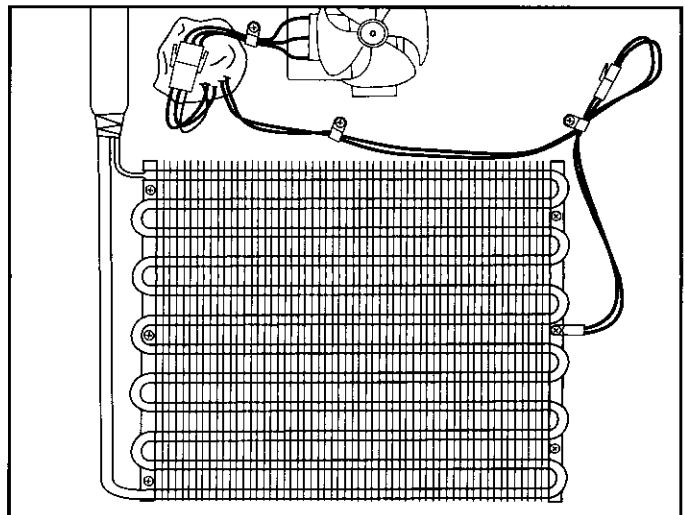


Figure 6-88. Evaporator

Refrigerant Valve Access and Removal (Model 430)

The refrigerant valves are located to the right of the compressor, and are held to the valve bracket with P-clamps and screws. The top valve is for the upper wine storage compartment and the bottom valve is for the lower wine storage compartment. (See Figure 6-89)

NOTE: See *HOT COMPRESSOR & TUBING CAUTION* at beginning of this section.

After evacuating the refrigerant from the sealed system, cut the capillary tube approximately 1" from the refrigerant valve, and cut the valve inlet tube approximately 3" from the refrigerant valve. Then, lift the valve out.

Filter-Drier Access and Removal (Model 430)

The filter-drier, which has two outlet tubes, is located to the left of the condenser. One outlet tube runs to the top refrigerant valve, and the other tube runs to the bottom refrigerant valve. (See Figure 6-89)

NOTE: See *HOT COMPRESSOR & TUBING CAUTION* at beginning of this section.

After evacuating the refrigerant from the sealed system, cut both outlet tubes approximately 1" from the filter-drier, and cut the drier inlet tube approximately 1" from the filter-drier.

NOTE: Always replace the filter-drier when servicing the sealed system.

Compressor Access and Removal (Model 430)

The compressor sets on top of four threaded studs and is secured with nuts over the studs. (See Figure 6-90)

NOTE: See *HOT COMPRESSOR & TUBING CAUTION* at beginning of this section.

After evacuating the refrigerant from the sealed system, Disconnect the compressor electricals. Extract the four nuts from the threaded studs. Lift the compressor until it clears the threaded studs. Lift the compressor until it clears the threaded studs. Lift the compressor until it clears the threaded studs. Pull it forward to gain better access to the suction and discharge tubes. Cut the suction tube and discharge tube approximately 1" from the compressor, and pull the compressor out.

Condenser Access and Removal (Model 430)

The condenser is attached to the top of the unit with screws at the front and the back. There are also screws at the front and back that secure the condenser fan shroud to the condenser. (See Figure 6-90)

NOTE: To access and remove the condenser, the unit will need to be pulled from its installation. See *TIPPING WARNING, HOT COMPRESSOR & TUBING*

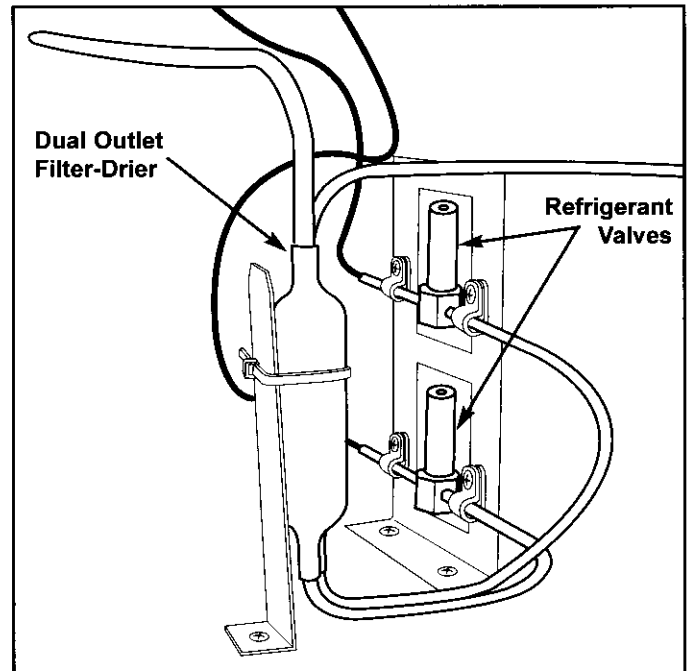


Figure 6-89. Capillary Tubes, Refrigerant Valves, Dual Outlet Filter-Drier

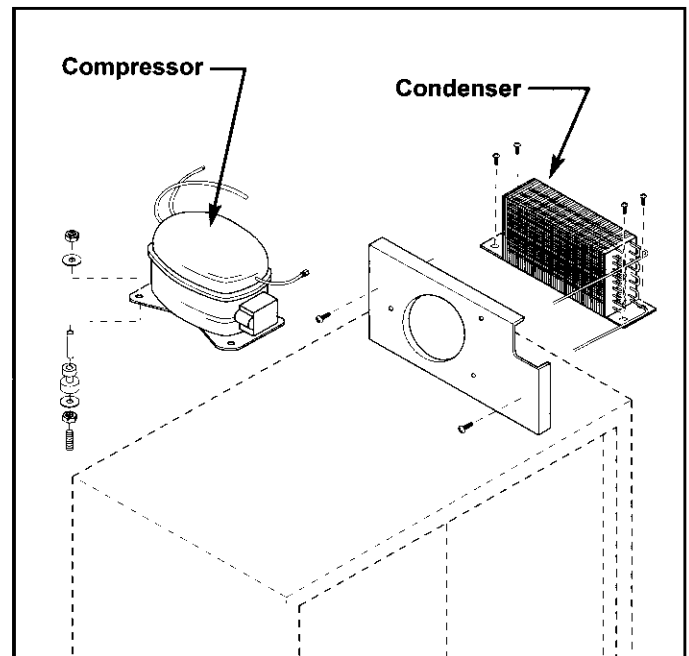


Figure 6-90. Compressor and Condenser

CAUTION and *SHARP FINS CAUTION* at beginning of this section.

Pull the unit from its installation and remove the unit shroud. Then, after evacuating the refrigerant from the sealed system, cut the inlet and outlet tubes approximately 2" from the condenser. Extract the condenser fan shroud mounting screws and the condenser mounting screws. Now, lift the condenser up and off the unit top.