

## Model BI-36R Exterior Cosmetic / Mechanical Components

### Kickplate

To remove a kickplate, extract the screws from the left and right corners of the kickplate, then pull the kickplate forward. (See Figure 7-125).

### Dual Installation Kickplate

A dual installation kickplate assembly is held in place with magnets at each end and one screw at top center. To remove the dual installation kickplate, the screw at top center must be extracted before pulling the dual installation kickplate forward (See Figure 7-125A).

### Drain Pan

The drain pan slides in from the front of unit on two side brackets. A locating feature was built into the drain pan in the form of detentes at the bottom front that drop into notches at the front of the side brackets.

To remove the drain pan (See Figure 7-126):

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

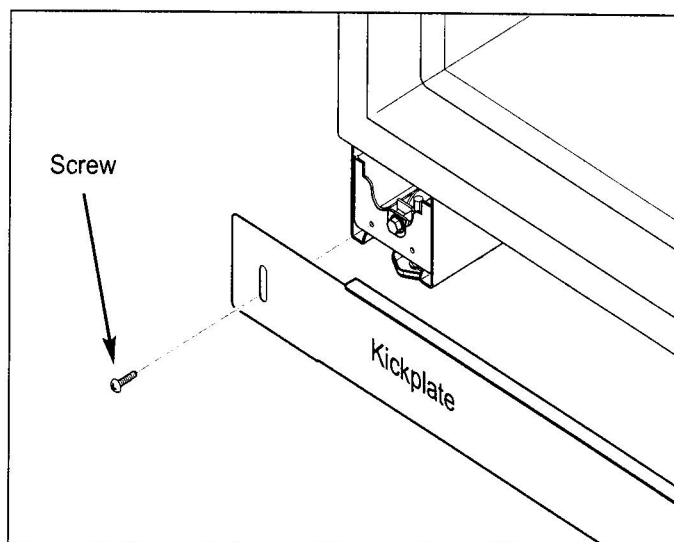


Figure 7-125. Kickplate Removal

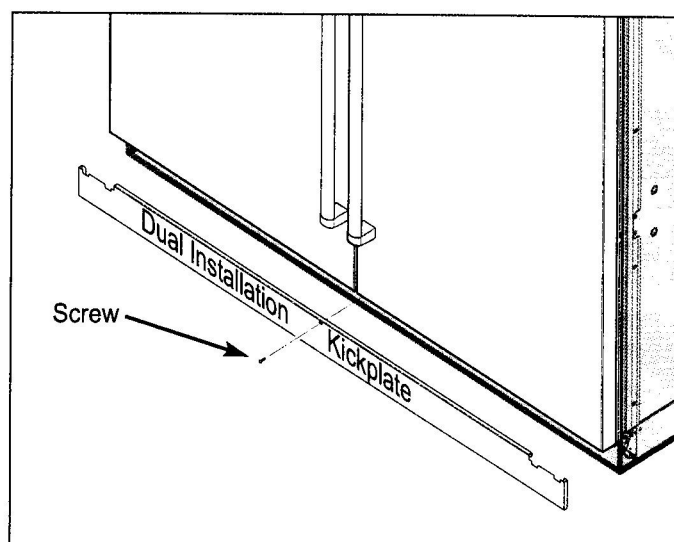


Figure 7-125A. Dual Installation Kickplate

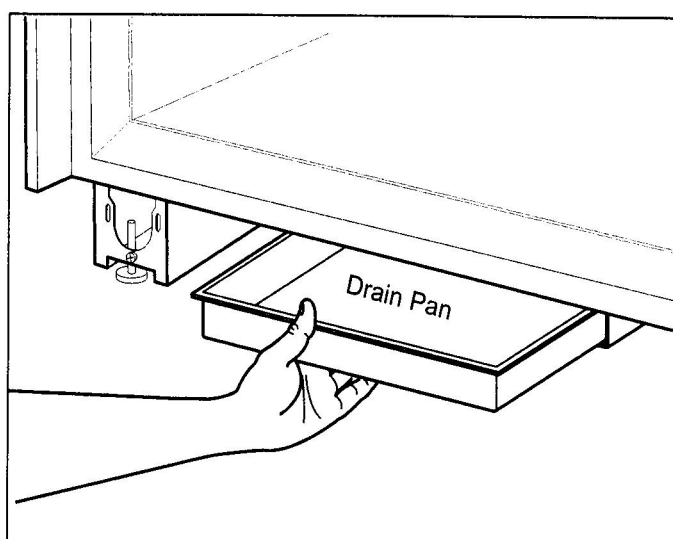


Figure 7-126. Drain Pan Removal

## Door Switch

The door switch is located at the top rear of the top cabinet frame, with the switch's actuator protruding through a hole in the front of the frame. A series of tabs and pegs hold the door switch in place.

To remove a door switch, first open the grill, then (See Figure 7-127):

1. Disconnect the switch electrical leads using a needle-nose pliers to pull the electrical lead housings away from the switch.
2. Use a small flat-blade screwdriver to pry the front retaining tab at each side of the switch back while lifting that side of the switch up. Repeat this step on each side of the switch.
3. Pull switch back and lift off of the top cabinet frame

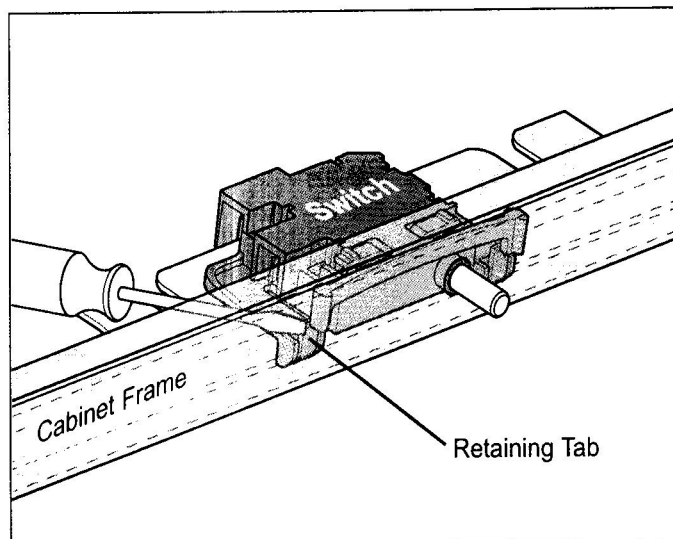


Figure 7-127. Door Switch Removal

## Top Cabinet Trim

The top cabinet trim sits below the grille assembly. Screws pass through open ended slots in the trim to secure it to the top cabinet frame.

To remove the top cabinet trim first open the grill then, (See Figure 7-128):

1. Use a T-15, 6-lobe Torx type bit, to loosen, but not remove, the trim mounting screws.
2. Pull the trim forward, off of the unit.

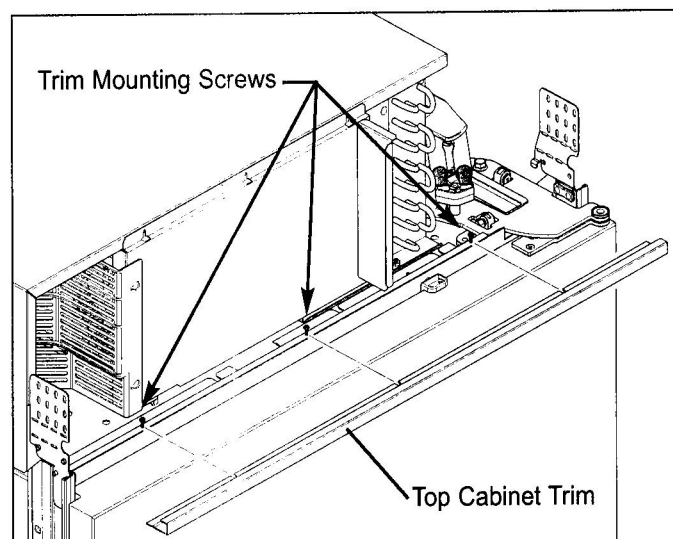


Figure 7-128. Top Cabinet Trim Removal

## Grille Assembly

The grille assembly is attached at the top of the unit with screws passing through the grille's side frames into grille brackets.

To remove a grille assembly (See Figure 7-129):

1. Lift open the front of the grille assembly to access the mounting screws.
2. With a T-20, 6-lobe Torx type bit, extract the two front grille mounting screws, then loosen but do not remove the two rear mounting screws.
3. pull the grille assembly forward, off of the unit.

**NOTE:** When reinstalling the grille assembly, line up the notches at back of grille side frames with the rear mounting screws, then push the grille assembly back.

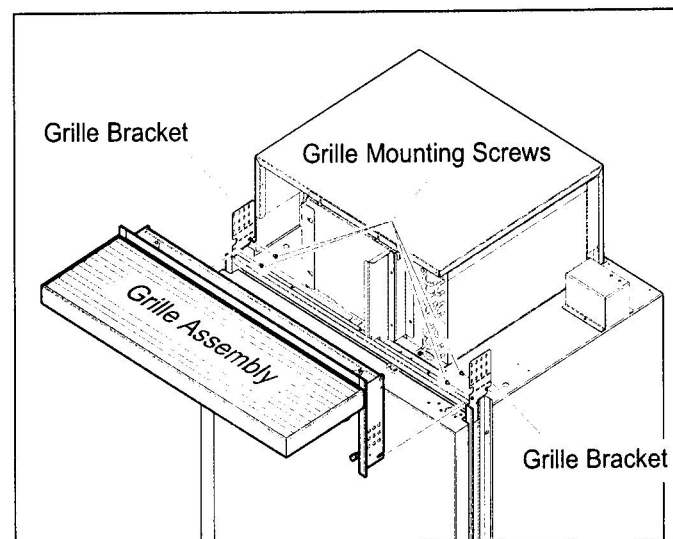


Figure 7-129. Grille Assembly Removal

## Framed / Overlay Refrigerator Door Handle / Handle-Side Trim

The door handle on framed units and the handle-side trim on overlay units is attached to the door with screws. These screws are covered by a screw cover.

To remove a handle or handle-side trim, open the door then:

1. At the top of the door, insert a flat blade screwdriver into the channel of the screw cover and push the cover back, disengaging it from the handle or trim (See Figure 7-9).
2. With a T-20, 6-lobe Torx type bit, extract the handle-side trim mounting screws and pull the trim from the door (See Figure 7-10).

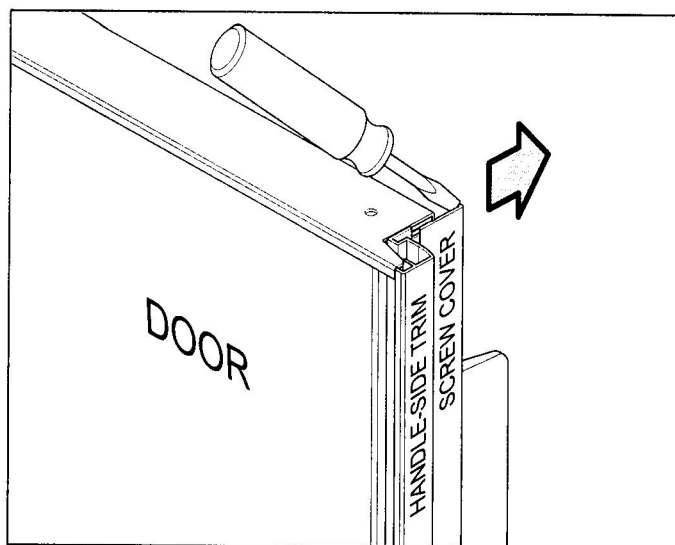


Figure 7-130. Screw Cover Removal

## Stainless Steel Door Handle Assembly

A screw inserted through the stainless steel handle standoffs into the handle secures the handle to the standoffs. The standoffs are then slides over threaded studs that are attached to the door shell. A socket head set-screw inserted through the side of the standoff secures the standoff to the stud.

To remove a stainless steel handle assembly (See Figure 7-132):

1. Use a 3/32" Allen-wrench to loosen the set-screw in each handle standoff.
2. Pull handle assembly off of the threaded studs.

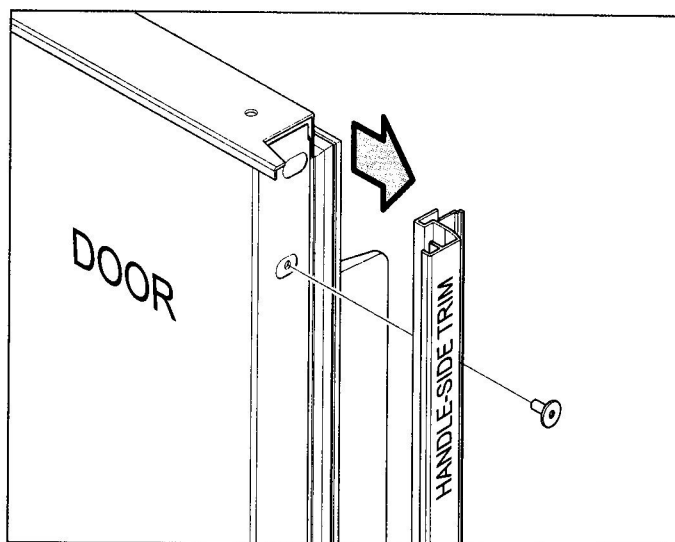


Figure 7-131. Handle / Handle-Side Trim Removal

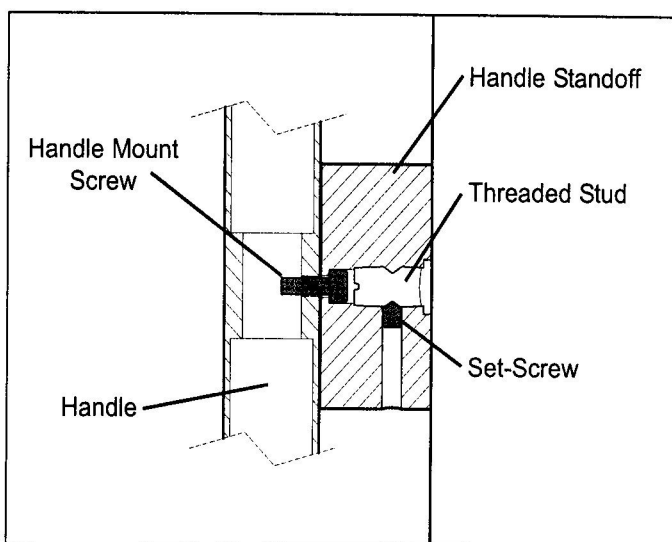


Figure 7-132. Cut-away View - SS Handle Assembly

## Top Door Hinge Assembly

The top hinge assembly is secured to the unit with bolts that pass down through the cabinet hinge plate into threaded inserts. Screws passing down through the door hinge secure the hinge assembly to the door.

**NOTE:** A special tool package is available to assist in removing a top hinge assembly. This tool package is provided with replacement hinge and door assemblies. If needed, order part #7011097. The directions below were written to be used with this tool package.

To remove a top hinge assembly, the grille assembly and top cabinet trim must first be removed. If the unit has a glass door, pull the heater flex cable out of the cable retainer at the side of the hinge assembly at this time, then:

1. With the door open, use a 5/32" Allen wrench or bit to extract the top door hinge mounting screw nearest to the hinge pivot point (See Figure 7-133).
2. Use a 1/8" Allen wrench or bit to replace the screw just removed with the 1/4-20X1/2" setscrew, included in the tool package, inserting the setscrew down until its top is flush with the top surface of the door hinge (See Figure 7-133).

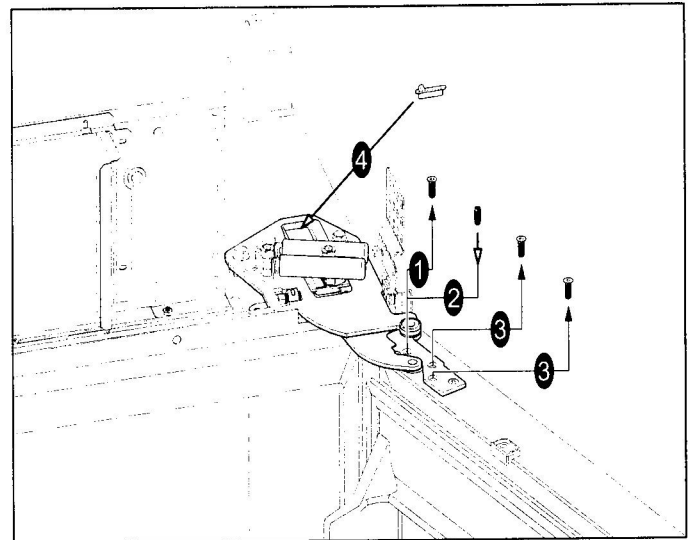
**NOTE:** If the setscrew is not inserted far enough it will damage the hinge plate when closing the door; if it is inserted too far it will not hold the door hinge in the correct position when closing the door.

3. Extract the inner door hinge mounting screws, leaving the outermost screw in place (See Figure 7-133).
4. Insert the hinge spacer, included in the special tool package, between the door closer guide and the back of the door closer track, then close the door (See Figure 7-133).

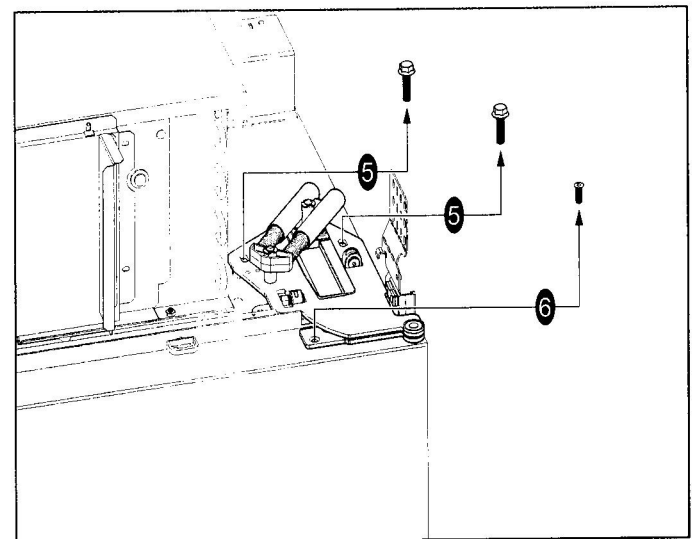
**NOTE:** This spacer will keep the door closer mechanism at the proper spacing to facilitate hinge assembly removal and reinstallation.

5. With the door closed, use a socket wrench with an extension and a 1/2" socket to extract the cabinet hinge mounting bolts (See Figure 7-134).
6. Extract the outermost door hinge mounting screw (See Figure 7-134).
7. Lift the hinge assembly up off of the top of the unit, allowing the door to shift toward the handle side and come to rest against the main frame (See Figure 7-135).

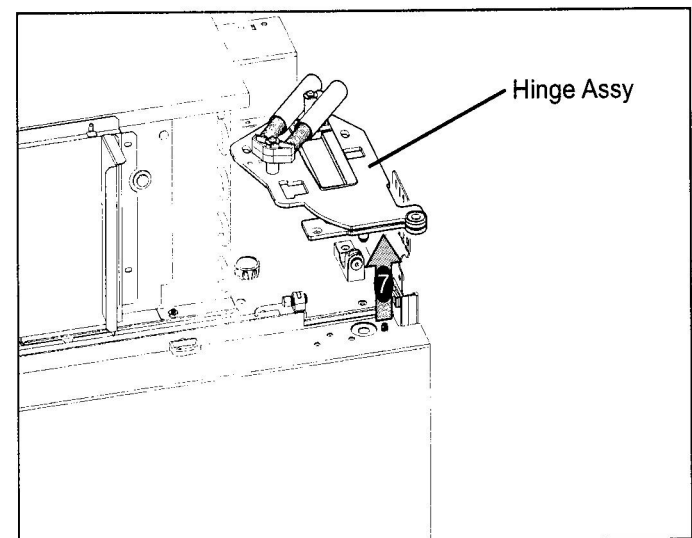
**NOTE:** It may be necessary to use a flat blade screwdriver to pry the post at the end of the door closer arm up out of the hole in the top of the door assembly.



**Figure 7-133. Top Door Hinge Screw Removal, Setscrew Installation and Spacer Installation**



**Figure 7-134. Cabinet Hinge Bolt Removal and Door Hinge Screw Removal**



**Figure 7-135. Top Door Hinge Assy Removal**



Door Assembly

The door assembly is secured to the top and bottom door hinges with screws. The post of the bottom door hinge fits down into a bearing in the bottom cabinet hinge assembly's door adjuster.

To remove a door assembly, the top hinge assembly must be removed first. Then, with one hand at each side of the door, open the door forty-five to ninety degrees and lift it off of the bottom cabinet hinge assembly. (See Figure 7-136)

Bottom Cabinet Hinge Assembly

The bottom cabinet hinge assembly is attached to the bottom of the unit with bolts.

To remove the bottom cabinet hinge assembly, first remove the top hinge assembly and the door. Then, using a 1/2" wrench or socket, extract the cabinet hinge mounting bolts and pull the hinge assembly from the unit. (See Figure 7-137)

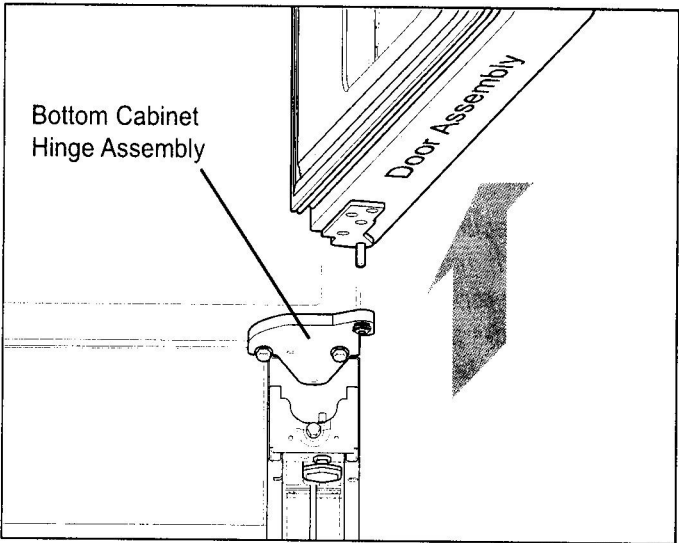


Figure 7-136. Door Assembly Removal

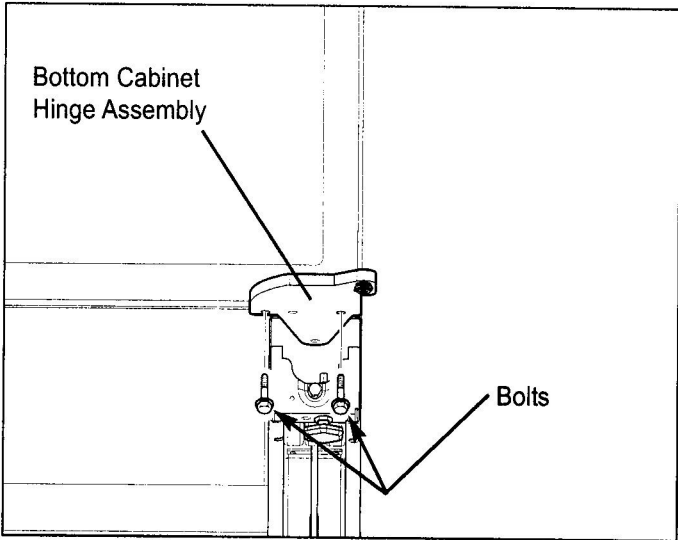


Figure 7-137. Cabinet Hinge Assembly Removal



## Model BI-36R Interior Cosmetic / Mechanical Components

### Door Gasket

A dart at the back of the door gasket fits into metal channels attached to the inside perimeter of the door.

To remove a door gasket, starting at one corner, pull the gasket dart from the metal channels. (See Figure 7-138).

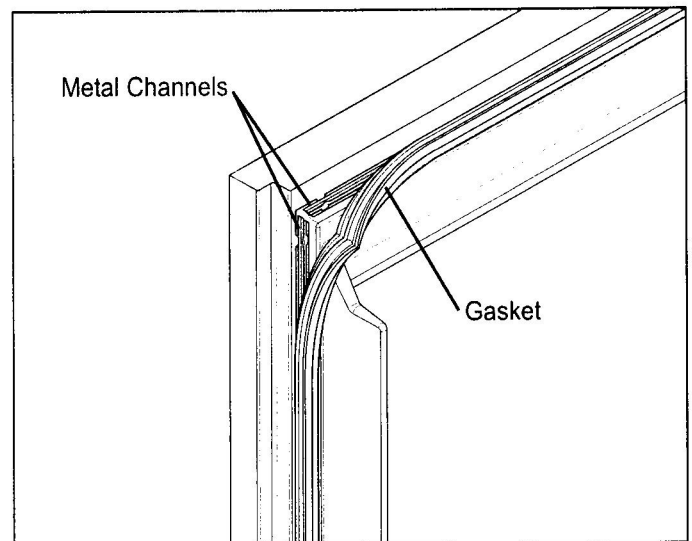


Figure 7-138. Door Gasket Removal

### Adjustable Door Shelves and Dairy Compartment

Removal and adjustment of the upper door shelves and dairy compartment assembly is achieved by sliding the grooves in the shelving endcaps over the molded retaining ribs of the door liner.

Lift out and up to remove, push in and down to install. (See Figure 7-139).

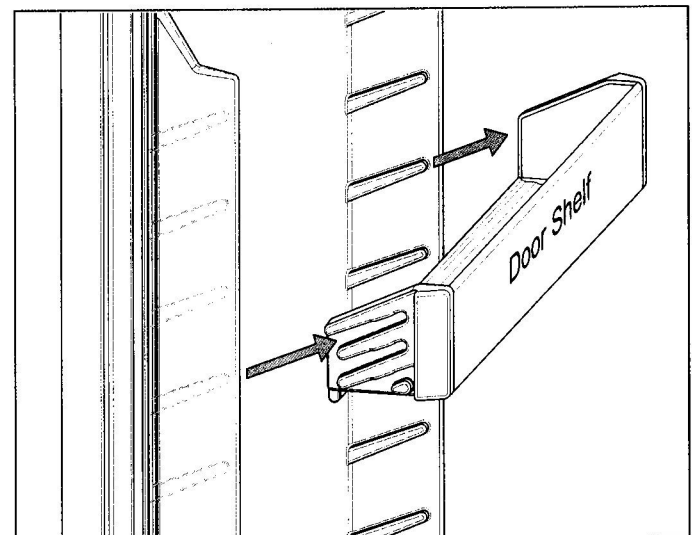


Figure 7-139. Adjustable Door Shelf

### Non-adjustable Door Shelf

The lower non-adjustable door shelf has hooks at the back sides of its endcaps that fit into notches in the door liner.

To remove the non-Adjustable door shelf lift it up slightly then pull it from the notches in the door liner; to install it push in and down (See Figure 7-140)

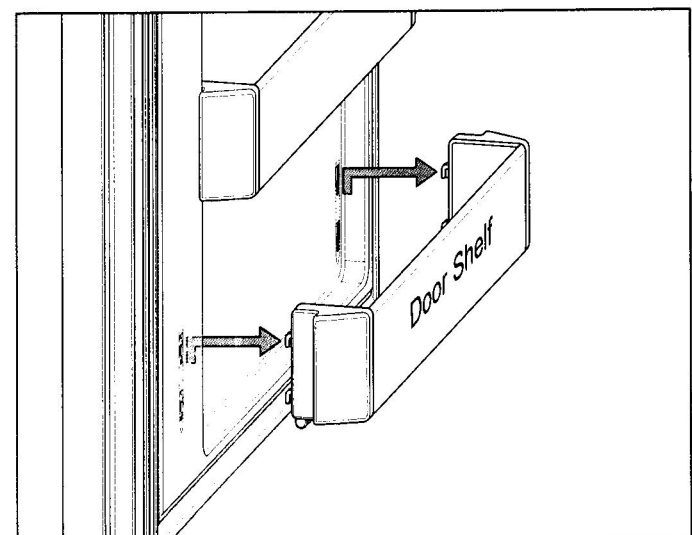


Figure 7-140. Non-Adjustable Door Shelf

Cantilever Shelf Assembly

To adjust and/or remove a refrigerator cantilever shelf assembly (See Figure 7-141):

- 1. Lift front of shelf up slightly.
- 2. Lift back of shelf up to disengage the shelf ladder hooks from the shelf ladders.
- 3. Pull shelf forward and out of the shelf ladders.

Crisper Glass Shelf

The crisper glass shelf rests upon shelf standoffs that are mounted to the refrigerator side walls.

To remove the crisper glass shelf (See Figure 7-142):

- 1. Lift shelf straight up off of the standoffs.
- 2. Pull shelf forward, out of compartment.

Deli Drawer and/or Crisper Drawer Assembly

To remove a deli drawer assembly or crisper drawer assembly, open the drawer until it stops, then lift the front of the drawer up slightly off of the drawer slide while continuing to pull the assembly out of the compartment. (See Figure 7-143).

**NOTE:** If the door is limited to a 90-degree opening, removing the non-adjustable door shelves will assist in this task.

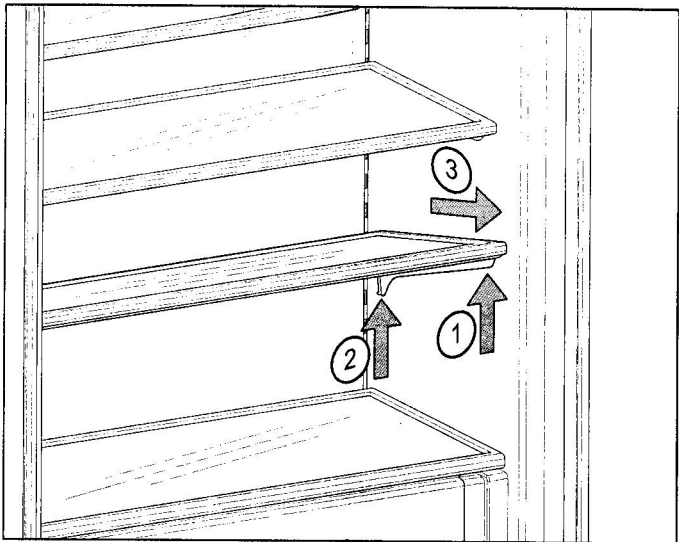


Figure 7-141. Cantilever Shelf Removal

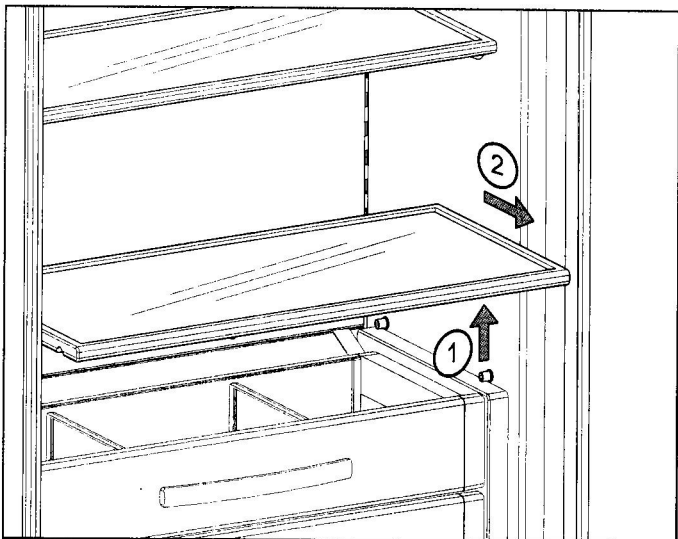


Figure 7-142. Crisper Shelf Removal

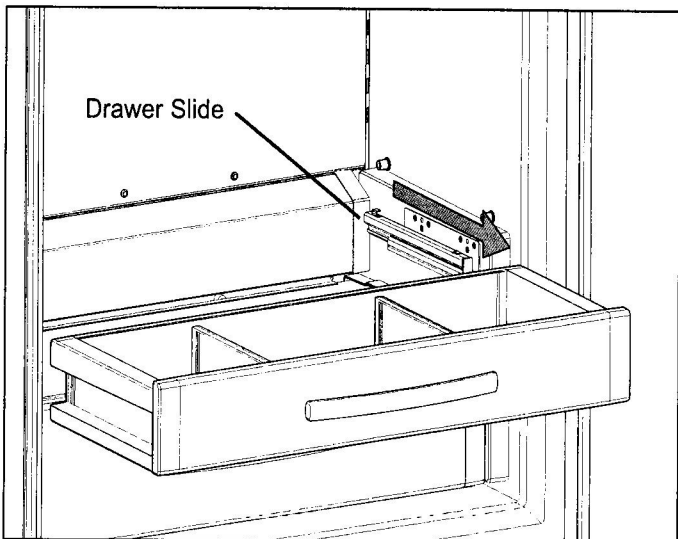


Figure 7-143. Refrigerator Drawer Removal



## Glass Crisper Cover Assembly

The glass crisper cover assembly is located between the deli drawer and the top crisper drawer and is held in place by crisper cover supports attached to each side wall.

To remove the glass crisper cover assembly, first remove the deli drawer and the top crisper drawer, then (See Figure 7-144):

1. Grasp the assembly at the front edge toward each side.
2. Lift the front of the assembly upward and pull it forward to release it from the support retaining clips.

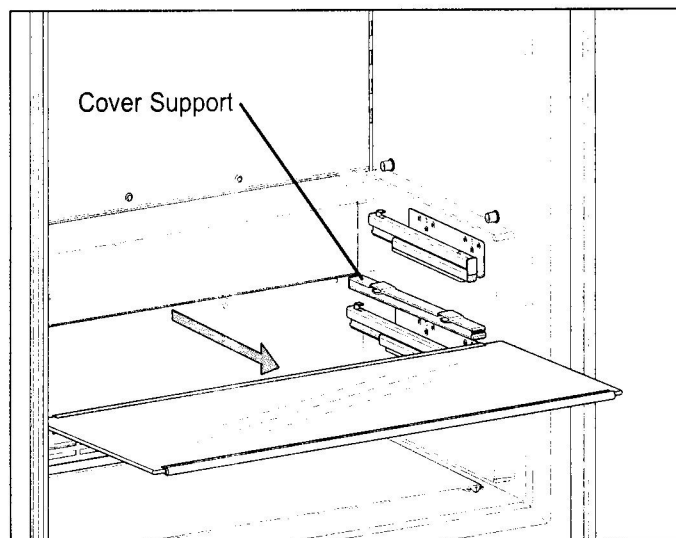


Figure 7-144. Crisper Cover Removal

## Crisper Cover Support

The crisper cover supports are secured with screws to the compartment side wall and the crisper spacer assembly.

To remove a crisper cover support, the glass crisper cover must be removed first, then extract the support mounting screws and pull the support from the side wall or crisper spacer. (See Figure 7-145)

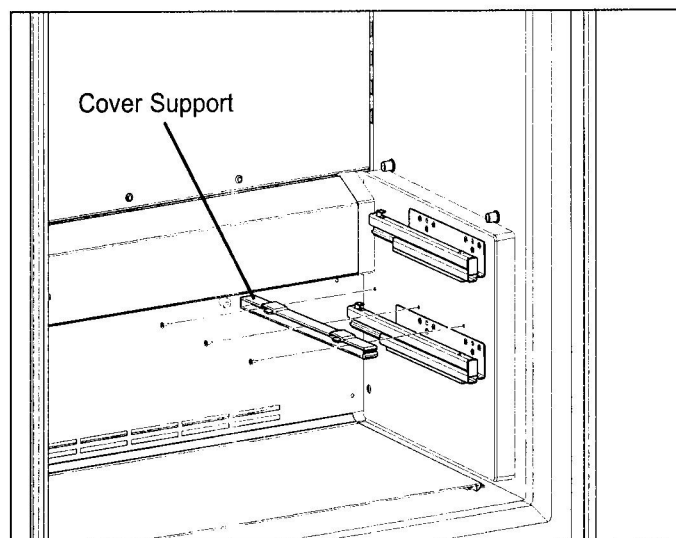


Figure 7-145. Crisper Cover Support Removal

## Refrigerator Drawer Slide

The drawer slides are secured with screws to the compartment side walls and the crisper spacer assembly.

To remove a drawer slide, first remove the drawer assembly, then extract the slide's mounting screws and pull the slide from the side wall or crisper spacer. (See Figure 7-146)

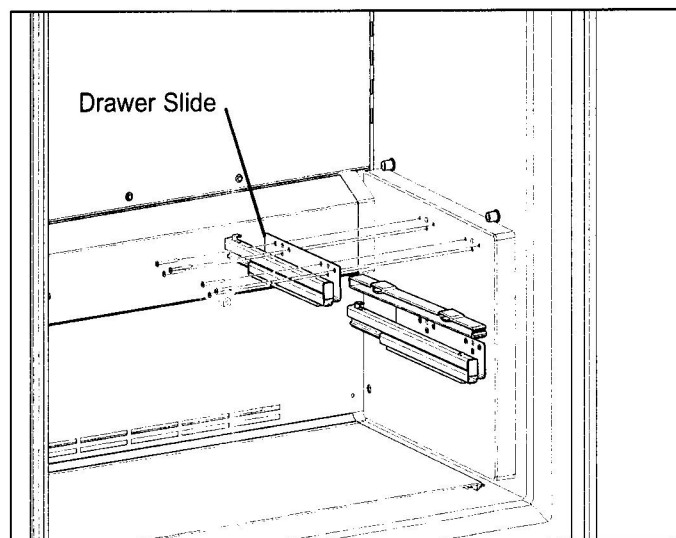


Figure 7-146. Drawer Slide Removal

Crisper Light Cover Assembly

The crisper light cover assembly is secured to the lower refrigerator duct by its upper flange and end caps engaging two crisper light cover supports that are part of the lower duct assembly.

To remove the lower light cover, first remove the crisper glass shelf and deli drawer assembly, then lift the light cover up at each end, disengaging it from the supports. (See Figure 7-147)

Lower Light Bulb

The lower light assembly is located behind the crisper light cover.

To remove the lower light bulb, first remove the crisper glass shelf, deli drawer assembly and light cover, then turn the bulb counterclockwise to remove it from the light socket. (See Figure 7-148)

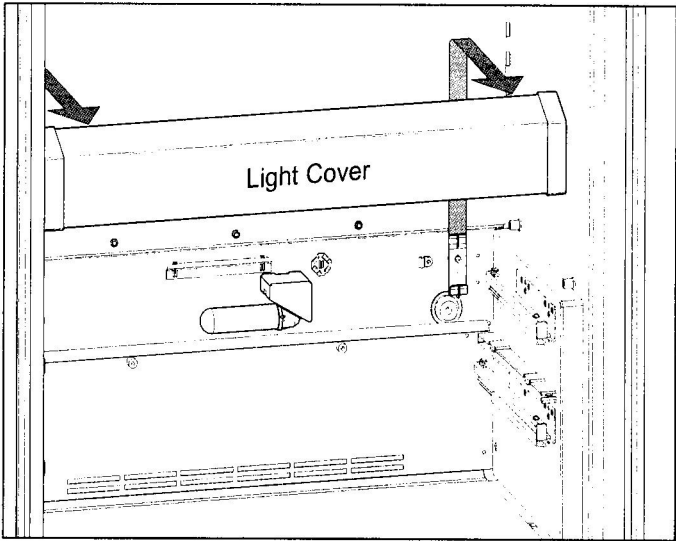


Figure 7-147. Crisper Light Cover Removal

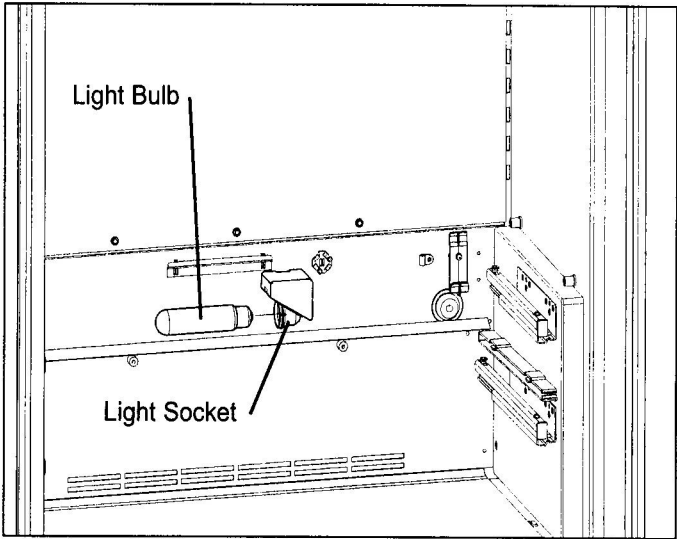


Figure 7-148. Lower Light Bulb Removal

## Crisper Spacer Assembly

The crisper spacer assembly, which also holds the Consumer Use and Care Cards, is attached to the hinge side wall with screws.

To remove the crisper spacer assembly, first remove the crisper glass shelf, the drawer assemblies, the glass crisper cover, hinge-side drawer slides and the crisper light cover. Then, extract the crisper spacer mounting screws and pull the spacer assembly from the wall (See Figure 7-150)

## Air Purifier Cartridge

The air purification system is located behind a door on the upper refrigerator duct assembly.

To remove the air purifier cartridge (See Figure 7-151):

1. Pull bottom edge of door forward and up until it locks in the up position.
2. Grab top of inside flap and pull it forward and down (this will cause the cartridge to pop out of the socket).
3. Lift cartridge up from socket.

## Upper Light Diffuser Assembly

The upper light diffuser assembly, located at the top of the refrigerated compartment, is held in place by inverted T-shaped slots at its sides fitting over pegs on the light diffuser brackets.

To remove the light diffuser (See Figure 7-152):

1. Push diffuser toward rear of unit until center of inverted T-shaped slots line up with diffuser bracket pegs.
2. Lower diffuser down and pull it from the compartment.

**NOTE:** When reinstalling the light diffuser, be sure to pull it forward fully so that the tabs inside the inverted T-shaped slots engage the pegs in the diffuser brackets. Failure to do so will allow the diffuser to fall out easily.

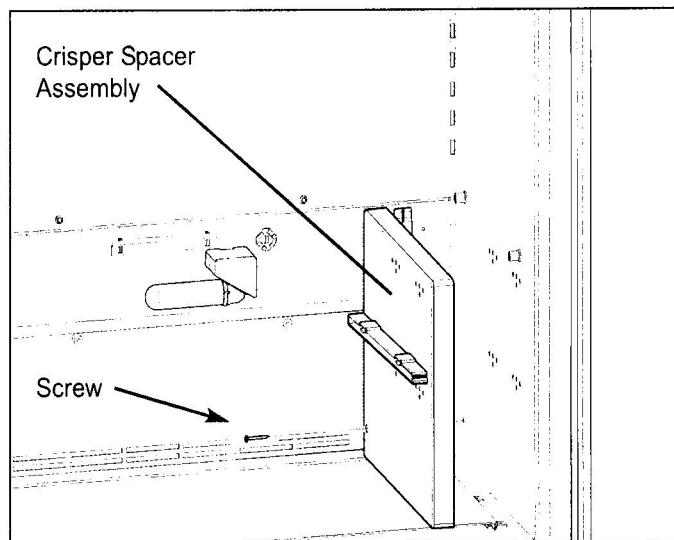


Figure 7-150. Crisper Spacer Assembly Removal

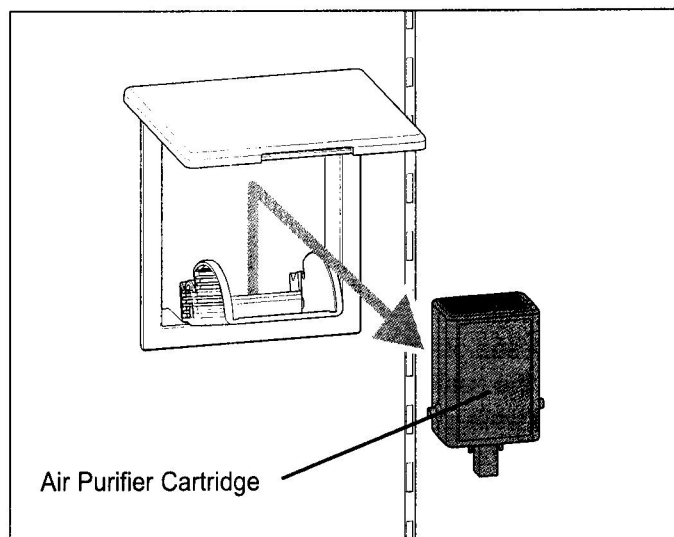


Figure 7-151. Air Purifier Cartridge Removal

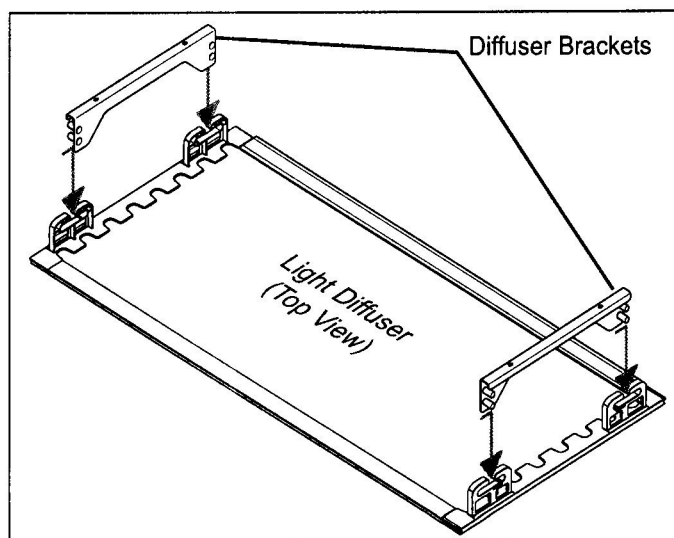


Figure 7-152. Upper Light Diffuser Removal

## Upper Light Bulb and Light Bracket Assembly

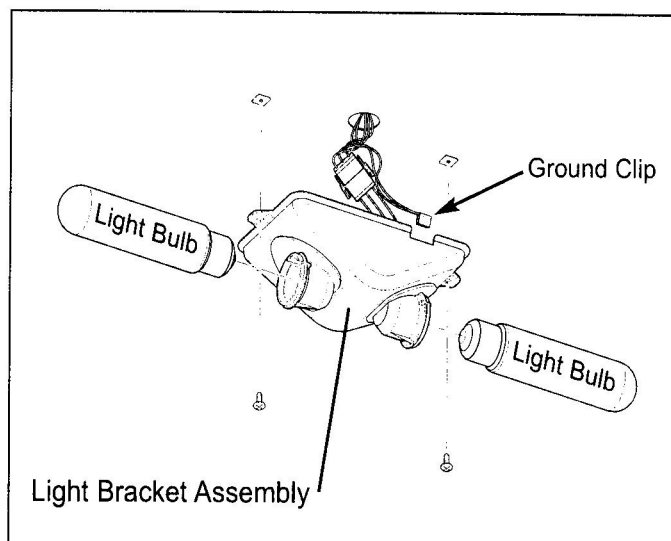
The lighting assemblies are located behind the light diffuser at the top of the compartment.

To remove light bulbs, first remove the light diffuser, then turn the bulb counterclockwise to remove it. (See Figure 7-153)

Light bracket assemblies are secured with screws to the compartment ceiling.

To remove a light bracket assembly, first remove the light diffuser and light bulbs, then (See Figure 7-153):

1. Extract bracket mounting screws.
2. Lower assembly down and disconnect the lighting wire harness.
3. pull ground clip from side of bracket.



**Figure 7-153. Upper Light Assembly**

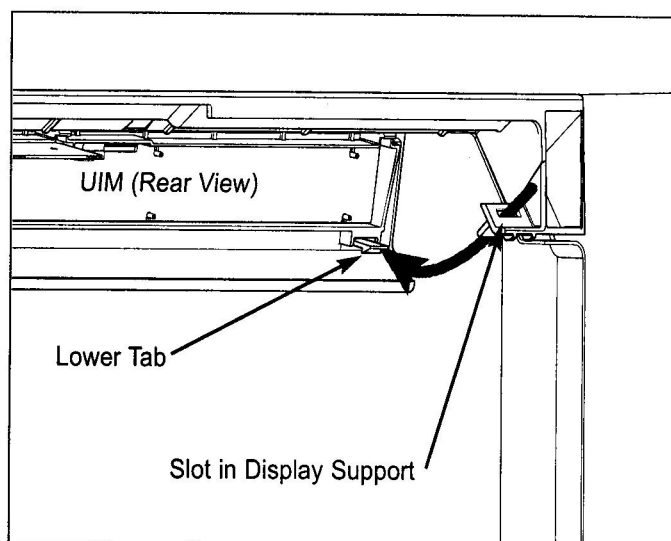
## Control Panel Assembly

(a.k.a. UIM - User Interface Module)

The control panel assembly (UIM) is located at the top front of the refrigerator compartment and is secured with tabs at each end fitting into slots in the display support.

To remove the control panel assembly, first remove the upper light diffuser, then (See Figure 7-154):

1. At each end of control panel assembly, reach behind the control panel and push the lower tabs upward while pulling the bottom edge away from the display support.
2. Once the lower tabs are disengaged, lower the assembly down and disconnect the electrical lead from the control panel assembly PC board.



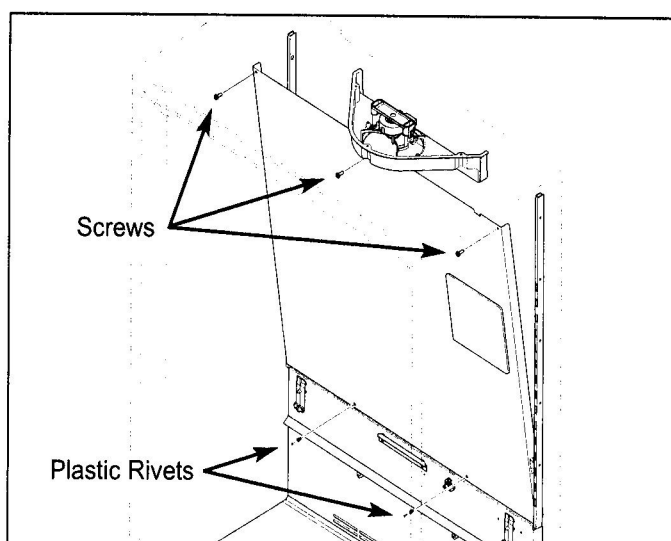
**Figure 7-154. Control Panel Assembly Removal  
(viewed from behind)**

## Upper Duct Assembly

The refrigerator upper duct assembly has notches at the bottom of each side flange that fit over locating pins on the shelf ladders; screws at the top of the duct secure it to the back wall of the compartment; at the bottom, plastic rivets hold it tight to the top flange of the lower duct assembly.

To remove the upper duct assembly, first remove all cantilever shelves, the crisper glass shelf and the upper light diffuser, then (See Figure 7-155):

1. At the bottom of duct, extract plastic rivet center posts using a fingernail, putty knife, or similar device, then pull rivets out.
2. Extract screws from top of upper duct.
3. Pull top of duct forward, about 45 degrees from vertical, then lift the duct up off of shelf ladder pins.



**Figure 7-155. Upper Duct Assembly Removal**



## Shelf Ladder

Shelf ladders are held to the side walls with screws.

To remove a shelf ladder, first remove all cantilever shelves, the crisper glass shelf, upper light diffuser and upper duct assembly, then (See Figure 7-156):

1. Extract shelf ladder mounting screws.
2. Pull shelf ladder from side wall.

## Evaporator Fan Shroud Assembly

The evaporator fan shroud is secured with screws to the compartment ceiling.

To remove the evaporator fan shroud assembly, first remove all cantilever shelves, the crisper glass shelf, upper light diffuser and upper duct assembly, then (See Figure 7-157):

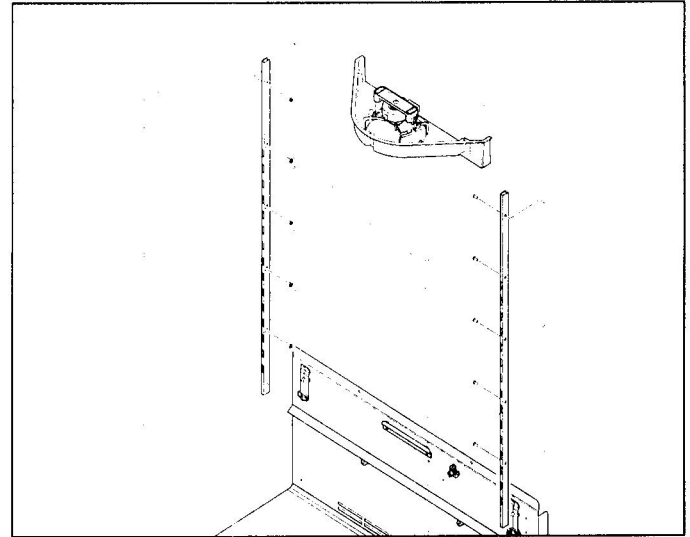
1. Disconnect evaporator fan electrical leads.
2. Extract screws securing fan shroud to compartment ceiling and pull assembly from the compartment.

## Evaporator Fan Motor

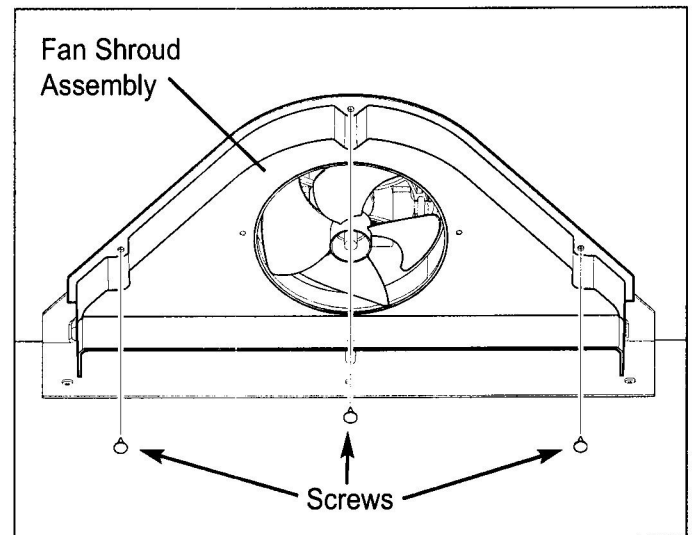
The evaporator fan motor sits on top of the evaporator fan shroud bracing with its shaft passing through a hole in the brace; the motor is then held in place by a fan bracket snapping together with the bracing over the back side of the motor.

To remove the evaporator fan motor, first remove all cantilever shelves, the crisper glass shelf, upper light diffuser, upper duct assembly and evaporator fan assembly, then (See Figure 7-158):

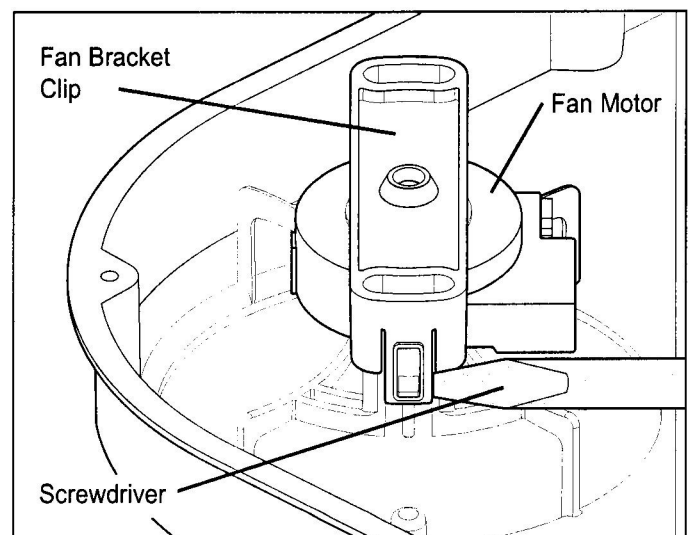
1. Pull fan blade from fan motor shaft.
2. Using a flat-bladed screwdriver, pry fan bracket clips off of the tabs at each side of shroud bracing.
3. Lift fan motor off of fan shroud.



**Figure 7-156. Shelf Ladder Removal**



**Figure 7-157. Evaporator Fan Shroud Assembly**



**Figure 7-158. Fan Motor Removal**

**Air Purifier Pocket Assembly**

The air purifier pocket assembly, consisting of the air purifier cartridge holder, a fan assembly and a transformer, is located behind the top evaporator cover, and is secured to the compartment back wall with screws.

To remove the air purifier pocket assembly, first remove all cantilever shelves, the crisper glass shelf, upper light diffuser and upper duct assembly, then (See Figure 7-159):

- 1. Disconnect fan motor wire leads and transformer wire leads from wire harness.
- 2. Extract air purifier pocket assembly mounting screws and remove assembly from unit.

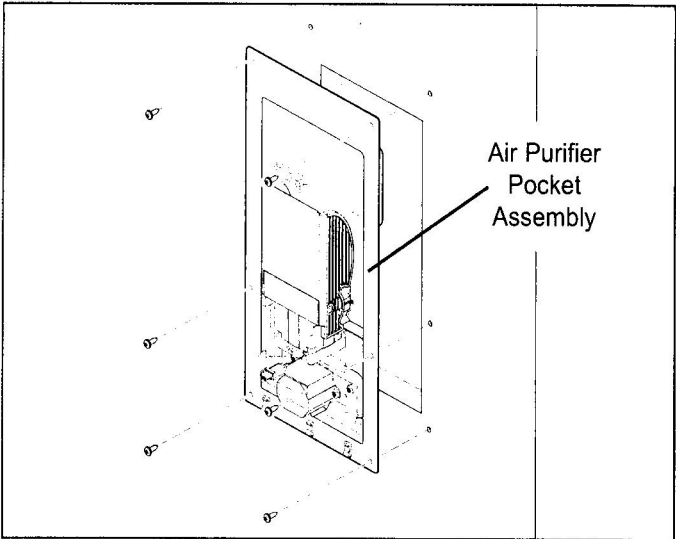


Figure 7-159. Air Purifier Pocket Removal

**Refrigerator Compartment Thermistor**

The refrigerator compartment thermistor is inserted into a thermistor clamp behind the upper duct assembly.

To remove the compartment thermistor, first remove all cantilever shelves, the crisper glass shelf, upper light diffuser and upper duct assembly, then (See Figure 7-160):

- 1. Pull thermistor from clamp.
- 2. Cut thermistor’s wire leads six (6) to twelve (12) inches from the back wall, then pull thermistor from compartment.

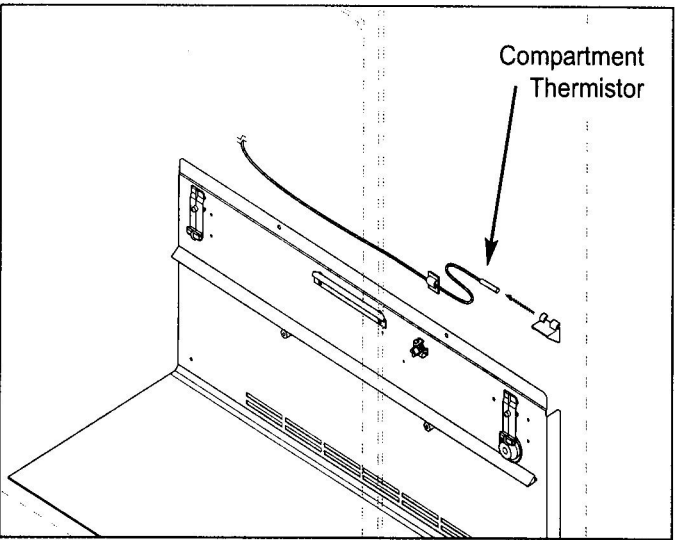


Figure 7-160. Compartment Thermistor Removal

**Lower Duct Assembly**

The lower duct assembly is held in place with screws passing through it into standoff screw grommets that are fastened to the compartment back wall.

To remove the lower duct assembly, first remove all cantilever shelves, the upper light diffuser, crisper glass shelf, upper duct assembly, drawer assemblies, glass crisper cover, hinge-side drawer slides, crisper light cover, and the crisper spacer, then (See Figure 7-161):

- 1. Extract lower duct mounting screws.
- 2. Lean top of duct forward and remove all panel mount electrical connections from duct, then remove duct from the unit.

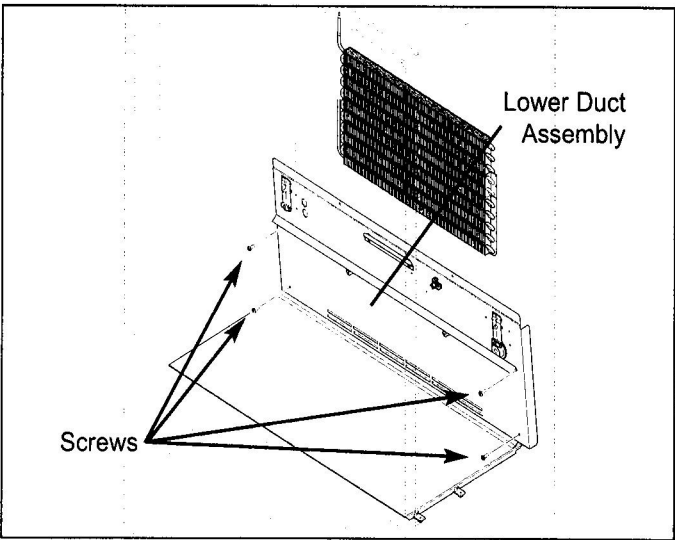


Figure 7-161. Lower Duct Assembly Removal



## Refrigerator Evaporator Thermistor

The refrigerator evaporator thermistor is inserted six to ten inches into the opening below the third elbow on the left side of the evaporator.

To remove the evaporator thermistor, first remove all cantilever shelves, the upper light diffuser, crisper glass shelf, upper duct assembly, then (See Figure 7-162):

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

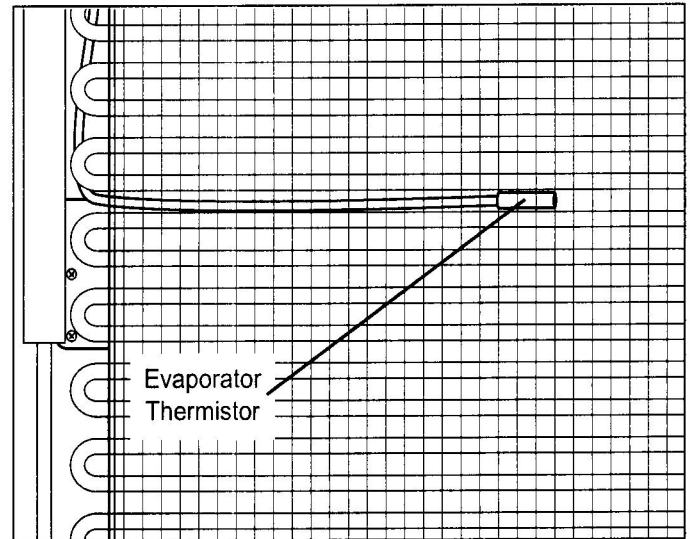


Figure 7-162. Evaporator Thermistor

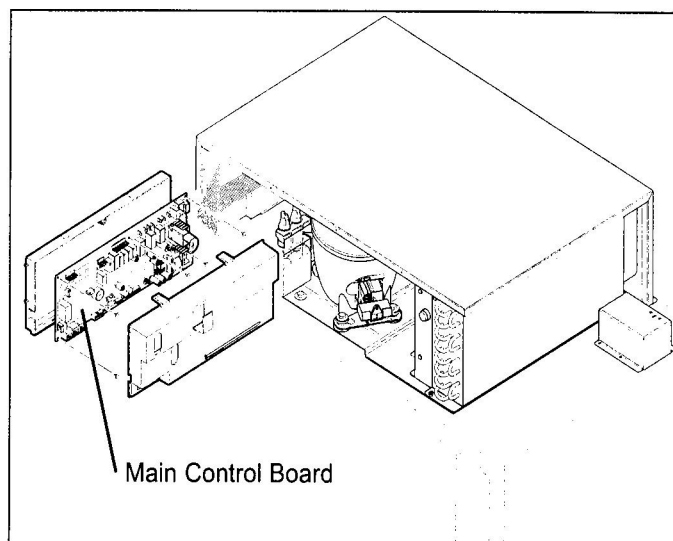
## Models BI-36R Compressor Area Mechanical Components

### Main Control Board

Screws hold the main control board inside a control housing that sits on a slide support bracket at the left side of the compressor area.

To remove the main control board assembly, the control grille and compressor shroud will need to be removed first, then (See Figure 7-163)

1. Grab front of control housing and pull it toward front of unit, off of the support bracket.
2. Disconnect wire leads from wire harness at right side of housing.
3. Disconnect communication cables from right side of control.
4. At top of control housing, lift the cover latches off of tabs along top of housing case, then separate the cover from the case.
5. Disconnect all wire leads from control board.
6. Extract control board mounting screws and lift board out of case.



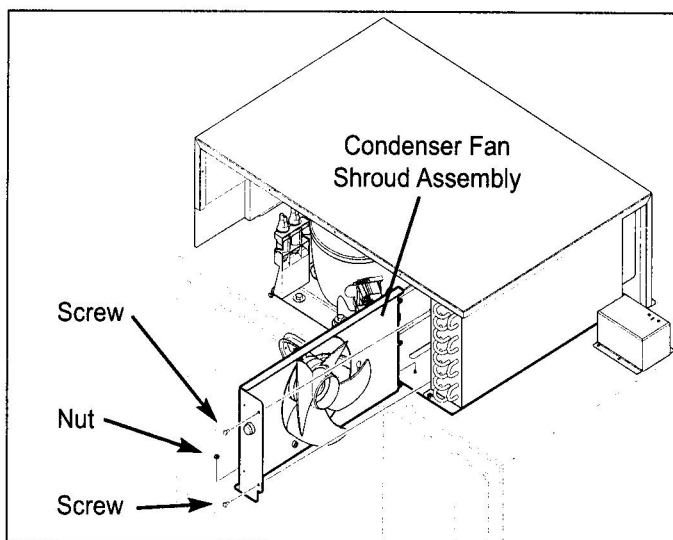
**Figure 7-163. Control Board Assembly**

### Condenser Fan Shroud Assembly

Tabs at the back of the condenser fan shroud fit into grommets in the condenser's rear bracket. A hole in the bottom front flange of the condenser fan shroud fits down over a threaded stud, and a nut is then applied onto the stud. The front flange of the condenser fan shroud assembly is then secured to the front condenser bracket with screws.

To remove the condenser shroud assembly, first remove the top cabinet trim, top cabinet frame and compressor shroud, then (See Figure 7-164):

1. Extract condenser shroud mounting screws at front of condenser.
2. Extract nut from threaded stud at base of condenser fan shroud.
3. Pull assembly forward slightly, disconnect condenser fan electrical leads, then pull the assembly from the compressor area.



**Figure 7-164. Condenser Fan Shroud Assembly**

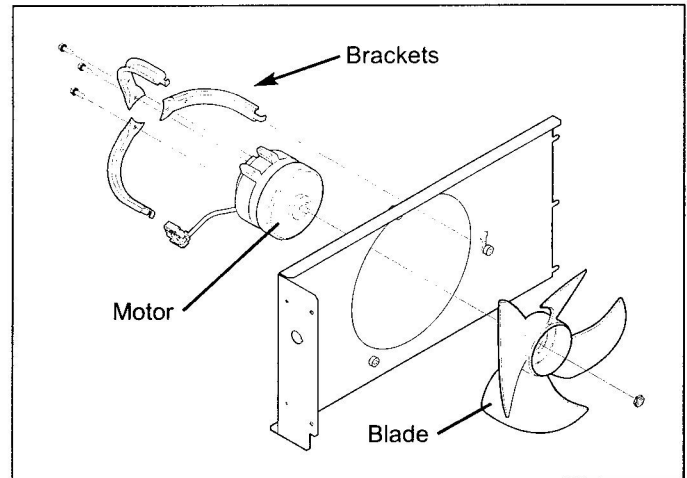
## Condenser Fan Motor

The condenser fan is mounted to the condenser fan shroud with three fan mounting brackets that hook into grommets that are in the condenser fan shroud. At the back of the motor, screws pass through these brackets into the back of the fan motor. The condenser fan blade is held onto the fan motor shaft with a nut.

To remove the condenser fan motor, first pull the condenser fan shroud assembly from the compressor area, then (See Figure 7-165):

1. Extract screws securing motor to brackets.
 

**NOTE:** The brackets will unhook from the grommets in the shroud after the screws are removed.
2. To remove fan blade from fan motor:
  - a. Grab blade and motor while turning nut counterclockwise.
  - b. Then pull the blade from the motor shaft.



**Figure 7-165. Condenser Fan Motor Removal**

## Models BI-36R Sealed System Components

The sealed system components at the top of the appliance sit on a sliding unit tray. There is a slot in the unit tray running from front to back, with a bolt positioned in the middle of this slot and attached to the top of the appliance. This allows the tray to be pulled straight forward to aid in sealed system repairs. (See Figure 7-166) When not being moved for service, a bolt passing down through a hole at the front of the unit tray holds it in place.

### ⚠ WARNING

**UNIT COULD TIP FORWARD! MAKE SURE THE ANTI-TIP BRACKETS ARE IN PLACE AND THE UNIT IS PROPERLY ANCHORED BEFORE ATTEMPTING TO SLIDE THE UNIT TRAY OUT.**

#### NOTES:

- Removing the condenser fan shroud assembly before sliding the unit tray out will allow greater access to sealed system components on the tray. See condenser Fan Shroud Assembly removal instructions earlier in this section.
- When tapping into the sealed system, always use solder-on process valves. Do **NOT** use bolt-on process valves as they are prone to leak.
- Whenever servicing the sealed system, the high-side filter-drier **MUST** be replaced.

### High-Side Filter-Drier

**NOTE:** It is not necessary to slide the unit tray forward in order to replace a high-side filter-drier.

To remove a high-side filter-drier, first capture the refrigerant from sealed system, then (See Figure 7-167):

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

#### NOTES:

- Do not sweat tubing apart. Doing so will induce moisture into the sealed system.
- After capillary tube separates, check tubing for internal burrs. If burrs exist, repeat step 1 above.
- When installing replacement filter-drier, insert capillary tube until it touches screen inside drier, then pull capillary tube away from screen approximately 3/8" before brazing. (See Figure 7-168).
- Filter-drier outlet must be facing downward in order to function properly.

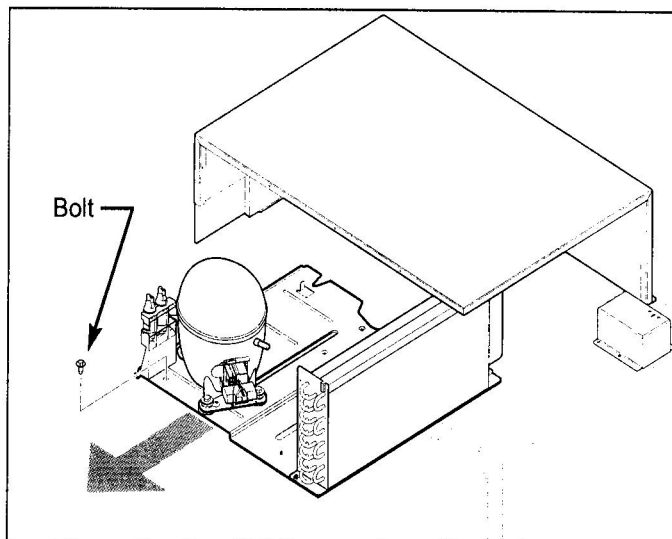


Figure 7-166. Sliding Out the Unit Tray

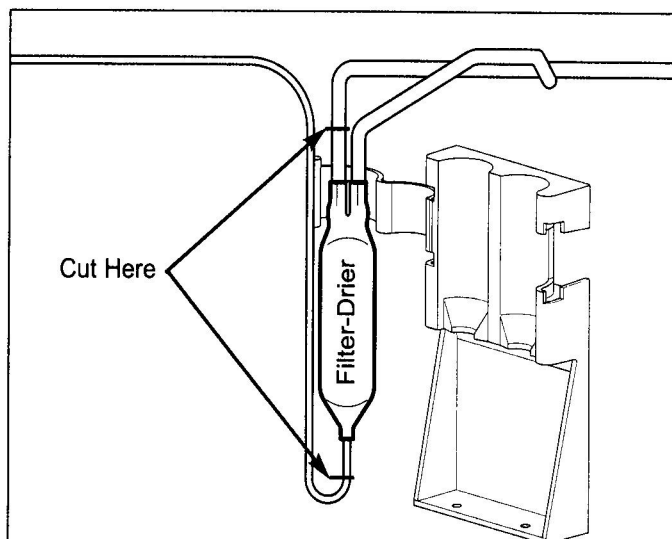


Figure 7-167. Filter-Drier Removal

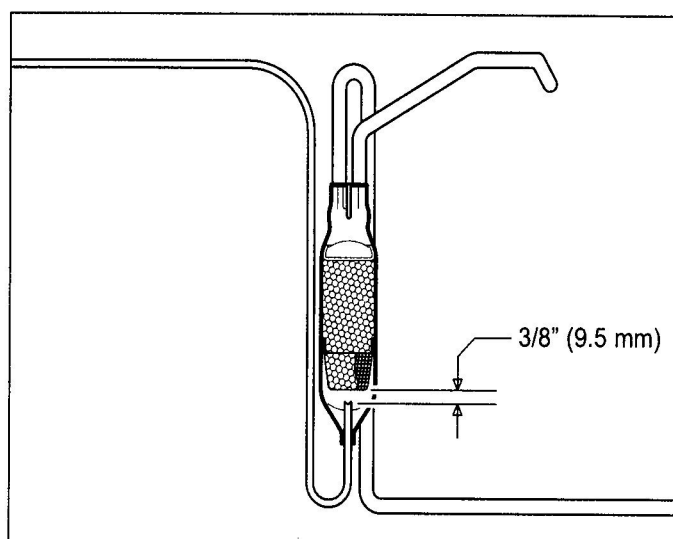


Figure 7-168. Capillary Tube Insertion Note