

SECTION 2

COMPONENT INFORMATION

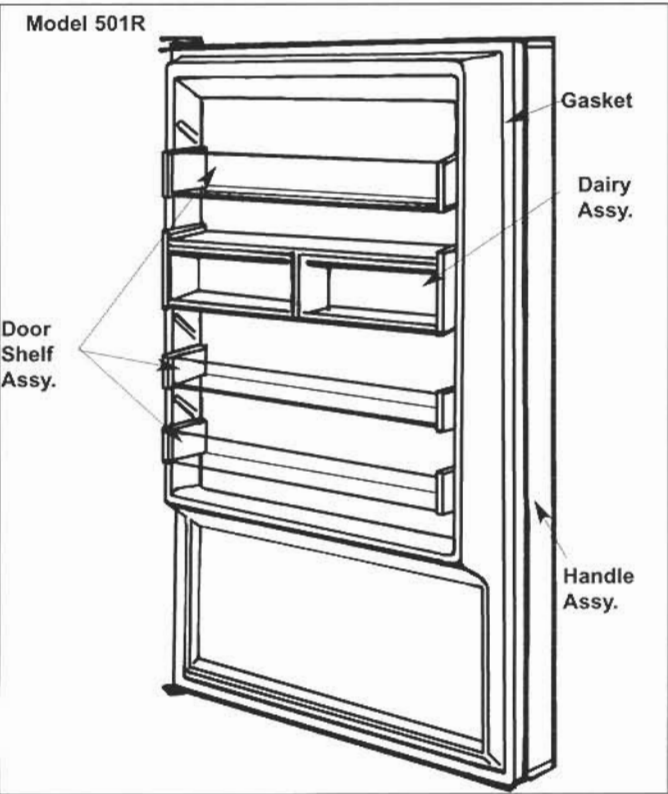


Figure 2-1. Refrigerator Door

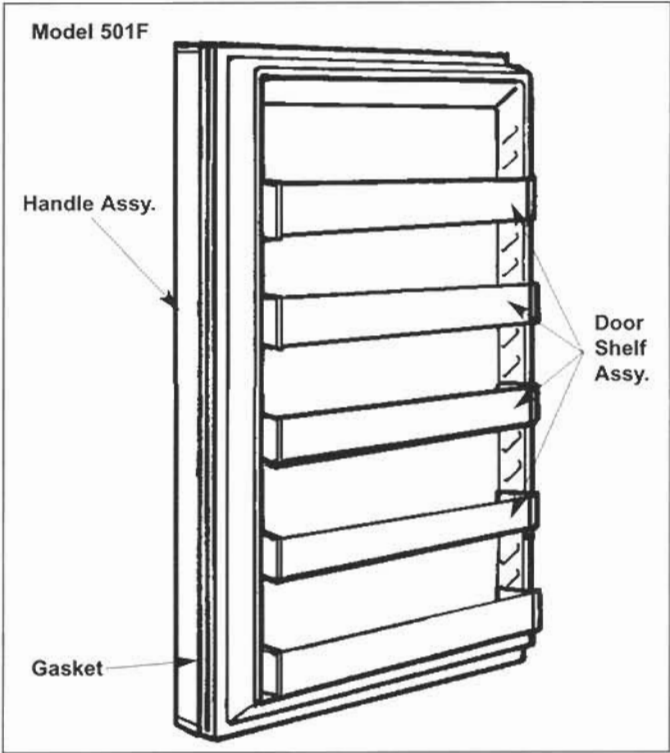


Figure 2-2. Freezer Door

DOORS AND DRAWERS

Refrigerator/Freezer Door Assembly

See Figures 2-1 thru 2-7. Door assemblies consist of the following parts:

- Door shell and liner with solid foam core
- Door gasket
- Door trim
- Door handle assy.

NOTE: Service replacement doors do not include handle assemblies.

NOTE: The dairy assy. and door shelf assy. are independent from the door assy.

NOTE: Models 501R, 501F, 511, 532, 542 & 561: Extended Door Handle Packages are available for raised panel applications. Contact your parts or product distributor.

If either the door handle end caps should happen to crack or break, order standard Handle End Cap Package, part no. 4-20-049-0 or Extended Handle End Cap Package, part no. 4-20-070-0.

NOTE: Model 590: If either the door handle end caps should happen to crack or break, order 590 Handle End Cap Package, part no. 4-20-092-0.

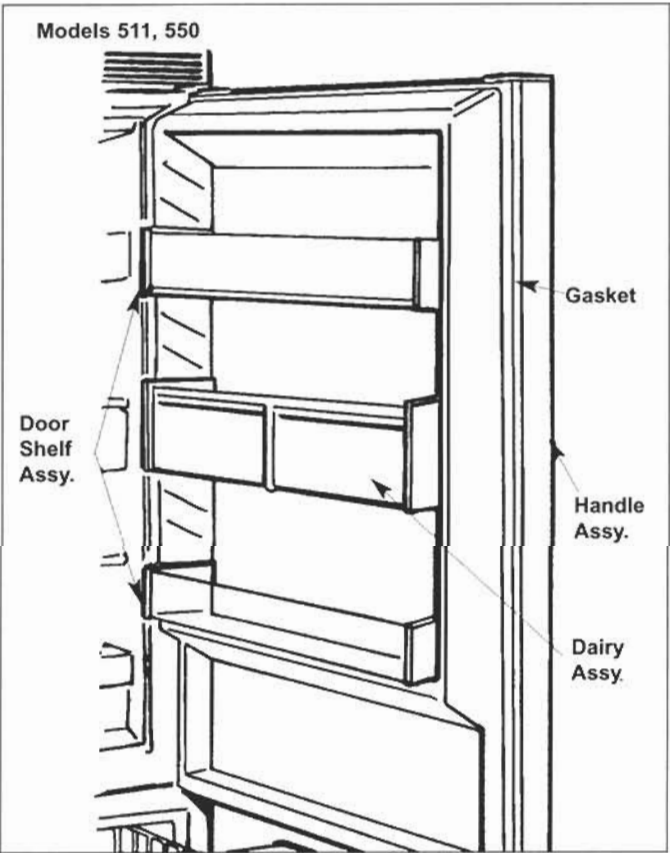


Figure 2-3. Refrigerator Door

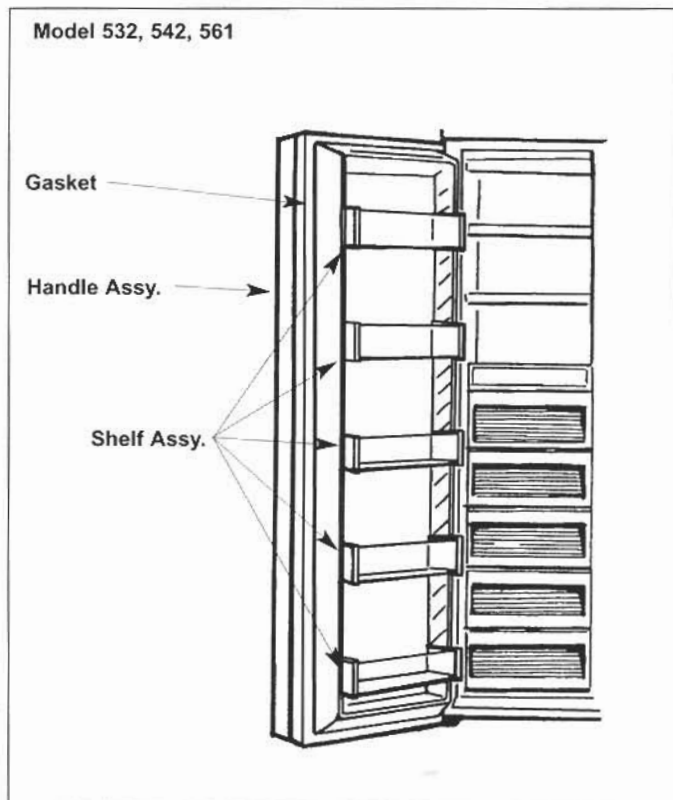


Figure 2-4. Freezer Doors

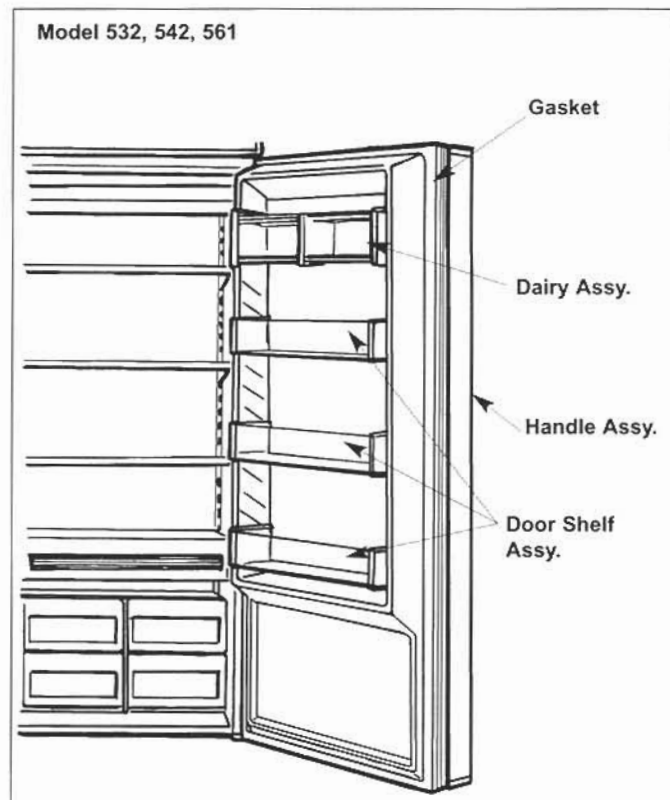


Figure 2-5. Refrigerator Doors

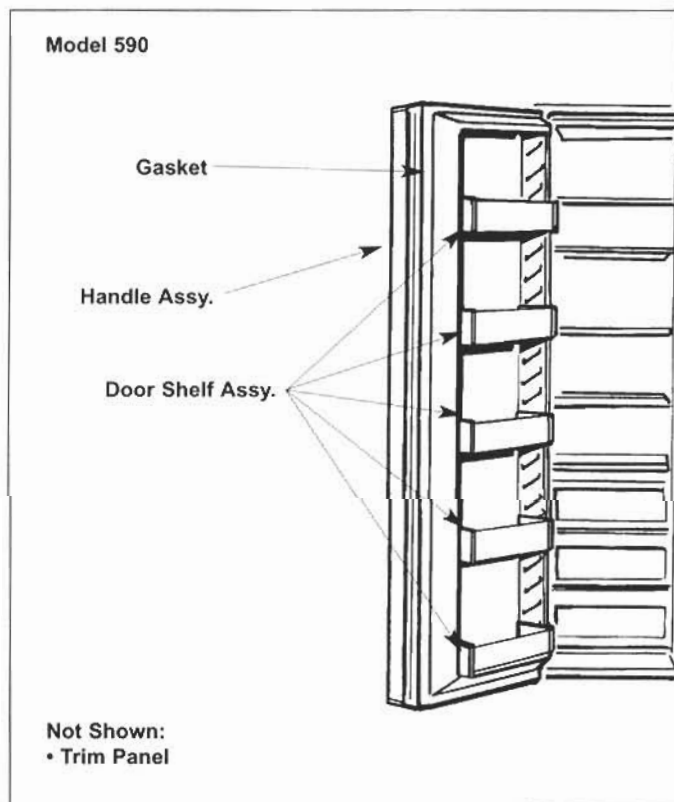


Figure 2-6. Freezer Door

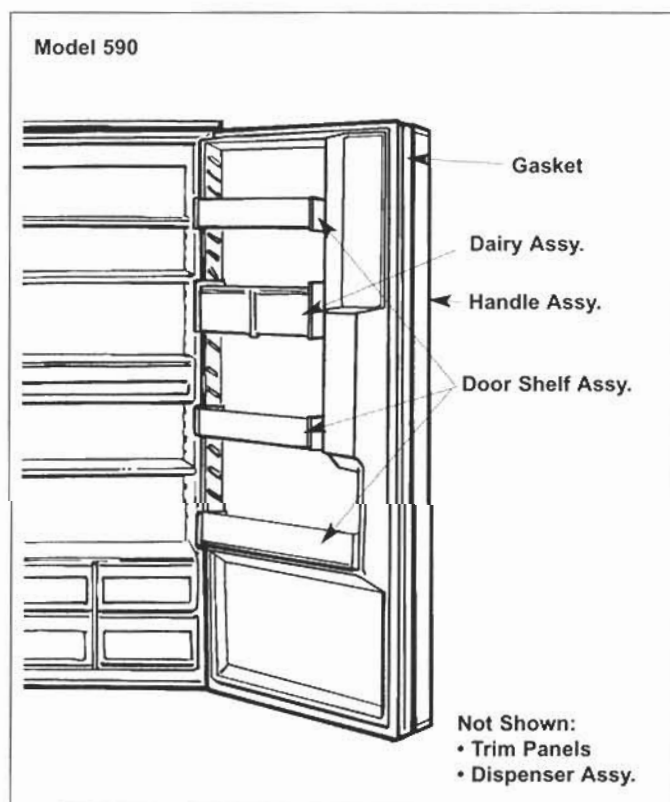


Figure 2-7. Refrigerator Door

Freezer Drawer Assembly - Models 511, 550

CAUTION

Freezer drawer is heavy. Use proper lifting techniques when removing drawer assembly.

The freezer drawer assembly pulls out, providing access to the food and ice. The drawer consists of the following:

- Foamed drawer shell
- Door liner
- Drawer trim and handle
- Gasket
- Upper basket
- Lower basket

The drawer slides have a built-in self-closing incline feature. The complete drawer assembly can be removed by lifting up and out while holding the upper basket (Figure 2-8).

The lower basket is fixed to the frame assembly. The upper basket rolls in and out on the frame assembly and drawer slides (Figure 2-9).

NOTE: Attached to the back of the bottom freezer basket frame is a restraint clip (not shown). This clip holds the upper roll-out basket to the frame. This clip is not to be removed or discarded; it is installed to prevent child entrapment.

FREEZER DRAWER ADJUSTMENT-MODELS 511 & 550

1. Loosen the two rear screws of each cabinet drawer slide, and remove the screw at the slide front (Figure 2-10).
2. Relocate the front screw to the desired position (Figure 2-10). After adjustment, tighten all screws and reinstall the drawer. Check door seal for proper gasket seating.
3. To adjust the drawer pitch, remove the two plastic plugs on each side of the liner (Figure 2-11). Use a socket wrench to loosen all four

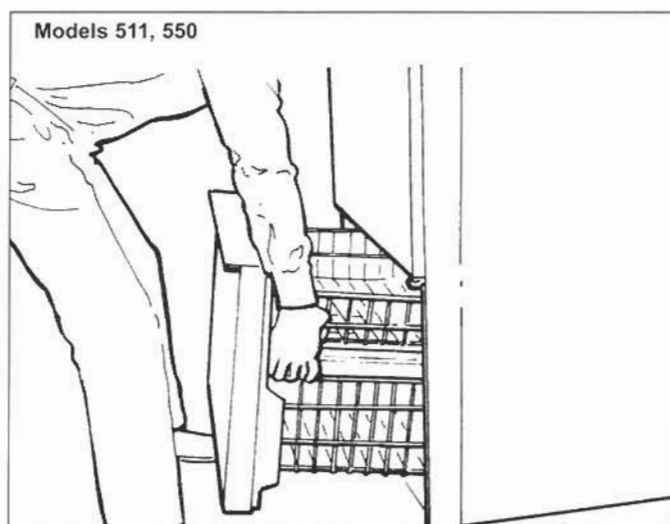


Figure 2-8 Removing Freezer Drawer

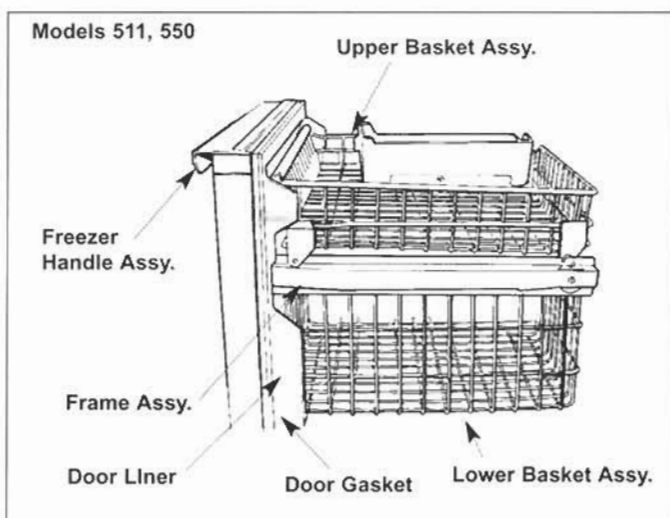


Figure 2-9. Freezer Drawer Assy.

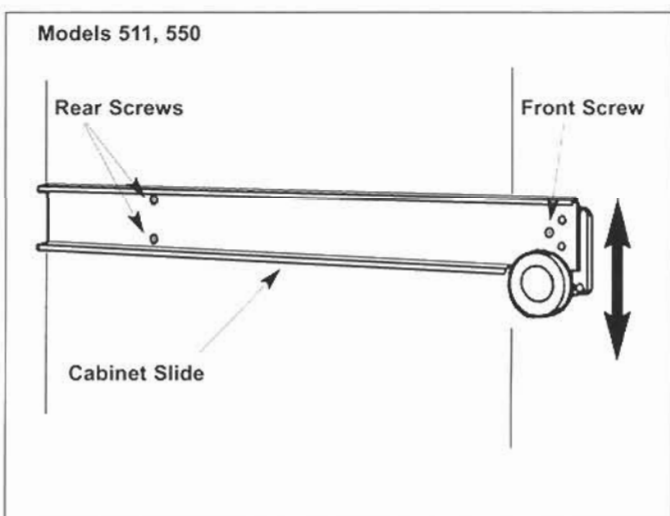


Figure 2-10. Drawer Up-And-Down Adjustment

1/2" bolts (two on each side). Make the necessary adjustment, then retighten all bolts. Reinstall plastic plugs.

NOTE: If there is too much side-to-side movement, the cabinet slides may be spaced out. To fine tune the drawer tracking, the following shims are available:

- Front Shim, part no. 0232300
- Rear Shim, part no. 0232310

Door Shelf Assembly - All Models

The door shelf assy. slides into the molded tracks of the door liner. To disassemble the door shelf:

1. Place a flat-bladed screwdriver into the outside end cap and pry the end cap away from the shelf assembly (Figure 2-12).
2. This will release the end caps from the door shelf support, allowing the door shelf support to slide off the open end (Figure 2-13).

Dairy Compartment - All Models

The dairy compartment assy. slides into the molded tracks of the door liner in the same manner as the door shelves. To disassemble the dairy compartment:

1. Insert a flat blade screwdriver into the outside end cap and pry away from the dairy compartment (Figure 2-12).
2. Release the two lock tabs and remove the inside end caps.
3. The dairy doors with the magnetic catch strip pivots between the center divider and the inside end caps. To remove the center divider, release the lower tab from the back side of the compartment and drop it down to release the upper tab.
4. The door gasket pushes into the channel around the dairy compartment.

NOTE: The bottom strip of the gasket contains the magnet.

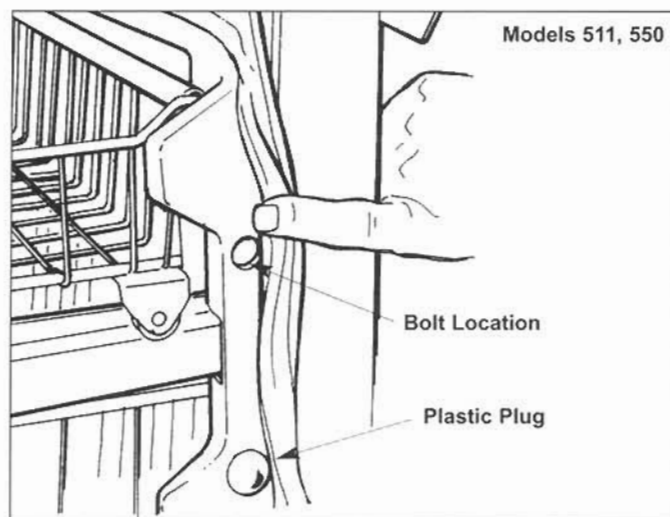


Figure 2-11 Door Pitch Adjustment

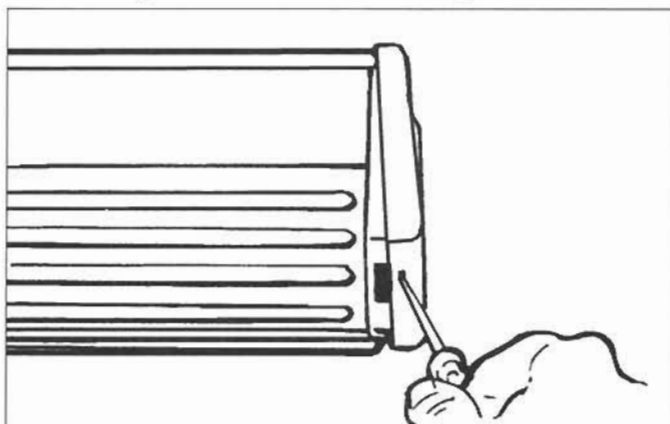


Figure 2-12. Installing/Removing Door Shelf Assy.

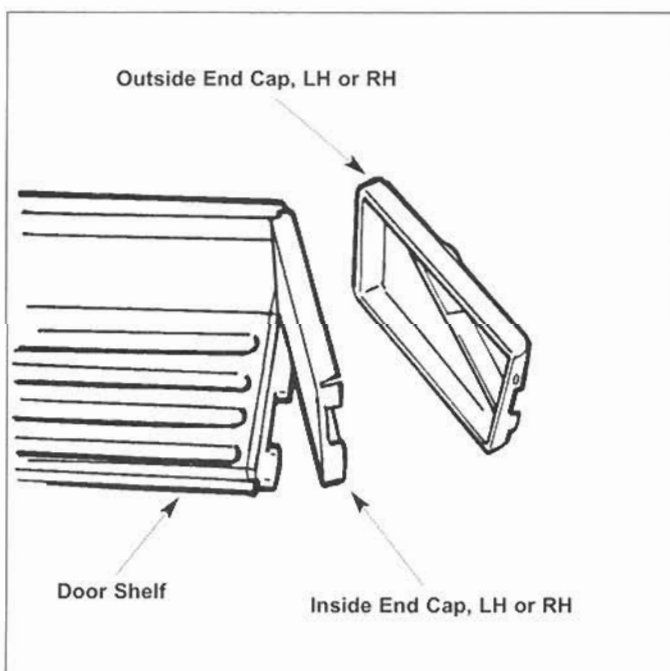


Figure 2-13. Door Shelf Disassembly

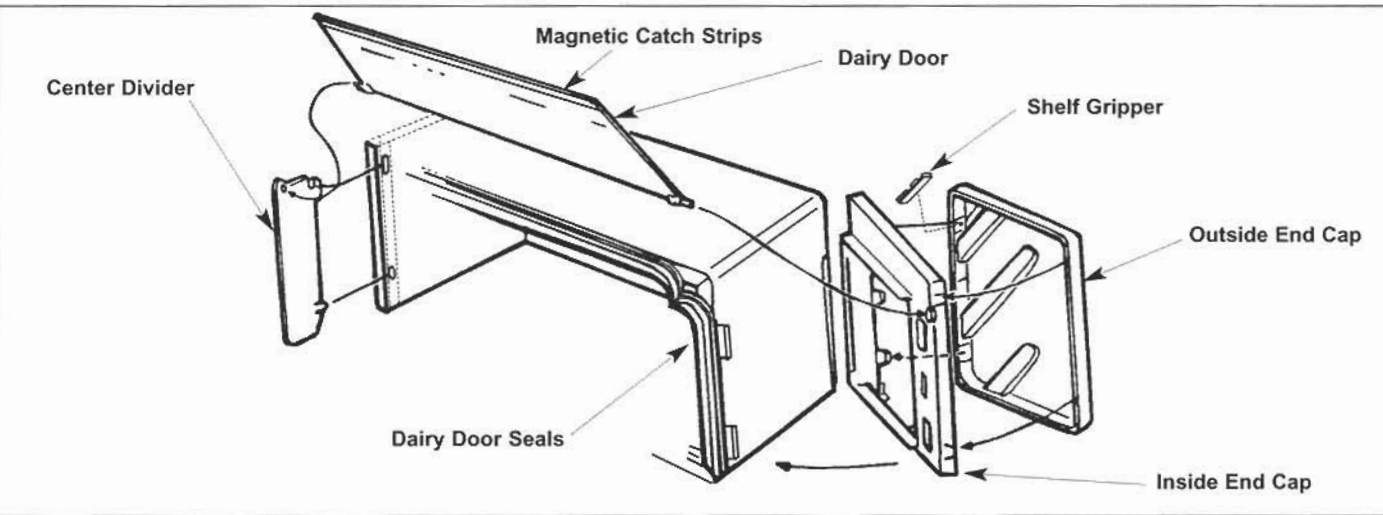


Figure 2-14. Dairy Compartment Assy.

Door Panel Assembly
- All Models Except 590

To install or remove a door panel, use the following procedure.

1. Remove the door handle trim moldings from the handle. The trim moldings are held in place with magnets. Place one end of a piece of tape in the center of the molding, and remove molding by pulling on the tape (Figures 2-15).
2. Remove the door handle screws (Figure 2-15) and remove the door handle.
3. Install the selected door panel into the exposed channel.
4. Reinstall the door handle and handle trim moldings.

NOTE: *Extended Grip Full Length Handles, for thicker raised panels are available from your parts or product distributor.*

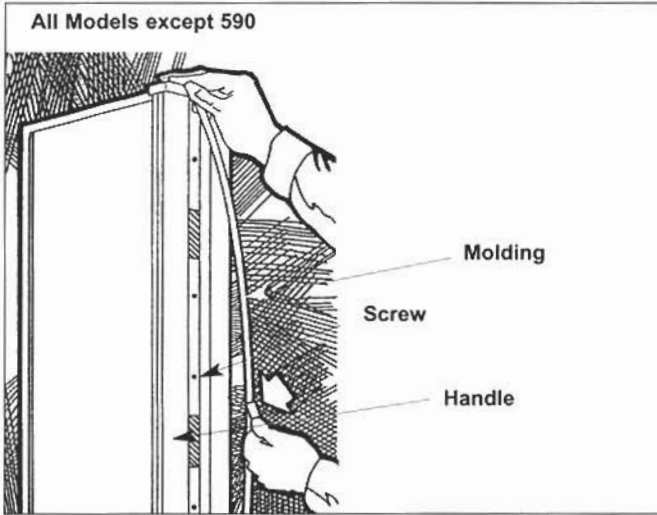


Figure 2-15. Door Moldings and Handle

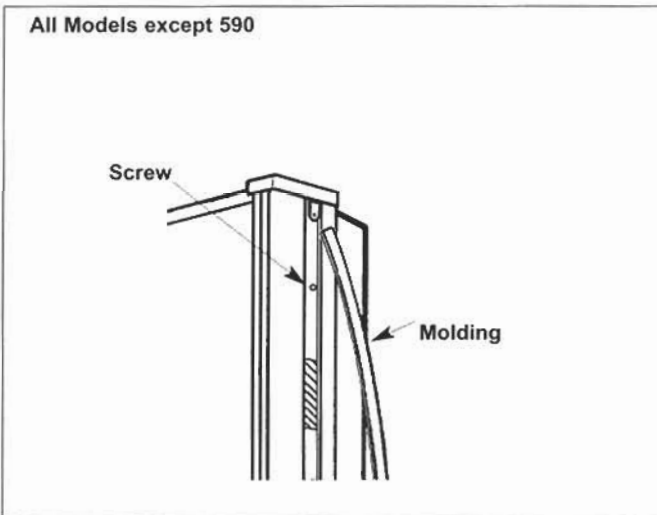


Figure 2-16. Door Moldings

Door Panel Assembly - Model 590

To install or remove a door panel, use the following procedure.

1. Remove the door handle trim moldings (Figure 2-17). The trim moldings are held in place with magnets. Place one end of a piece of tape in the center of the molding, and remove molding by pulling on the tape.
2. Remove the door handles from the freezer and/or refrigerator doors.
3. Remove the trim panel(s) by sliding them out of the doors (Figure 2-18).
3. **Refrigerator Door Assy. Only.** Remove the water and ice glasswell by removing the glasswell screw (Figure 2-18). Slide the glasswell up and pull out.
4. Remove the top and bottom trim filler mounting screws and trim fillers (Figure 2-19). Also, remove the vertical trim strip and mounting screw.
5. Install the selected door panels by sliding into the frame on the door.
6. Reverse steps 1 - 4 to reassemble.

Door Dispenser Assembly - Model 590

⚠ WARNING

Always disconnect electrical power at the master power switch before attempting repair.

Use the following procedure to remove the door dispenser assy.

1. Remove the door handle, trim and panels as described on previous page.
2. Remove the glasswell screw. Slide the glasswell assy. up and out (Figure 2-18).
3. Remove the vertical trim strip and screws (Figure 2-19).

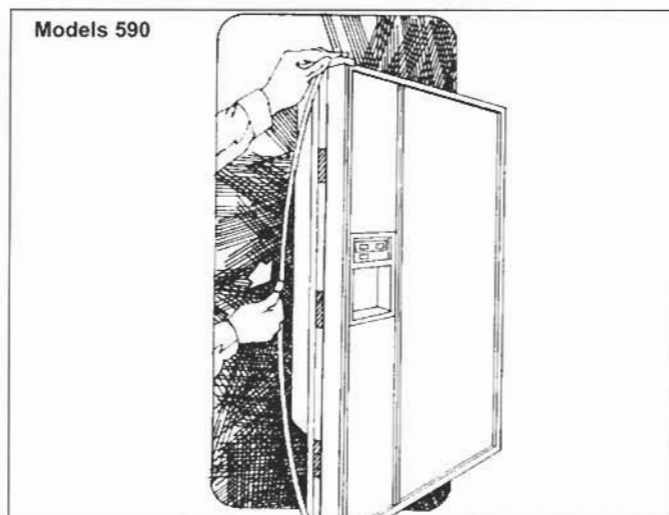


Figure 2-17. Door Trim Molding

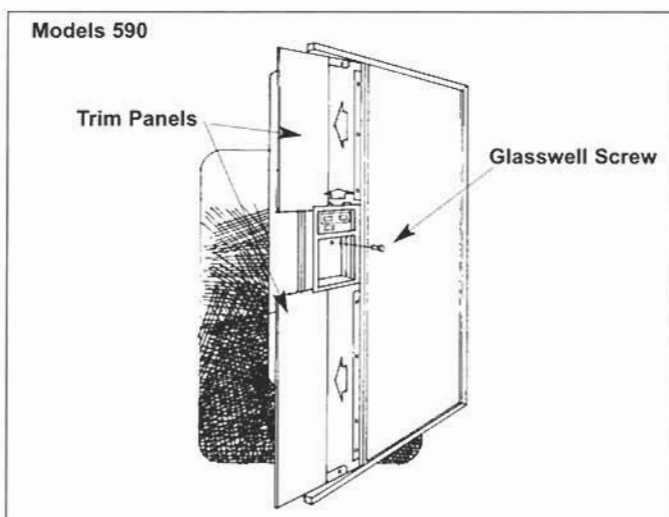


Figure 2-18. Door Trim Panels

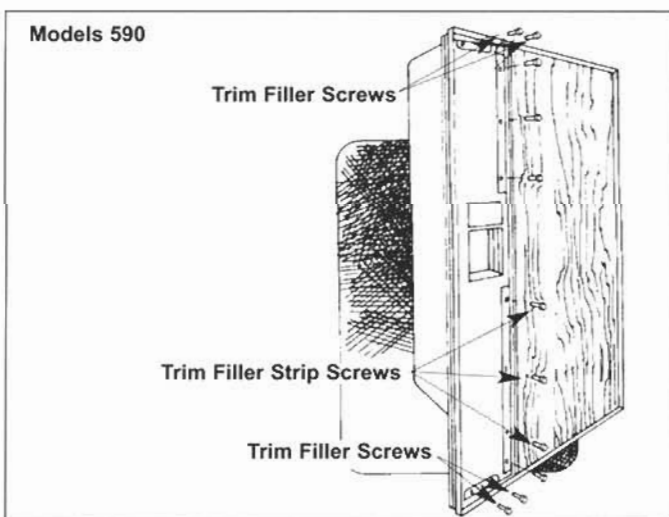


Figure 2-19. Door Trim Screws

4. Remove the six Phillips head screws securing the door dispenser assy., then remove the dispenser by pulling the bottom out and down.
5. Disconnect wiring harnesses and green ground wire from the dispenser.

NOTE: The door dispenser cannot be field repaired; it must be replaced.

6. To reassemble, reverse steps 1 - 5.

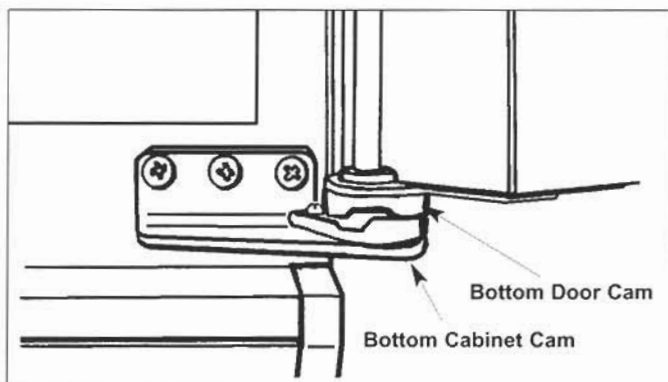


Figure 2-20. Gravity Door Closer

Door Closer Assemblies

GRAVITY TYPE CLOSER - Model 501R & 501F Prior To Serial No. 836000; Model 511 & 550 Regardless of Serial No.

When the door is closed, the door closer cams (Figure 2-20) should not be totally bottomed-out. Both cams should be riding up and down on each other for the proper closure action.

NOTE: An Accessory Door Stop Package is available. See DSRH & DSLH in Service Parts Price Book.

SPRING STOP/CLOSURE ASSY.

The spring door closer assy. allows the door to stop at 130° and utilizes a spring-assist door closing mechanism.

NOTE: An Accessory Door Stop Package is available which will stop the door at 87°, 90° or 105°. See DS90 and DS105 in Service Parts Price Book.

NOTE: Replacement door closer assemblies are supplied with replacement instructions.

Door Adjustment

NOTE: The unit must be level before adjusting doors.

If unit is properly installed, blocked and leveled, it may still be necessary to adjust the door(s) from left to right and/or in and out. Adjustments are performed at the top and/or bottom door hinge(s). In each door hinge are two small Phillips head shipping screws that will need to be removed and discarded before adjustments are made. The remaining larger door hinge screws are then loosened, allowing door adjustment from left to right and/or in and out (Figure 2-21). After adjusting the door, the door hinge screws are tightened back down and the door seal checked for proper gasket sealing.

NOTE: If a side-by-side unit is properly installed and leveled, and the doors properly adjusted yet one door lines up higher than the other, a bottom hinge spacer (part no. 0183100) is available. The door hinge screws of the lower door hinge are loosened and the hinge spacer(s) inserted between the bottom door trim and the bottom door hinge (Figure 2-22). This will raise the door slightly. The door hinge screws are then tightened back down. Bottom hinge spacer (part no. 0183100) will **NOT** work on over-and-under units.

Refrigerator Drawer and Freezer Basket Assemblies - All Models

The crisper drawer and roll-out basket drawer are similar in design. Replacement parts include fronts, windows, baskets and drawers (Figure 2-23).

1. Remove the screws from the bottom of the assembly front.

NOTE: These screws are not used on the crisper assy.

2. Release the tabs on the top corners of the fronts using a flat-blade screwdriver. Depress the tab and pull the front forward slightly so the tab will not relock, then repeat for the other side.
3. To reassemble, hold windows and slides in place (if used). Position the bottom of the front piece over the lower tabs, then secure to the top tabs. Install the screws (if used) through the bottom of the front piece.

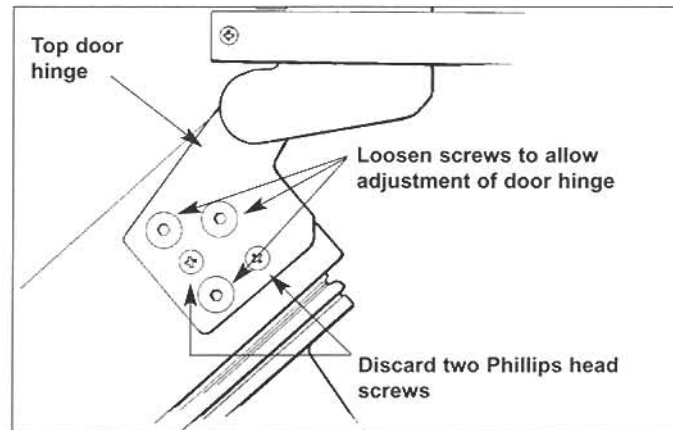


Figure 2-21. Door Adjustment

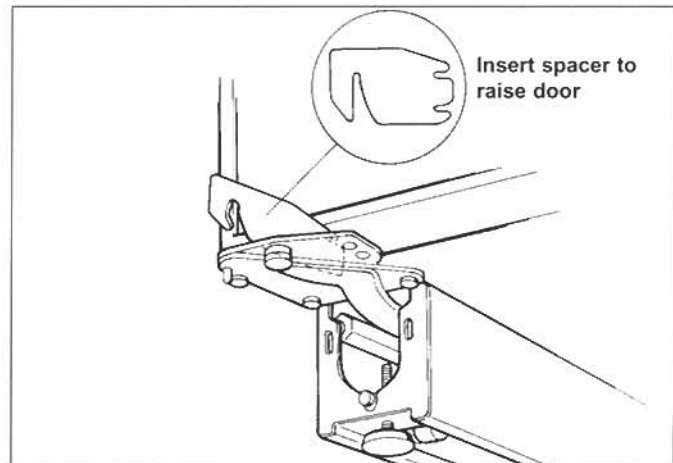


Figure 2-22. #0183100 Hinge Spacer Installation

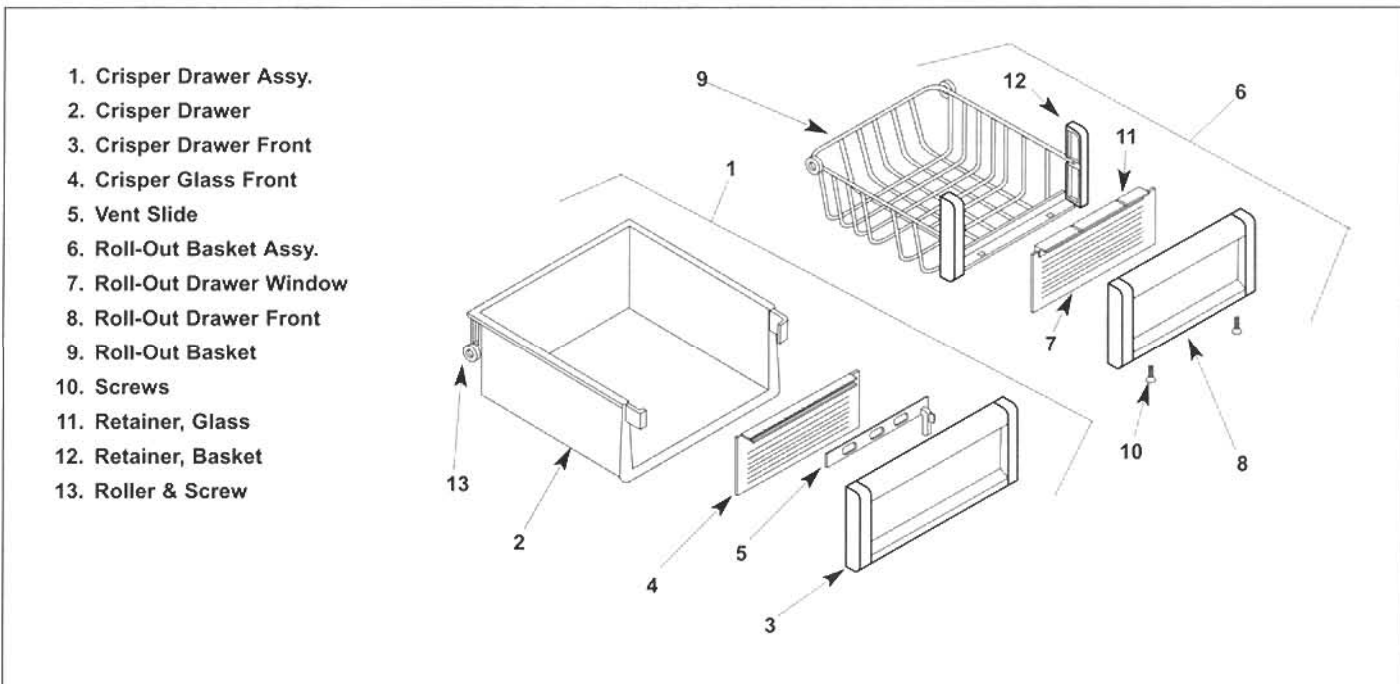


Figure 2-23. Crisper and Roll-Out Basket Assemblies

FREEZER COMPONENTS

⚠ WARNING

Always disconnect electrical power to equipment before attempting repairs.

Freezer Fan Motor - Model 501F

1. Remove the overhead light diffuser by grasping the back edge and pulling forward to release, then drop the front edge out of the channel. (Figure 2-24).
2. Remove the two screws from front of fan guard and lift out (Figure 2-25).
3. Tilt the evaporator cover out at the top and lift off of the posts at the bottom.
4. Remove the screws holding the fan shroud in place and disconnect the lighting electrical leads.
5. Remove the fan bracket screws and pull out the bracket and fan motor assy. (Figure 2-26).
6. Disconnect the motor electrical connection (Figure 2-26).
7. To reassemble, reverse steps 1-6.

NOTE: Clamp position should always be UP (Figure 2-27).

NOTE: As a service part replacement, white fan blade, part no. 3-15-006-0, must be used prior to S/N 663116/P679466. From S/N 663116/P679466 to M/P1004775, use the black fan blade, part no. 3-15-045-0. Starting with S/N M/P1004775, use grey fan blade, part no. 3-15-052-0.

NOTE: Fan blade position after Serial Number 1004775 is 1-5/8".

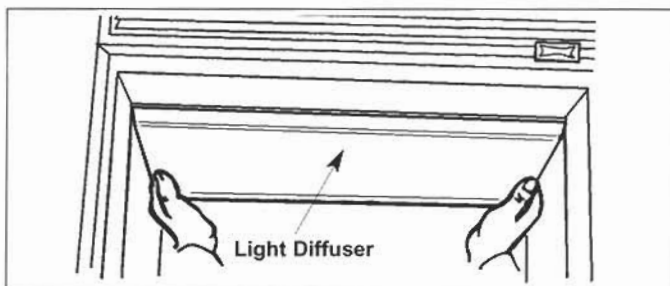


Figure 2-24. Light Diffuser

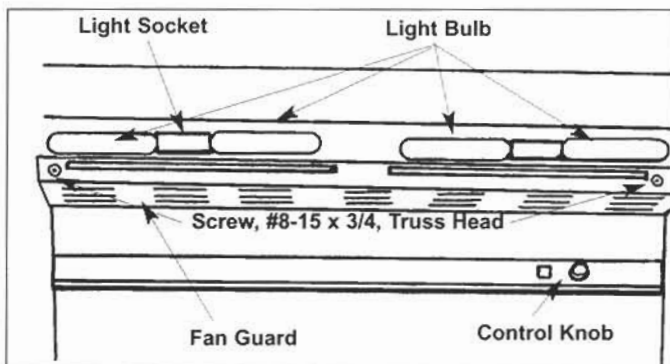


Figure 2-25. Fan Guard

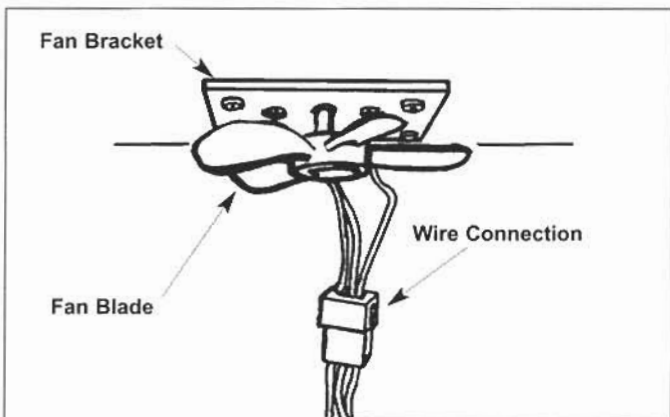


Figure 2-26. Evaporator Fan Blade Assy.

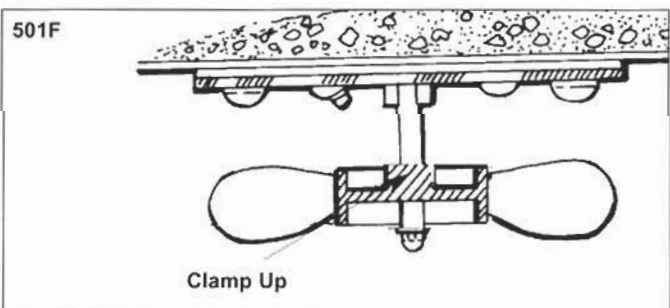


Figure 2-27. Evaporator Fan Assy.

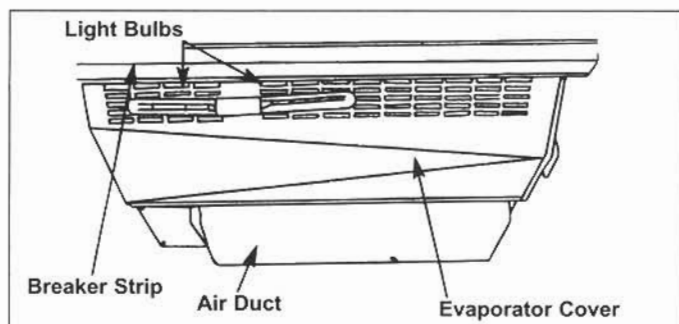


Figure 2-28. Model 511, 550 Freezer Compartment, Top

Freezer Fan Motor - Models 511, 550

1. To access and remove the evaporator fan assembly, the freezer air duct and evaporator cover will need to be removed first (Figure 2-28).
2. Remove the mounting screws at the left side of the fan shroud. Tilt the front edge of the assembly down and disconnect the fan motor wiring from the wire harness (Figure 2-29).
3. Continue to tilt the assembly forward and pull out. The freezer evaporator fan can now be removed from the fan shroud.

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

Freezer Fan Motor - Models 532, 542, 561

1. To access the freezer evaporator fan motor, remove the freezer duct/shelf (Figure 2-30). Remove the two #10-12 x 1/2 screws from the cover and raise up. Disconnect wire harness and continue to raise up until the top lip of the cover releases from the air diffuser. The fan motor is mounted behind the evaporator on the freezer fan shroud (Figure 2-31).
2. To remove fan, remove the screws (Figure 2-24) from the top of the shroud and pull the shroud forward. The fan assembly will now lift straight up from behind the evaporator (Figure 2-31).

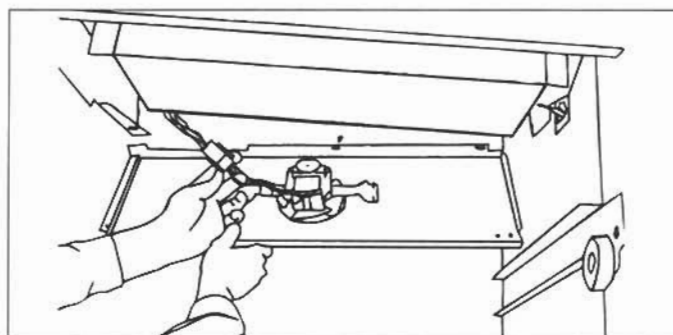


Figure 2-29. Model 511, 550 Freezer Assy.

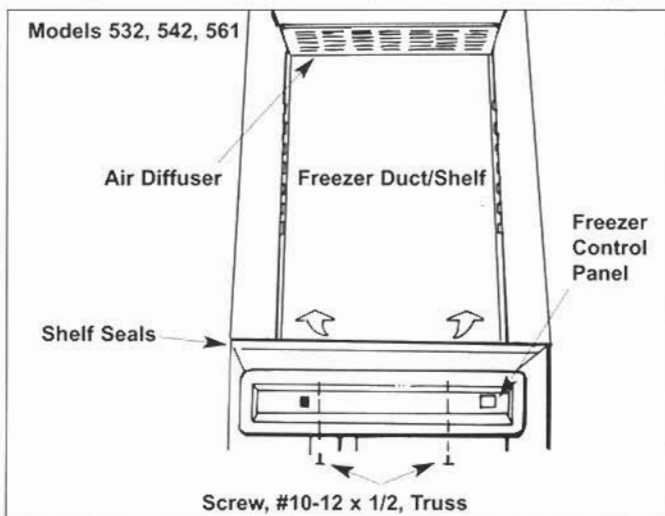


Figure 2-30. Freezer Duct/Shelf

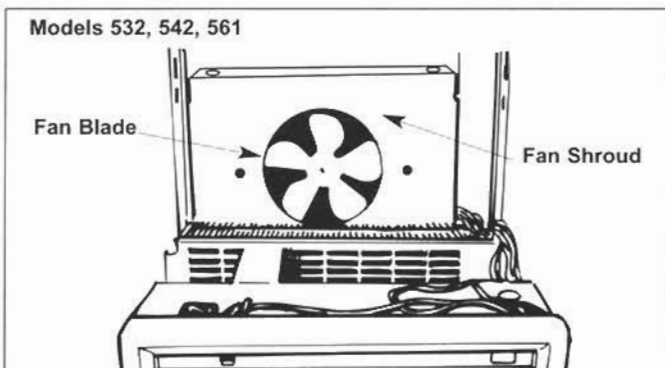


Figure 2-31. Freezer Fan

NOTE: When reinstalling the fan, angle the bottom of the fan shroud towards the back of the freezer and then raise the top of the shroud into position to secure at top. A properly installed shroud will be parallel to the evaporator.

3. Reinstall the freezer duct/shelf (Figure 2-30). Insert the top lip of the cover behind the air diffuser and then lower it. Be sure the cutouts in the cover line up with the tabs at the back.

Freezer Fan Motor - Model 590

1. To access the freezer evaporator fan motor, lift off the freezer utility rack (Figure 2-32).
2. Remove the top diffuser. Remove front evaporator cover held in place with two screws at the top and two screws at the bottom (Figure 2-33).

NOTE: On Model 590, remember to remove screw just below water reservoir area before tilting evaporator cover forward.

3. Remove two screws, then pull fan motor assembly out (Figure 2-34).

NOTE: Fan motor wires are held in place by a clip on the side wall.

4. For reassembly, reverse steps 1 - 3.

NOTE: After fan motor is installed, make sure fan blade rotates freely.

Models 590

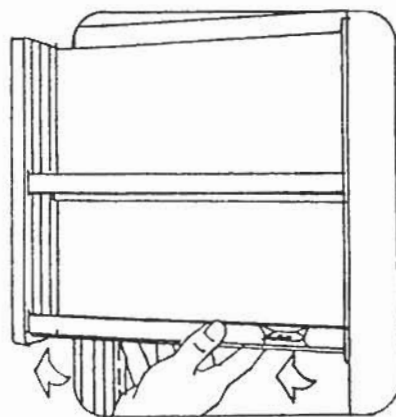


Figure 2-32. Freezer Utility Rack

Models 590

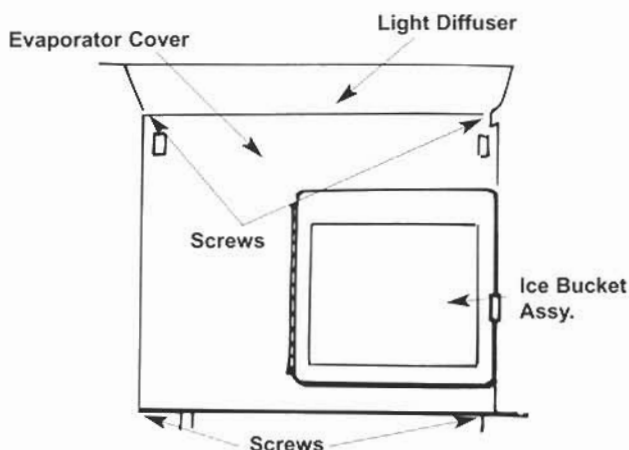


Figure 2-33. Evaporator Cover

Models 590

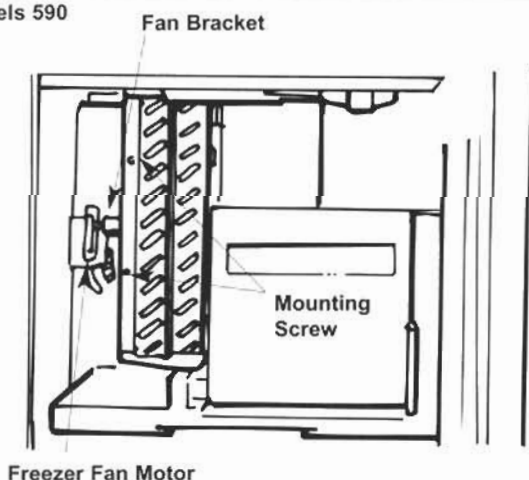


Figure 2-34. Freezer Fan Motor

Ice Maker Assy. - Model 501F**▲ WARNING**

Always disconnect electrical power to equipment before attempting repairs.

▲ CAUTION

Do not manually advance the ejector blades on the modular ice maker.

The ice bucket is located in the top right freezer basket (Figure 2-35).

The ice maker is connected to the ice level arm by a connecting rod (Figure 2-36).

When the ice bucket is removed, ice production will stop. There is a tab on the rear left hand corner of the bucket that activates the ice maker switch (Figure 2-36).

1. To access and remove the icemaker assy., remove the top right freezer basket which contains the ice bucket.
2. Slide the connecting rod to the right, off of the icemaker shut-off arm, allowing the ice level arm to drop out of the way.
3. Remove the mounting screw at the bottom left of the icemaker which secures the icemaker bracket to the drain trough enclosure.
4. Extract the two mounting screws at the top rear, above the icemaker mold.
5. Pull the icemaker assy. forward and disconnect the electrical leads from the icemaker.

Models 501F

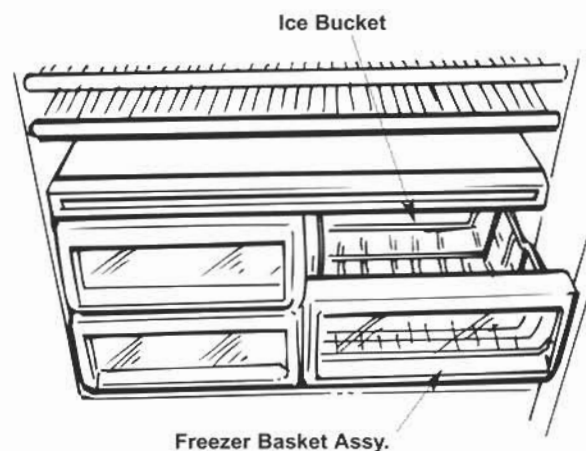


Figure 2-35. Ice Bucket

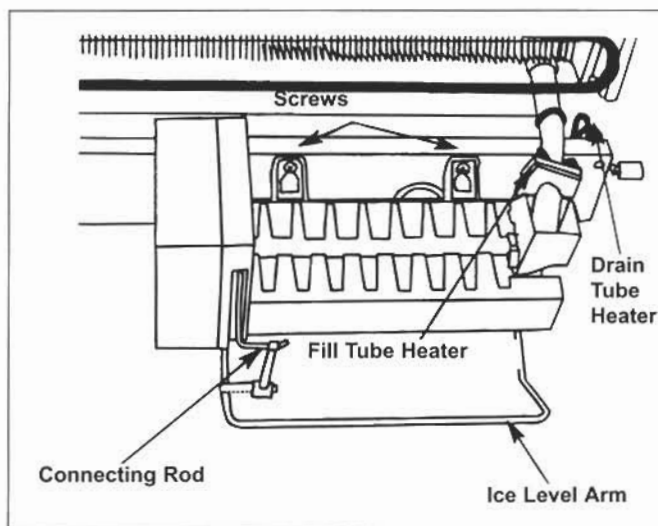


Figure 2-36. Icemaker Area

Compact Ice Maker Assembly
Model 550 Prior to Serial Number
M/P681166, and between Serial Numbers
M/P681565 to M702716/P700765

The ice maker assy. linkage roller contacts the back of the ice bucket and raises or lowers the ice level arm, when the ice bucket is pushed in or out. Ice production stops when the bucket is removed.

NOTE: If the shut-off arm on the right hand side of the ice maker is not activating the shut-off micro switch, the shut-off arm should be manually adjusted toward the ice maker until contact is achieved.

Modular Ice Maker Assembly
Model 511, 550 Between Serial Number
M/P681166 to M/7681565, and starting with
Serial Number M702716/P700765

⚠ WARNING

Always disconnect electrical power to equipment before attempting repairs.

⚠ CAUTION

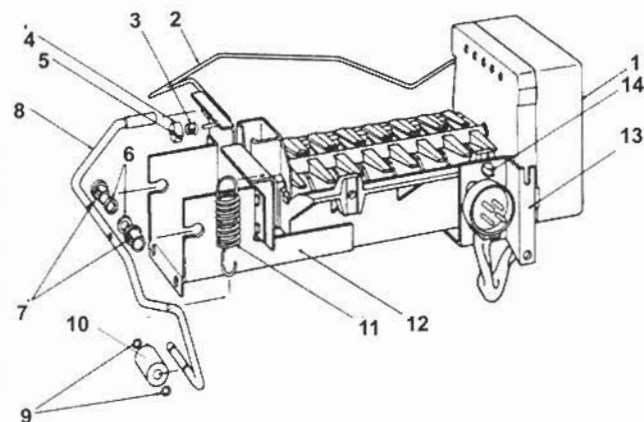
Do not manually advance the ejector arms or drive gear or the main assy. will be destroyed.

The ice bucket is located in the top left rear corner of the top freezer basket (Figure 2-38). A tab on the rear left corner of the bucket activates the ice-maker switch. If the ice bucket is out of position, ice production will stop.

NOTE: If the ice maker stops making ice, verify ice bucket is in position and check the shut-off arm to see if it is stuck in the up (off) position.

The ice maker is located in the upper left corner of the freezer compartment and secured to the side wall by two screws above the ice maker and one screw below it (Figure 2-39).

Models 550



- | | |
|----------------------------|---------------------------|
| 1. Ice Maker Assy. | 8. Ice Maker Arm Guide |
| 2. Shut-off Arm | 9. Plastic O-ring |
| 3. Snap Bushing | 10. Roller, 3/4 x 1/4 x 1 |
| 4. Shaft Collar | 11. Extension Spring |
| 5. Setscrew, #8-32 x 3/16 | 12. Sensor Return Assy. |
| 6. Nylon Washer | 13. Ice Maker Bracket |
| 7. Snap Bushing, 3/8 x 3/4 | 14. Screw Grommet |

Figure 2-37. Compact Icemaker

Models 511, 550

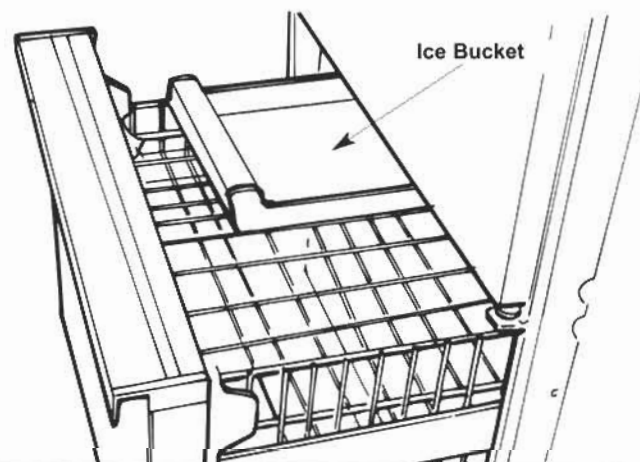


Figure 2-38. Ice Bucket Location

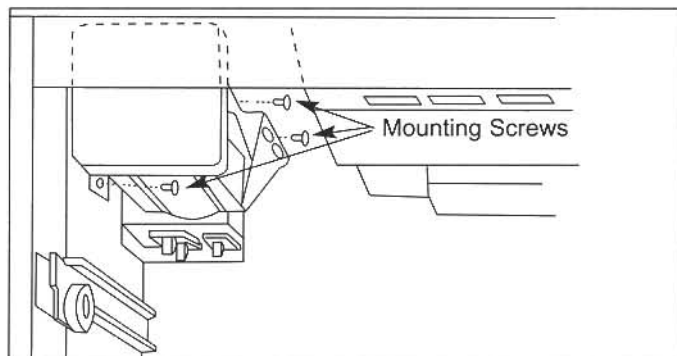


Figure 2-39. Models 511, 550 Icemaker

1. To remove the icemaker, extract the mounting screw at the bottom of the icemaker which secures the icemaker bracket to the left side wall.
2. Then extract the two mounting screws at the top, above the icemaker mold (Figure 2-39).
3. Pull the icemaker assy. down and disconnect the electrical leads from the icemaker.

Ice Maker Assembly - Models 532, 542, 561

▲WARNING

Always disconnect electrical power to equipment before attempting repairs.

▲CAUTION

Do not manually advance the ejector blades on a modular ice maker or the unit will be damaged.

The back channel of the ice bucket hooks over the ice bucket carriage assembly (Figure 2-41).

The guide on the carriage assy. contacts the arm of the ice maker linkage (Figure 2-42). As the carriage assy. is pulled out, the arm rides up the guide and the linkage will raise allowing clearance for the ice bucket. When the carriage is pushed back, the linkage drops into the ice bucket to sense the level of the ice.

Models 511, 550

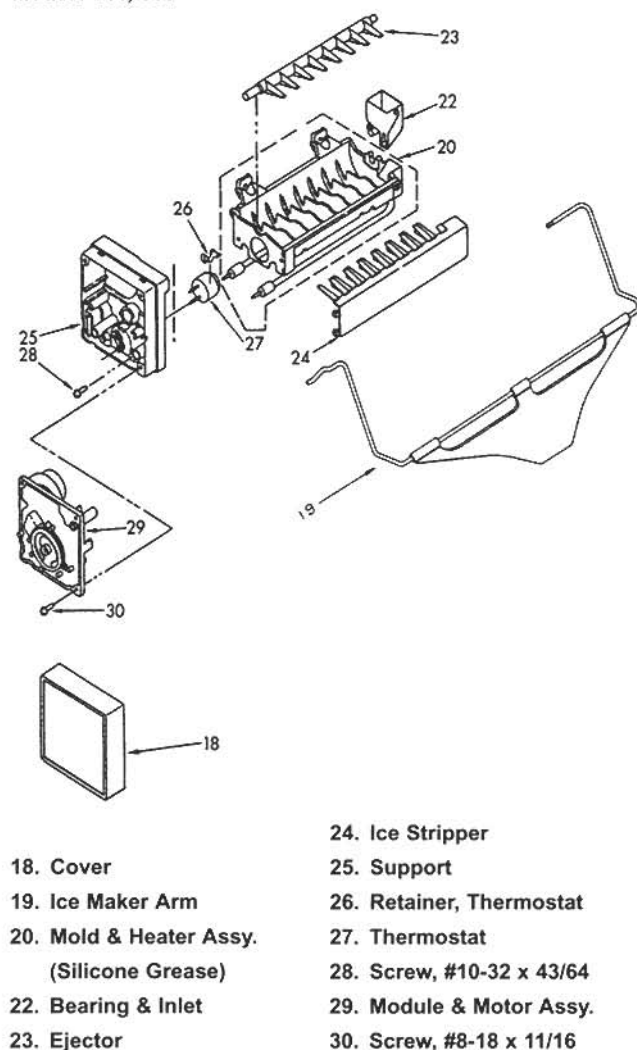


Figure 2-40. Modular Icemaker

Models 532, 542, 561

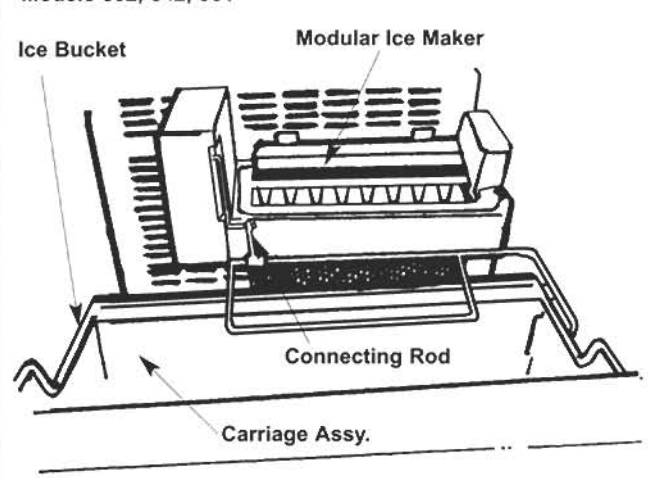


Figure 2-41. Ice Bucket

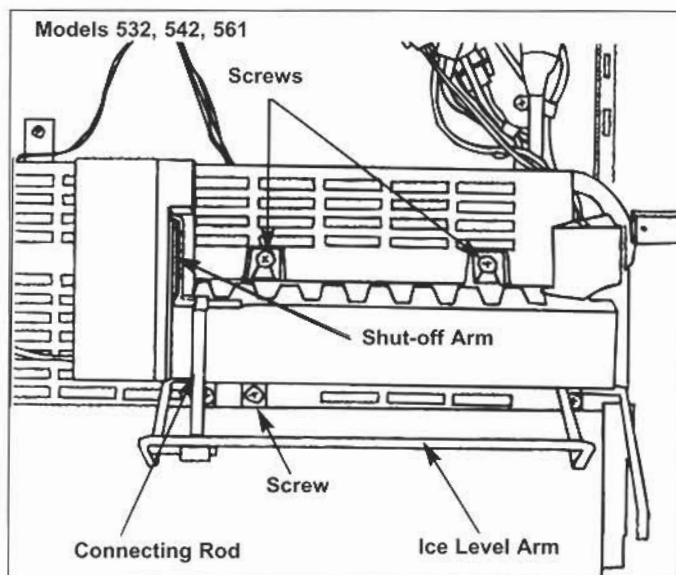


Figure 2-42. Icemaker

The linkage is connected to the ice level arm by a connecting rod (Figure 2-42). As the linkage raises or lowers, the ice level arm raises or lowers.

1. To remove the icemaker, slide the connecting rod to the right, off of the icemaker shut-off arm, allowing the ice level arm to drop out of the way (Figure 2-42).
2. Remove the mounting screw at the bottom left of the icemaker which secures the icemaker bracket to the evaporator cover assembly.
3. Then extract the two mounting screws at the top rear, above the icemaker mold.
4. Pull the icemaker assy. forward and disconnect the electrical leads from the icemaker.

The carriage assy. rolls within the tracks of the slide. To remove, push the carriage in and remove the two front-most screws on each slide. Pull the carriage and slides out together (Figure 2-43).

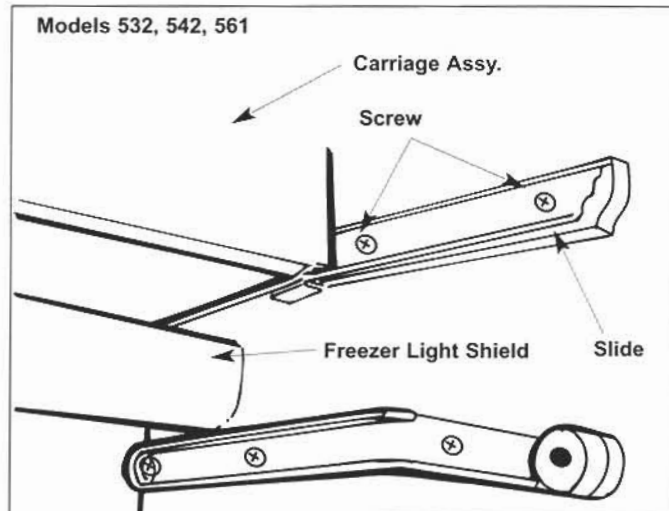


Figure 2-43. Carriage Slides

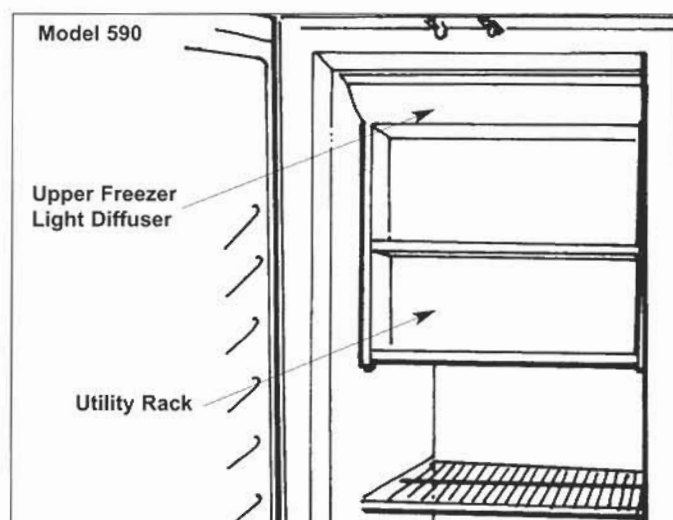


Figure 2-44. Upper Freezer Light Diffuser

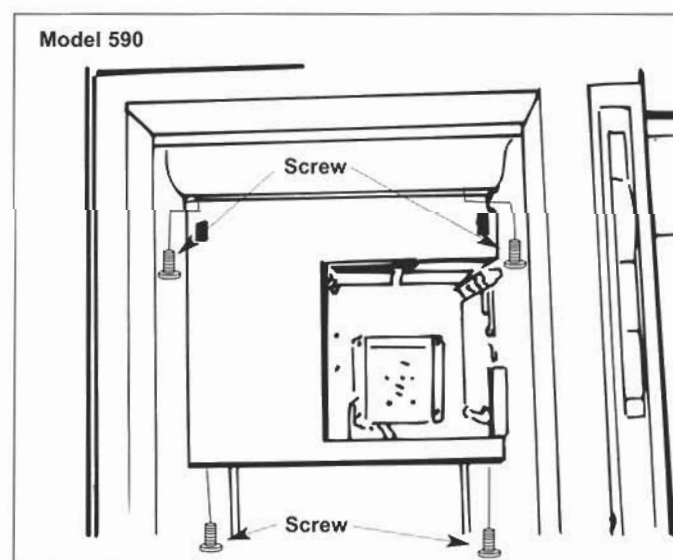


Figure 2-45. Evaporator Cover Removal

Ice Maker Assembly - Model 590

▲WARNING

Always disconnect electrical power to equipment before attempting repairs.

1. To access the ice maker, lift up and remove the freezer utility rack (Figure 2-44), then remove the top light diffuser. Remove the ice bucket.
2. Remove the front evaporator cover (Figure 2-45). It is secured with two screws on top and two screws on the bottom.
3. Remove rear air duct.
4. Remove the lower evaporator cover by pulling out the two snap pins (Figure 2-46).
5. Remove the bucket mainframe assy. by unscrewing three screws located on the freezer side wall along with the three screws located on the back wall (Figure 2-47).
6. Drop down the bucket mainframe assy. Detach the wiring harness and remove the ice maker.

NOTE: It is not necessary to drop the bucket mainframe assy. to replace the modular head.

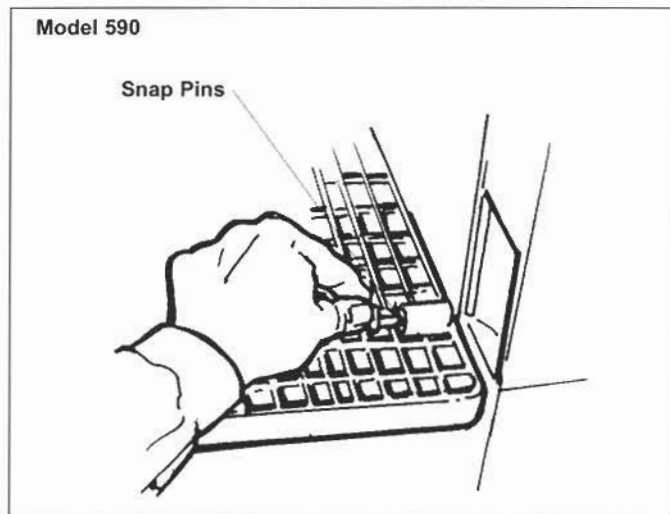


Figure 2-46. Lower Evaporator Cover

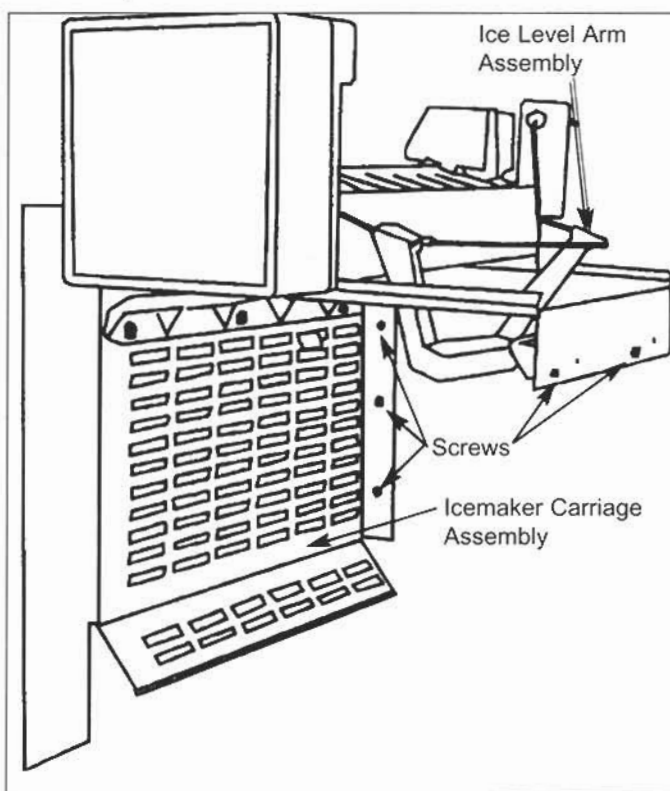


Figure 2-47. Lower Evaporator Cover

Ice Maker Auger Motor Assy. - Model 590

⚠ WARNING

Always disconnect electrical power to equipment before attempting repairs.

1. To access the ice auger motor, lift up and remove the freezer utility rack (Figure 2-44), then remove the top light diffuser. Remove the ice bucket.
2. Remove the front evaporator cover (Figure 2-45). It is secured with two screws on top and two screws on the bottom.
3. Remove the four screws and motor bracket (Figure 2-48).
4. Disconnect the motor leads and switch wiring harness (Figure 2-49).
5. To reassemble, reverse steps 1 - 4.

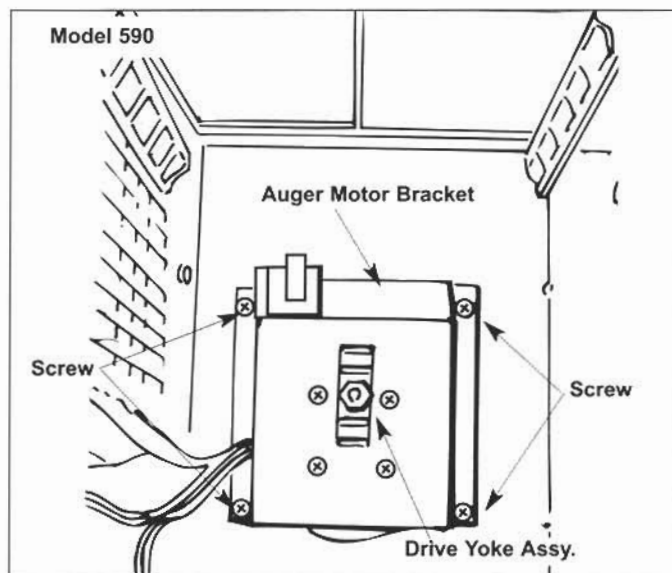


Figure 2-48. Auger Bracket

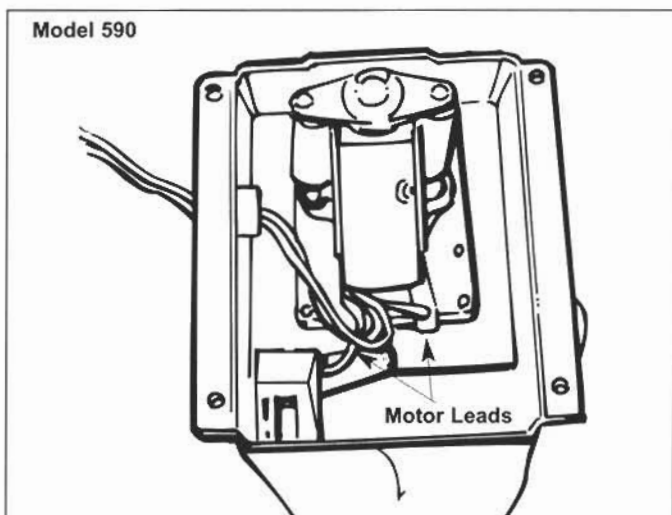


Figure 2-49. Auger Motor Assy.

Water Valve Solenoid - Models 501F, 511, 532, 542, 550, 561

The water valve is mounted to a bracket behind the kickplate at the left hand side (Figure 2-50).

⚠ WARNING

Always disconnect water to the unit and turn electrical power off at the master power switch before attempting repair.

1. To access and remove the water valve, first remove the kickplate.
 2. Loosen the mounting screw which secures the valve retainer plate.
- Push valve up and back.
- Disconnect electrical leads and inlet and outlet water lines.

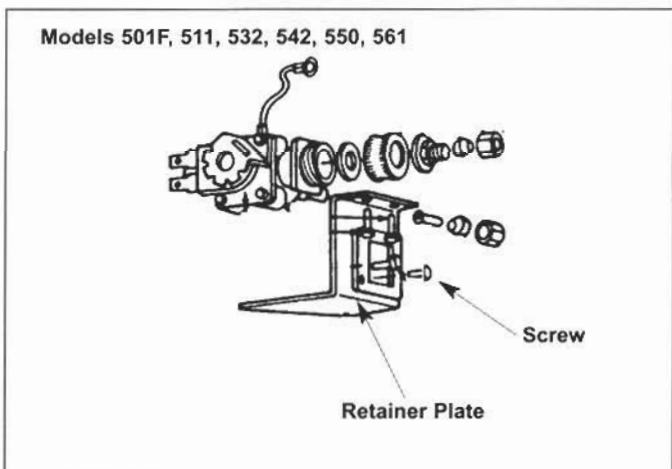


Figure 2-50. Water Valve Solenoid

Dual Water Valve Solenoid - Model 590

⚠ WARNING

Always disconnect water to the unit and turn electrical power off at the master power switch before attempting repair.

The dual water valve is located in the compressor area. The water supply connection is located underneath the unit (Figure 2-51). A copper water line from the supply connection is fed up the rear duct to the dual water valve.

Figures 2-52 & 2-53 illustrate the connections at the dual water before and after serial number 1259340.

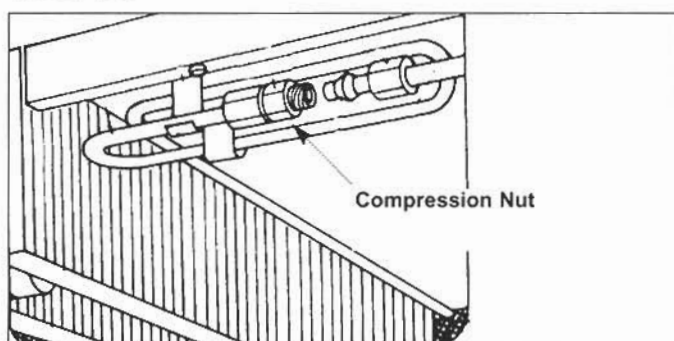


Figure 2-51. Water Supply Connection Location

Model 590 after S/N 1259340

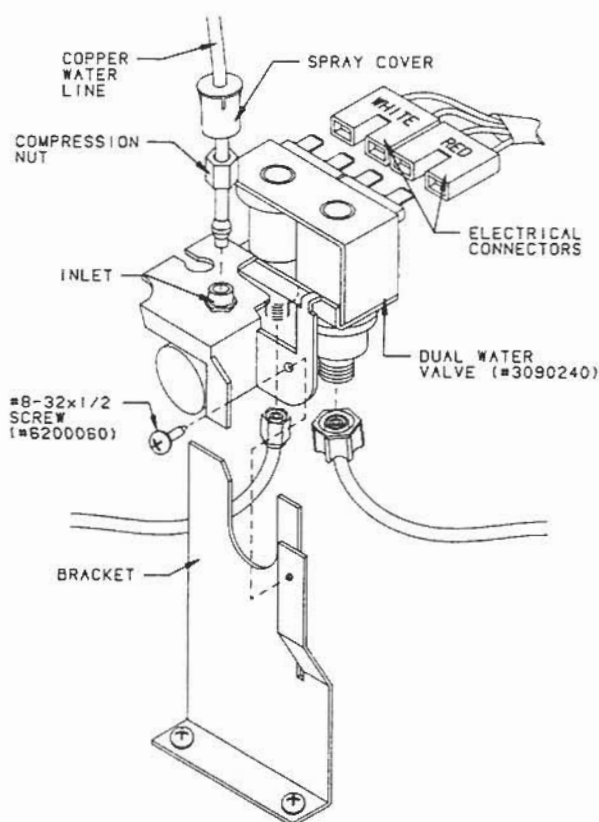


Figure 2-52. Water Valve Connection After S/N 1259340

Model 590 prior to S/N 1259340

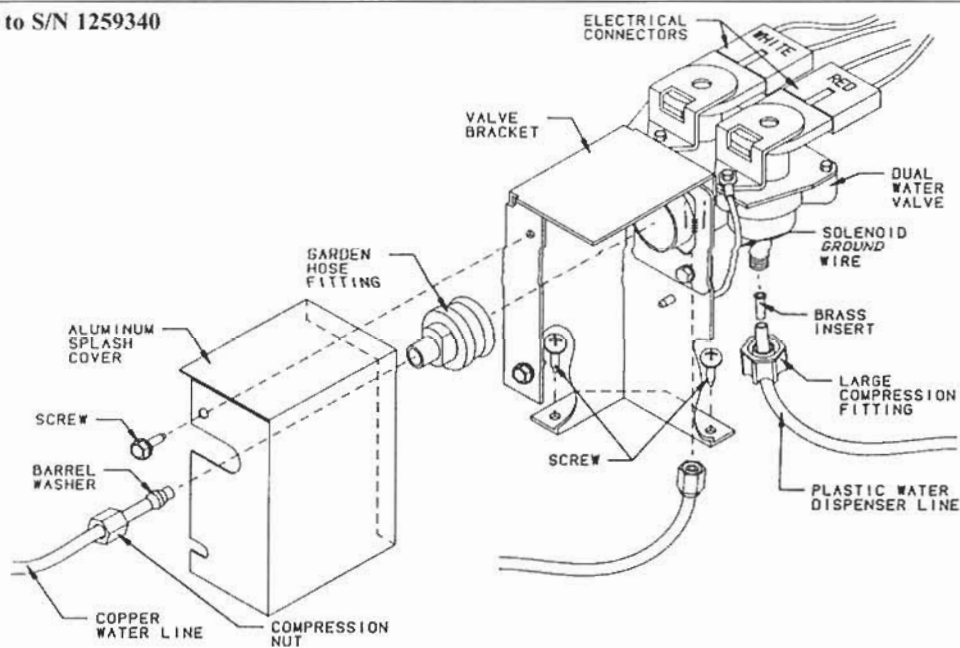


Figure 2-53. Water Valve Connection Prior to S/N 1259340

CONTROLS - MODELS 501R/501F

⚠ WARNING

Always disconnect electrical power to equipment before attempting repairs.

For access to the controls, use the following procedure:

1. Remove the overhead light shield by grasping the back edge of the shield and pulling forward to release, then drop the front edge out of the channel. (Figure 2-54).
2. Remove the two screws from the fan guard and lift out (Figure 2-55). Tilt the evaporator cover out at the top and lift off of the posts at the bottom.
3. The refrigerator control is mounted to the evaporator cover (Figure 2-56). Remove the control knob and two nuts. The control will pull off the mounting bracket.

NOTE: The Model 501F freezer control is mounted as an air sensing coil at back of the evaporator cover, above the evaporator (Figure 5-58).

NOTE: It is possible to reinstall the control 180° in the wrong position. Be sure the control readout is proper.

CONTROLS - MODELS 511, 550

⚠ WARNING

Always disconnect electrical power to equipment before attempting repairs.

For access to the controls, use the following procedure:

1. Remove the overhead light shield by grasping the back edge of the shield and pulling forward to release, then drop the front edge out of the channel. (Figure 2-54).
2. Remove the two screws from the fan guard and lift out (Figure 2-55). Tilt the evaporator cover out at the top and lift off of the posts at the bottom.

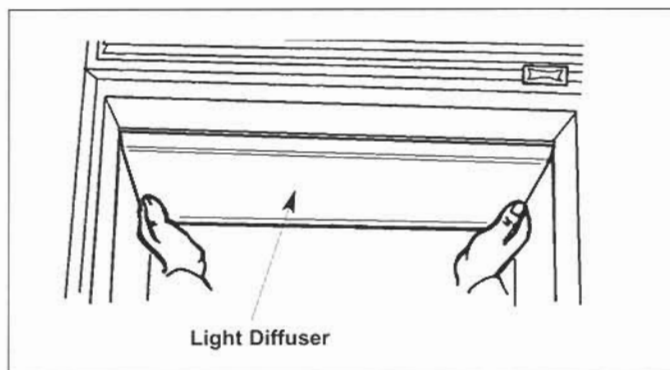


Figure 2-54. Light Diffuser

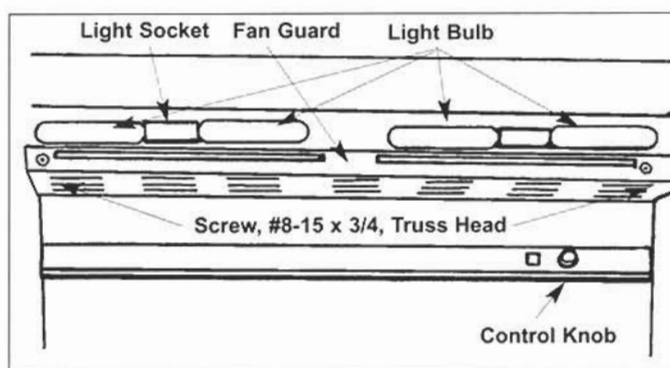


Figure 2-55. Fan Guard

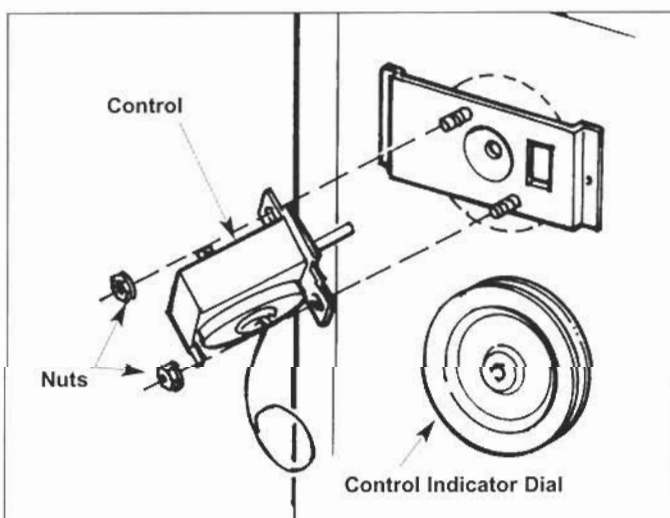


Figure 2-56. Control Assy.

- The controls are mounted to the evaporator cover (Figure 2-56). Remove the control knobs and nuts. The controls will pull off the mounting bracket.

NOTE: It is possible to reinstall the control 180° in the wrong position. Be sure the control readout is proper.

- Refrigerator Control** - The cap tube of the refrigerator control is routed through a channel formed by the evaporator fins. Pull the control bulb from the channel (Figure 2-57).

When reinstalling the control, follow the instructions that are supplied with the replacement control.

- Freezer Control** - The freezer control cap tube is routed to the back of the freezer, through a plastic tube from the refrigerator to the freezer area (Figures 2-58 & 2-59). Straighten the control bulb and pull back through. When reinstalling, push the bulb through the tube, then coil the excess bulb at the outlet.

CONTROLS - MODELS 532, 542, 561

⚠ WARNING

Always disconnect electrical power to equipment before attempting repairs.

Refrigerator Control

For access to the refrigerator control, use the following procedure:

- Remove the overhead light shield by grasping the back edge of the shield and pulling forward to release, then drop the front edge out of the channel. (Figure 2-54).
- Remove the two screws from the air diffuser and lift out (Figure 2-55). Tilt the evaporator cover out at the top and lift off of the posts at the bottom.
- The refrigerator control is mounted to the evaporator cover (Figure 2-56). Remove the control knob and two nuts. The control will pull off the mounting bracket.

Model 511, 550

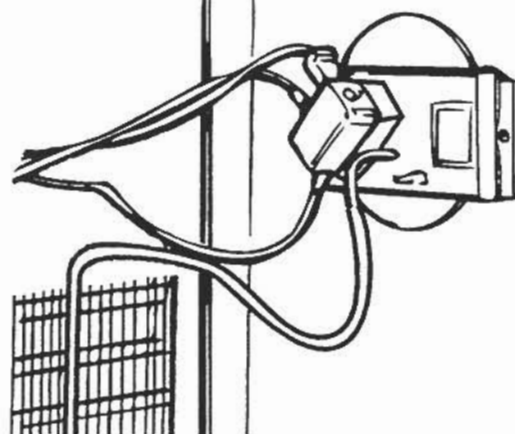


Figure 2-57. Refrigerator Control Routing

Model 511, 550

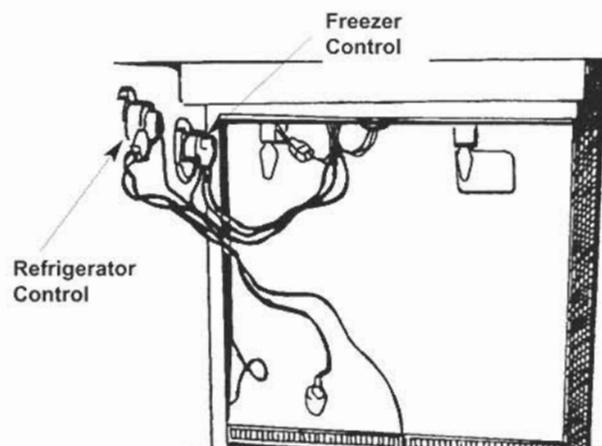


Figure 2-58. Controls Location and Routing

Model 511, 550

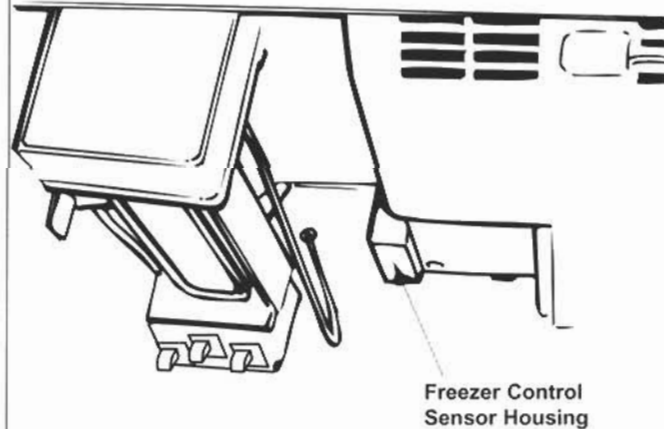


Figure 2-59. Freezer Control

NOTE: It is possible to reinstall the control 180° in the wrong position. Be sure the control readout is proper.

Freezer Control

1. Remove the mounting screws and remove the freezer control panel.

⚠ WARNING

Always disconnect electrical power before attempting repairs.

2. Disconnect the wiring block from the back of the panel and pull the panel out.
3. The freezer control and ice maker switch can be accessed from the back of the panel (Figure 2-60).

CONTROLS - MODEL 590

Refrigerator Control

1. Remove the water tank cover (Figure 2-61).
2. Remove the mounting screw located on the backside of the control panel, then remove the control assy.
3. Remove the three panel screws.
4. Remove the control dials, then remove the control (Figure 2-62 & 2-63) by unscrewing the mounting screws.

NOTE: Complete dual control instructions accompany replacement refrigerator control.

Freezer Control

1. Remove the water tank cover (Figure 2-61).
2. Remove the mounting screw located on the backside of the control panel, then remove the control assy.
3. Remove the three panel screws.
4. Remove the control dials (Figure 2-62 & 2-63), then remove the control by unscrewing the mounting screws.

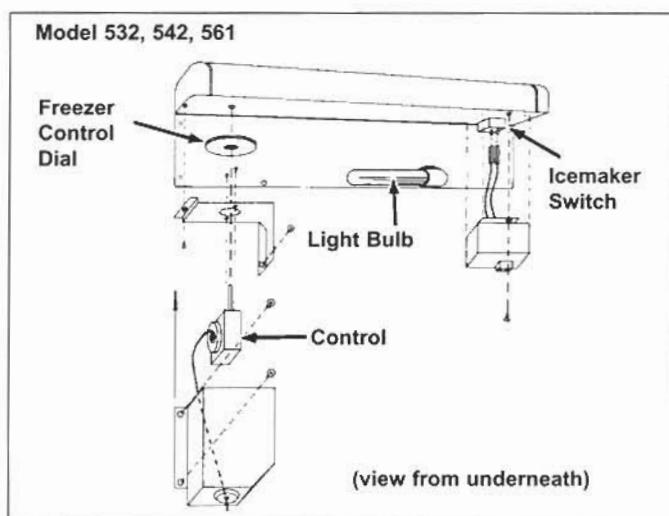


Figure 2-60. Freezer Control Area

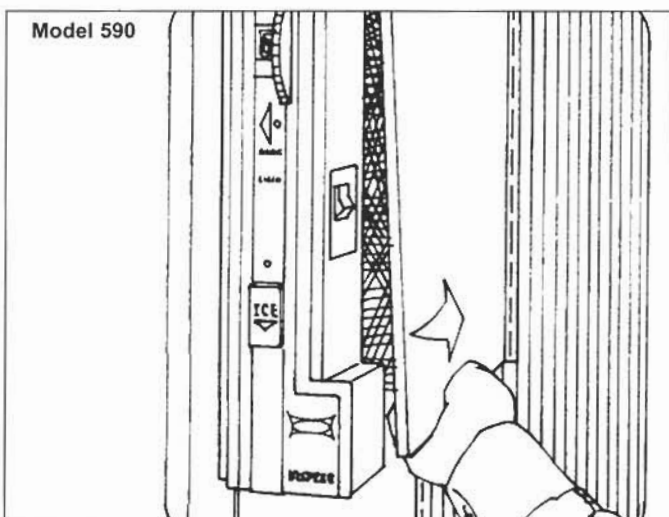


Figure 2-61. Water Tank Cover

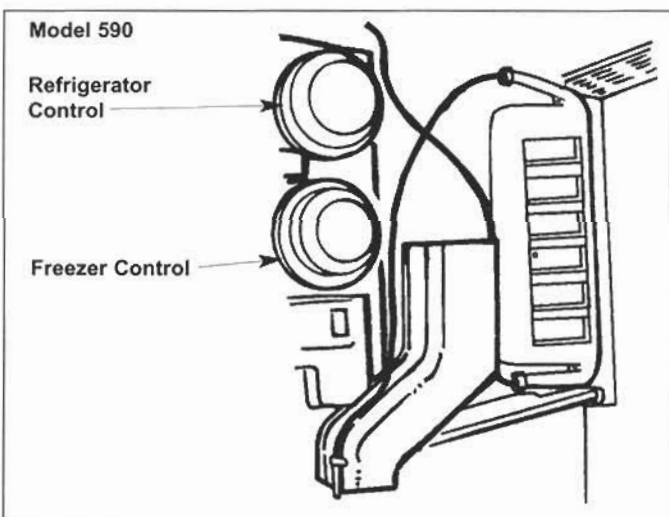


Figure 2-62. Water Tank

5. The freezer control bulb is inserted through a vinyl sleeve that leads to the freezer section.
6. When reinstalling, route the control bulb through a grommet to the freezer section, then downward into a plastic sleeve. The end of the control bulb should extend approximately 1" from the plastic sleeve (Figure 2-64).

Bulk Ice Switch - Model 590

1. Remove the water tank cover to access the bulk ice switch (Figure 2-63).
2. Remove the mounting screw located on the backside of the control panel, then remove the control assy.
3. Remove the three panel screws (Figure 2-63).
4. Remove the switch by pressing in the tabs securing the switch to the panel.

Ice Chute - Model 590

The ice chute is mounted to the center mullion wall (Figure 2-65). If there is a blockage in the chute, remove the water tank cover (Figure 2-61), then depress the two tabs so the front portion of the chute can be removed.

Water Tank Reservoir - Model 590

The water tank reservoir is held in place with three screws (Figure 2-63). The inlet tube at the bottom draws water in from the water valve, the outlet tube at the top carries the water to the dispensing unit.

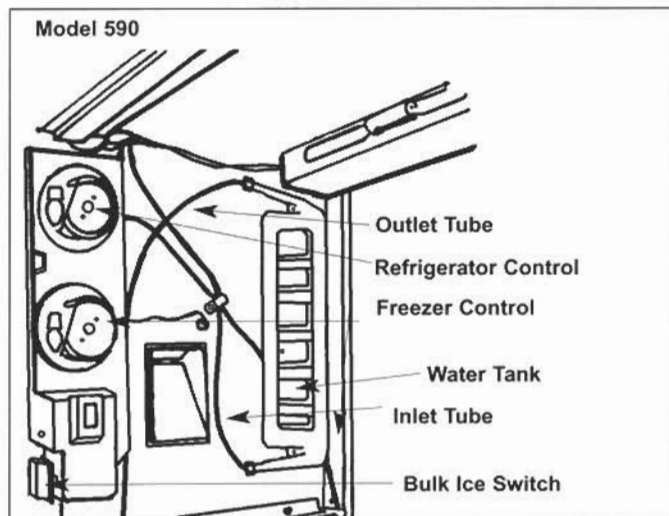


Figure 2-63. Control Panel

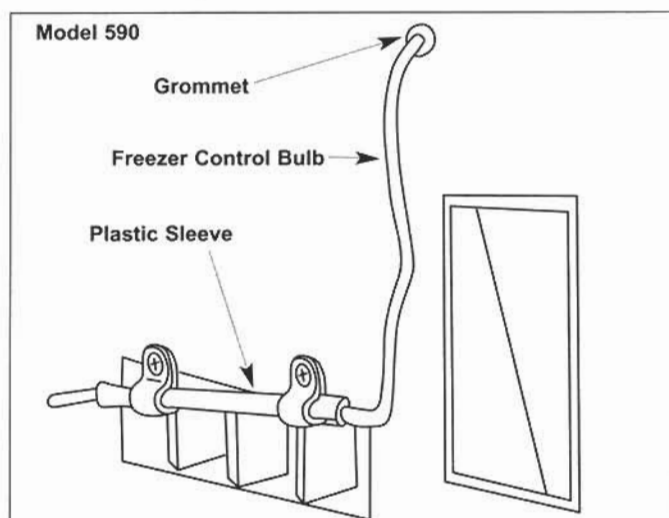


Figure 2-64. Freezer Bulb Routing

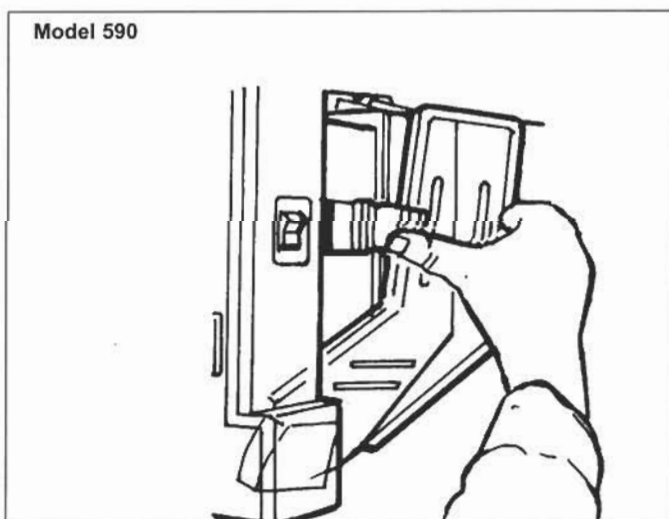


Figure 2-65. Ice Chute

EVAPORATOR ASSEMBLY MODEL 501F

⚠ WARNING

Always disconnect electrical power to equipment before attempting repairs.

⚠ WARNING

Evaporator coils are sharp and easy to bend; they are also very cold.

The larger finned tubes allow for efficient operation by drawing in the cabinet air and circulating it through this full width evaporator.

The design incorporates an eight pass defrost heater assy. along with a defrost drain tube heater (Figure 2-66). The defrost drain water is caught by the V-shaped drain trough. Because of the colder temperatures, a drain trough heater keeps the area warm during the defrost cycle only.

REFRIGERATOR EVAPORATOR ASSEMBLY - ALL MODELS

⚠ WARNING

Always disconnect electrical power at the master switch before attempting repairs.

⚠ WARNING

Evaporator coils are sharp and easy to bend; they are also very cold.

The larger fin tube design of the evaporator allows for a warmer coil operating temperature. Warmer operating temperatures provide advantages in inside humidity, compressor capacity and control "coil sensing" capabilities (Figure 2-67).

This evaporator coil incorporates an off-cycle defrost. Once the system is pulled down and the control is satisfied, the unit is shut down. The unit will remain off until the 39° F cut-in temperature is reached at the control.

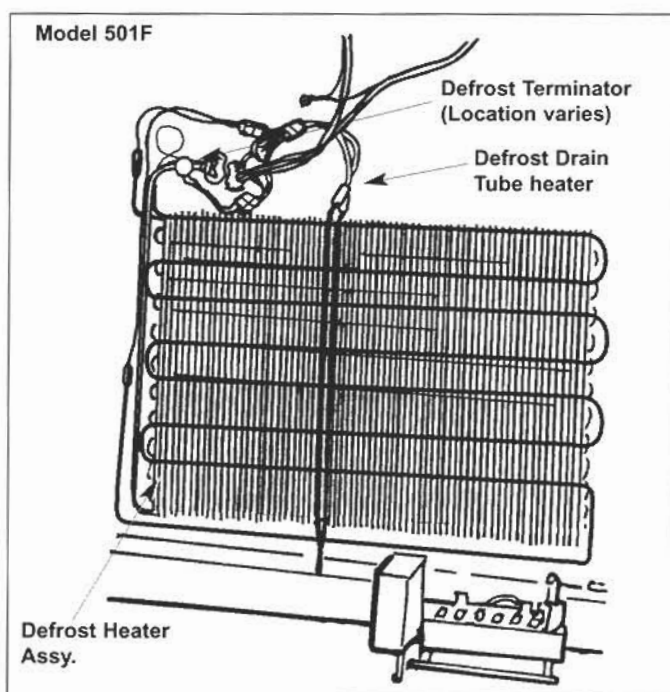


Figure 2-66. Evaporator Assy.

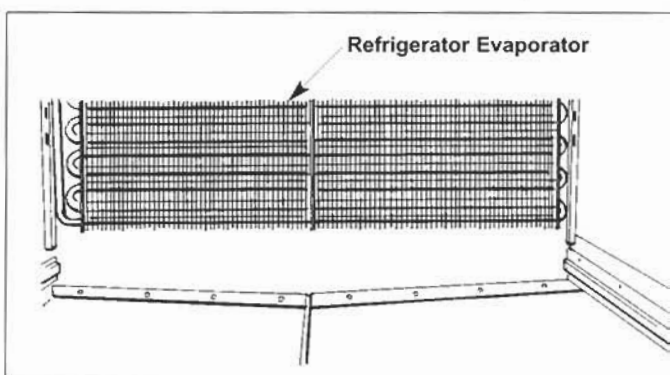


Figure 2-67. Refrigerator Evaporator Assy

LIGHT TERMINATOR

To prevent damage to plastic parts by lights overheating, a thermal switch is incorporated into the light system wiring. This design was incorporated starting with the following serial numbers:

| Model | Serial Number |
|-------|-----------------------------|
| 501R | M723972 / P725922 |
| 501F | M724222 / P726372 |
| 511 | M753523 |
| 550 | M722972 / P721572 |
| 532 | M722572 / P725022 |
| 542 | Regardless of Serial Number |
| 561 | M726672 & P725322 |
| 590 | Regardless |

The thermal switch specifications are:

Opens: 120°F+/-6°F

Closes: 85°F+/-7°F

On units equipped with the thermal switch, the lights will go off if the door is left open for extended periods (20-25 minutes). To reset the thermal switch, close the door for approximately 20 minutes. The light should then come back on when the door is opened. If it does not, the thermal switch may be faulty.

Before replacing the switch, check the mounting of the switch on the fan guard. It may be necessary to add a 1/8" stainless steel washer between the switch and the guard to prevent the bi-metal in the fuse from compressing (and opening) when the door is opened again.

NOTE: The thermal switch cannot be retrofitted to units built prior to the serial numbers listed above. The entire fan shroud assembly must be replaced.

See Figures 2-68 & 2-69 for thermal switch location.

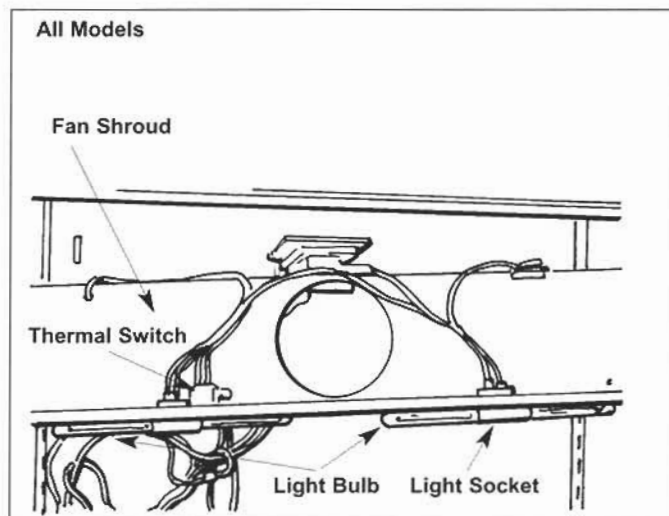


Figure 2-68. Thermal Switch-Refrigerator

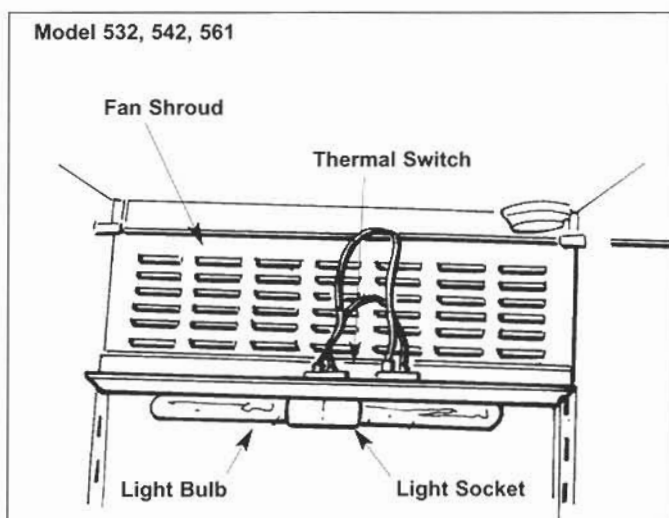


Figure 2-69. Thermal Switch-Freezer

UNIT ROLLER BASE ASSEMBLY**501R After S/N M834654/P835904****501F After S/N M834904/P836154****511 After S/N M830454****532 After S/N M824754/P827404****550 After S/N 824354/832954****561 After S/N 825954/P823654****590 Regardless of Serial Number****▲ CAUTION**

Floor should be protected with appropriate material to avoid damage from very heavy appliance when this unit is moved.

When the front leveling legs screwed all the way up into the base assy., the unit can be rolled in or out of its installation.

Use the adjustment bolt (located in front of the base assy.) to level the rear of the unit (Figure 2-70).

Turn the adjusting bolt clockwise to raise the back of the unit; turn counterclockwise to lower the back of the unit.

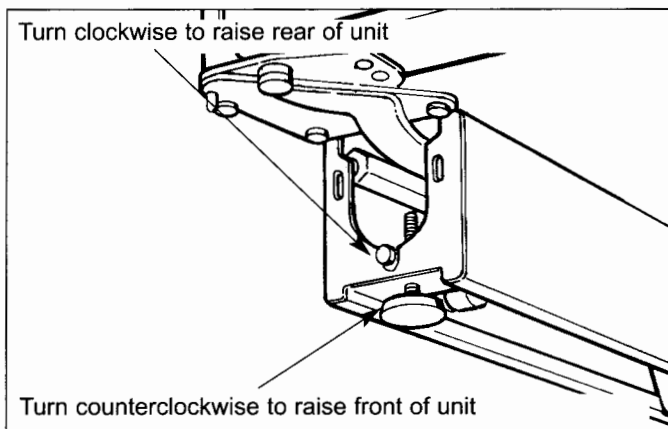


Figure 2-70. Roller Base Assy.