SECTION 2

INSTALLATION INFORMATION

INSTALLATION CONSIDERATIONS:

This section covers some of the more common installation issues seen by a service technician. An improper installation, though not a valid service issue, has the potential to lead to a customer placing a call for service. Installation related customer complaints could include, but are not limited to: Unit leveling, unit movement, door misalignment, doors and drawers not sealing, internal frost or condensation, warm compartment temperatures, exterior condensation, etc.

A WARNING

UNIT COULD TIP FORWARD UNDER CERTAIN LOAD CONDITIONS. FAILURE TO INSTALL ANTI-TIP COMPONENTS AND EXTEND FRONT LEVELERS TO FLOOR ACCORDING TO INSTALLATION MANUAL CAN RESULT IN SERIOUS INJURY OR DEATH.

NOTE: Always refer to the Installation Manual whenever installation related concerns arise, or contact the Sub-Zero Customer Service Department.

Unit Leveling (Model 424)

Unlike the other 400 Series units, the model 424 must be leveled before it is installed into the rough-in opening. (See WARNING above). To level the model 424, place it in front of the rough-in opening. Then, turn each of the four leveling legs clockwise to raise the unit, counterclockwise to lower the unit. (See Figure 2-1) An adjustable wrench or pliers may be needed.

NOTE: If removing a 424 from its installation, an antitip 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.

Unit Leveling (Models 427 & 427R)

NOTE: The unit must be in the correct installation position before leveling. (See WARNING above). The kick-plate/grille must be removed before leveling. (See Figure 2-3) If the unit has already been anchored to the cabinets, the side molding strips must be removed and the anchor screws must be extracted from the unit to cabinet brackets before leveling. (See Figure 2-4) These components must be reinstalled after leveling.

To level the unit, turn the front leveling legs counterclockwise to raise the front or clockwise to lower it. To assist in turning the front leveling legs up or down, use

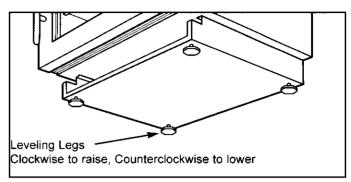


Figure 2-1. Model 424 Leveling Legs

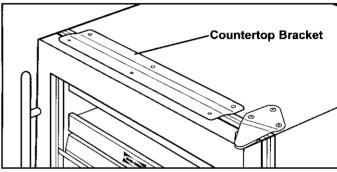


Figure 2-2. Model 424 Countertop Bracket

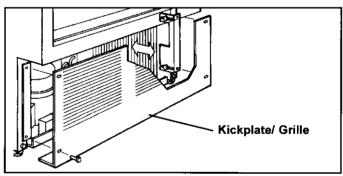


Figure 2-3. Model 427, 427R Kickplate/Grille Removal

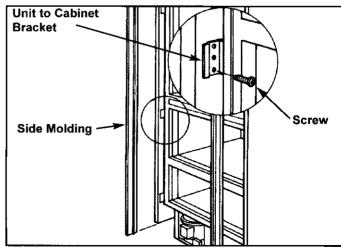


Figure 2-4. Model 427, 427R Molding Strip & Bracket

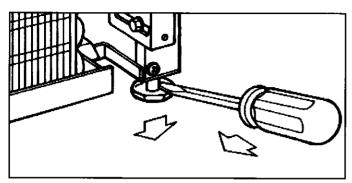


Figure 2-5. Model 427, 427R, 430 Adjusting Front Leveling Legs (427 Shown)

a standard screwdriver blade and place it in the foot of the front leg. (See Figure 2-5)

The rear levelers are adjusted from the front of the base by turning the Phillips head adjusting screw. Turn the screw clockwise to raise the rear or counterclockwise to lower it. (See Figure 2-6) The long adjusting screw reaches all the way to the rear leveler assembly.

NOTE: The rear leveling legs will only move 1/16" for every 18 revolutions on the Phillips head screw. Do not over torque. Use the lowest torque setting on any power screwdriver. Do not turn rear leveling legs by hand. Damage will occur if you turn these legs by hand.

Unit Leveling (Model 430)

NOTE: The unit must be in the correct installation position before leveling (See WARNING on previous page). The kickplate must be removed before leveling. (See Figure 2-7) If the unit has been anchored to the cabinets, the anchor screws must be extracted before leveling, then reinstalled after leveling.

To level the unit, turn the front leveling legs counterclockwise to raise the front or clockwise to lower it. To assist in turning the front leveling legs up or down, use a standard screwdriver blade and place it in the foot of the front leg. (See Figure 2-5 & 2-8)

The rear levelers are adjusted from the front of the base, using a 5/16" socket wrench. (The long adjusting screw just above the front leveler leg reaches all the way to the rear leveler/roller assembly.) Turn the adjusting screw clockwise to raise the rear or counterclockwise to lower it. (See Figure 2-8)

NOTE: Level is best checked at the top and side main-frame extrusion(s).

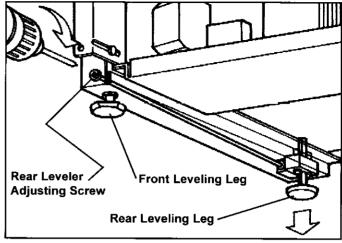


Figure 2-6. Model 427, 427R Adjusting Rear Leveling Leg

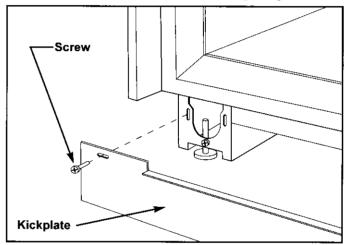


Figure 2-7. Model 430 Kickplate Removal

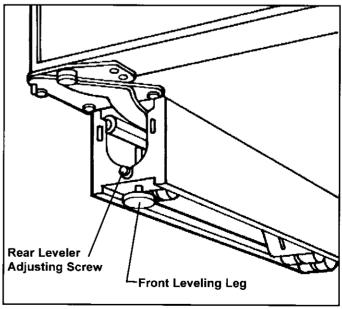


Figure 2-8. Model 430 Adjusting Rear Levelers

Door Adjustment (Model 424)

NOTE: The unit must be level before adjusting the door.

If the unit is properly installed, blocked and leveled, it may still be necessary to adjust the door(s) from left to right and/or in & out. Adjustments are performed at the top and/or bottom cabinet hinge(s).

NOTE: The door hinges on the 424 are non-adjustable.

To access and adjust the cabinet hinge(s), it will be necessary to pull the unit out approximately 6" from the rough-in opening. (See **NOTE** below.) Working on only one hinge at a time and using a 1/8" Allen wrench, loosen the three cabinet hinge screws, then "snug" them back down. (See Figure 2-9) Adjust door left to right, or in and out. After adjusting the door, re-tighten the screws and check for proper gasket seating.

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.

Door and Drawer Adjustment (Models 427 & 427R)

NOTE: The door on models 427 and 427R, as well as the drawers on the 427R are non-adjustable. Instead, the door and/or drawer <u>panels</u> must be adjusted if there is an alignment problem. Refer to the Installation Manual.

NOTE: The unit must be level before attempting to adjust the door and drawer panels.

Door Adjustment (Model 430)

NOTE: The unit must be level before adjusting the door.

If the unit is properly installed, blocked and leveled, it may still be necessary to adjust the door from left to right and/or in and out. Adjustments are performed at the top and/or bottom door hinge(s). Working on only one hinge at a time, remove the two small Phillips head shipping screws and discard them. Then loosen and "snug" the remaining Allen head screws. (See Figure 2-10 & 2-11) Adjust door left to right, or in and out. After adjusting the door, re-tighten the screws and check for proper gasket seating.

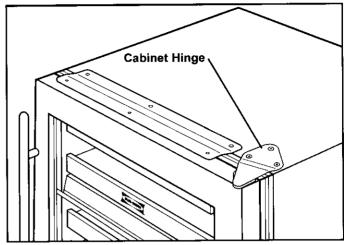


Figure 2-9. Model 424
Door / Cabinet Hinge Adjustment

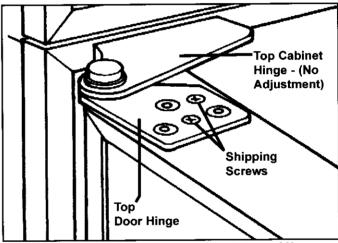


Figure 2-10. Model 430 Top Door Hinge

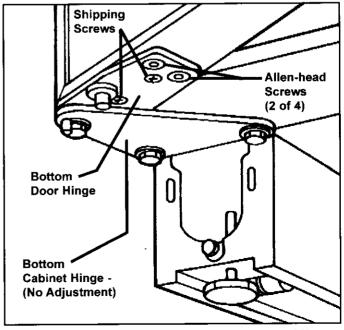


Figure 2-11. Model 430 Bottom Door Hinge

Door Stop Adjustment (Models 427 & 427R)

The models 427 and 427R have a 90° door stop cam built into the hinge system. The 90° door stop cam is located in the center portion of the hinge. To adjust it, use a standard straight-blade screwdriver to rotate the cam until you reach the stop point. (See Figure 2-12)

NOTE: You must make this adjustment at both bottom and top hinge.

Door Stop Installation (Model 430)

For the model 430, optional 90° and 105° door stops are available, free of charge from Parts Distributors and/or Product Distributors. The part number for the 90° stop is #DS90, and the part number for the 105° stop is #DS105.

To install a door stop on a model 430, the door must be closed. Slide the door stop cam up onto bottom hinge pin. The stub on the door stop fits into the hole on the cabinet hinge. Retain door stop by pushing the E-Ring into the groove at the end of the bottom hinge pin, making sure that the E-ring is clipped securely into the groove. (See Figure 2-13)

NOTE: Complete instructions accompany the part when ordered.

Door Panel Removal and Installation (All Models)

A WARNING

METAL DOOR PANELS MAY HAVE SHARP EDGES WHICH COULD INFLICT SERIOUS PERSONAL INJURY. PROTECTIVE GLOVES SHOULD BE WORN WHEN HANDLING PANELS.

DOOR PANELS MAY BE HEAVY OR UNSTABLE. IF THEY WERE TO FALL, THEY COULD CAUSE SERIOUS PERSONAL INJURY. CARE SHOULD BE TAKEN WHEN HANDLING.

Carbon, Platinum and Stainless Steel Door Panel Removal and Installation (Model 424)

NOTE: Models 424G/B, 424HAG/B, 424S/B, 424G/P, 424HAG/P, 424S/P, 424G/S, 424HAG/S, 424S/S, 424FS/G, 424FS/HAG and 424FS/S are are shipped from the factory with decorative steel panels and handles in place.

In order to remove the door panel, the door will need to be removed from the unit. To do this, you will need to pull the unit out approximately 6" from the rough-in opening to gain access to the door closer.

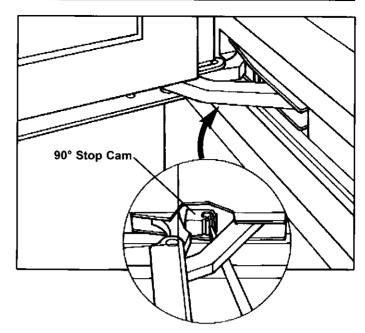


Figure 2-12. Model 427, 427R Door Stop Adjustment

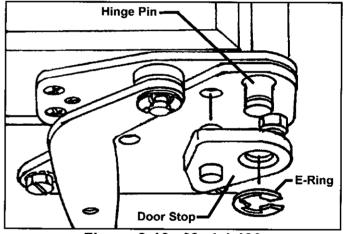


Figure 2-13. Model 430 Door Stop Installation

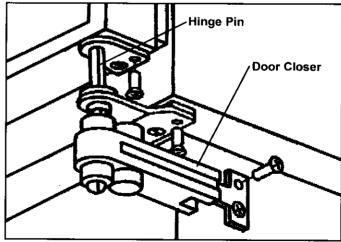


Figure 2-14. Model 424 Door Closer

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 two mounting screws securing the door closer to the side of unit base. Slide the door closer down off of the bottom door hinge pin. (See Figure 2-14)

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

Open the door and extract the two screws from the top door hinge. Lean the door away from the unit slightly and lift the door out of the bottom cabinet hinge. Lay the door down and remove the bottom door hinge and switch depressor. (If a lock and/or screws are present on the bottom handle side, remove them also.) Locate the Poly-tape under the gasket on the handle side which covers the handle mounting screw holes. (See Figure 2-15) Remove the tape, then extract the handle mounting screws and pull the handle from the front of the door. Now, lift the stainless steel panel from the door. (See Figure 2-16)

To install a stainless steel panel, reverse the steps above.

Overlay Door Panel Removal and Installation (Model 424)

NOTE: Overlay panels are attached to the door of a 424G/O, 424HAG/O and 424S/O, using screws passing through the door frame from the rear, into the panel. The handle may also be attached through the door frame or just through the panel.

To remove an overlay panel, open the door and locate the Poly-tape under the gasket which covers the panel mounting screw holes, and possibly the handle mounting screw holes. (See Figure 2-15) Remove the tape, then extract the panel mounting screws, and possibly the handle mounting screws. (See Figure 2-17) Now, pull the overlay panel from the door.

To install a new overlay panel, refer to the Installation Manual. If reinstalling the existing panel, reverse the steps above.

Door Panel Removal and Installation (Models 427 & 427R)

NOTE: The models 427 and 427R are NOT supplied with panels from the factory. Panels are purchased separately. Door panels are attached to the door of a

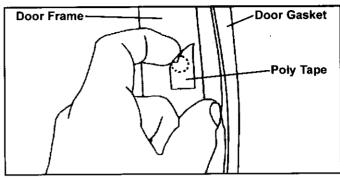


Figure 2-15. All Models
Poly Tape Over Handle Mounting Screws

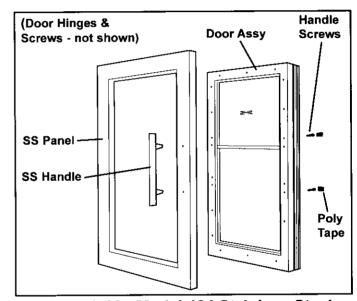


Figure 2-16. Model 424 Stainless Steel Door Panel Removal

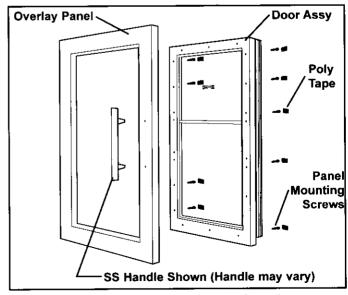


Figure 2-17. Model 424 Overlay Door Panel Removal

427 and 427R using screws passing through the door frame from the rear, into the panel. The handle is attached to the panel.

To remove a door panel, open the door and locate the Poly-tape under the gasket which covers the panel mounting screw holes. (See Figure 2-15.) Remove the tape, then extract the panel mounting screws. Now, pull the panel from the door. (See Figure 2-18.)

To install a new door panel on a 427 or 427R, refer to the Installation Manual. If reinstalling the existing panel, reverse the steps above.

Drawer Panel Removal and Installation (Model 427R)

NOTE: The model 427R is NOT supplied with panels from the factory. Panels are purchased separately. Drawer panels are attached to the drawers of a 427R using screws passing through mounting brackets at the bottom of each drawer, and a dog-eared bracket on the back of the panel fitting into slots in the face of the drawers. (See Figure 2-19.) Handles are attached to the panels.

To remove a drawer panel, open the drawer and locate the six screws at the bottom. Remove the screws, then pull the bottom of the drawer panel out slightly while pulling downward.

To install a new drawer panel on a 427R, refer to the Installation Manual. If reinstalling the existing panel, reverse the steps above.

Carbon, Platinum and Stainless Steel Door Panel Removal and Installation (Model 430)

NOTE: The models 430G/B, 430HAG/B, 430S/B, 430G/P, 430HAG/P, 430S/P, 430G/S, 430HAG/S, and 430S/S are shipped from the factory with decorative steel panels and handles in place.

To remove the stainless steel panel you will need to remove the door from the unit. If a door stop has been installed, it must also be removed at this time. (See the "DOOR STOP INSTALLATION, (Model 430)" section in this manual.) First, detach the door closer assembly from the bottom door hinge by opening the door until the hole in door closer arm aligns with the 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. Then, pry the door closer arm down off of the door hinge stud. (See Figure 2-20, and CAUTION on next page)

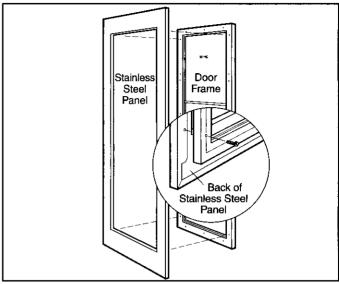


Figure 2-18. Model 427, 427R Door Panel Removal

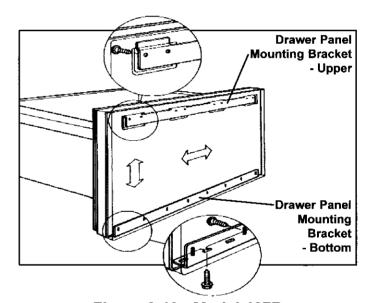


Figure 2-19. Model 427R Drawer Panel Removal

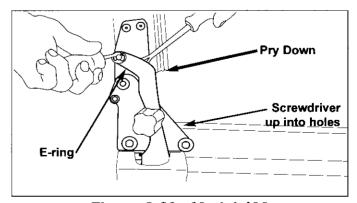


Figure 2-20. Model 430 Detaching Door Closer

A CAUTION

Door closer is spring loaded and may recoil quickly when detached.

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.

Open the door fully and extract the hinge-side trim mounting screws located just behind the vertical rib of the hinge-side trim, then remove the hinge-side trim. (See Figure 2-21) Extract the screws from the top door hinge. Lean the door away from the unit slightly and lift the door out of the bottom cabinet hinge. Lay the door down and remove the bottom door hinge. (If a lock and/or screws are present on the bottom handle side, remove them.) Remove the panel mounting screws from the hinge side of the door. Locate the Poly-tape under the gasket on the handle side which covers the handle mounting screw holes. (See figure 2-15) Remove the tape, then extract the handle mounting screws and pull the handle from the front of the door. Now, lift the stainless steel panel from the hinge side first, pivoting it off of the handle side of the door. (See Figure 2-22)

To install a stainless steel panel, reverse the steps above.

Framed & Overlay Door Panel Removal and Installation (Model 430)

NOTE: Framed and overlay panels are attached to the door of a 430G/F, 430HAG/F, 430G/O, 430HAG/O, 430S/F and 430S/O by sliding the 1/4" thick edge of the panel under the door trim. On the handle side of models 430G/O and 430S/O, additional screws passing through the door frame from the rear, into the panel may have been used for increased support. On the 430G/O, 430HAG/O, and 430S/O, the handle may also be attached through the door frame, or just through the panel.

To remove a framed or overlay panel, you must first remove the handle, or trim on handle side if overlay application. Using a piece of tape stuck to the center of the magnetic trim molding, pull the trim molding out at the midpoint to expose the handle mounting screws (See Figure 2-23). Remove the mounting screws and pull the handle, or trim on handle side, from the door. You should be able to slide the panel towards the handle side, and out from under the door trim at this time. If the panel will not slide from under the door trim, panel mounting screws and/or handle mounting screws may have been used. Open the door and locate the Polytape under the gasket. This tape covers the panel

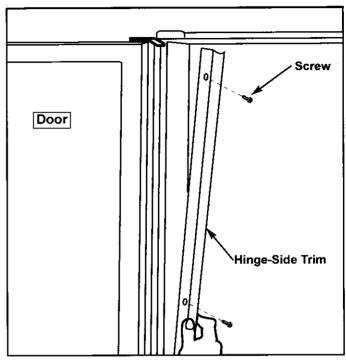


Figure 2-21. Model 430 Hinge-Side Trim Removal

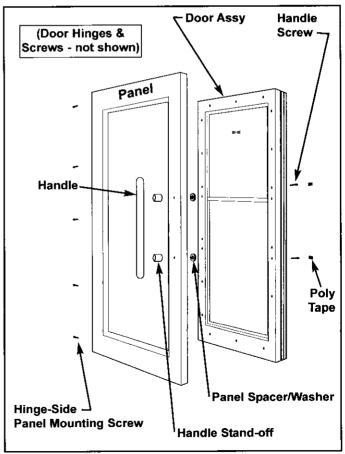


Figure 2-22. Model 430 Stainless Steel Door Panel Removal

mounting screw holes, and possibly the handle mounting screw holes. Remove the tape, then extract the panel mounting screws, and possibly the handle mounting screws. Now, you should be able to slide the panel towards the handle side, and out from under the door trim. (See Figure 2-24)

To install a new framed or overlay panel, refer to the Installation Manual. If reinstalling the existing panel, reverse the steps above.

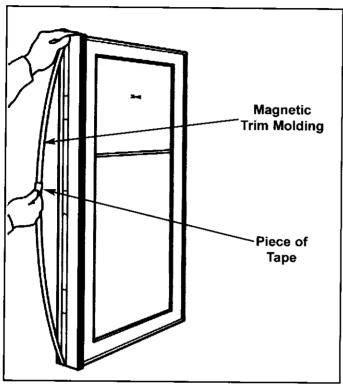


Figure 2-23. Model 430 Trim Molding Removal

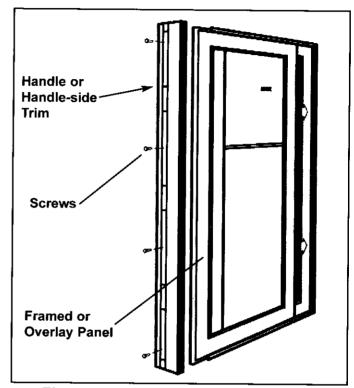


Figure 2-24. Model 430 Framed and Overlay Handle / Handle Side Trim & Door Panel Removal