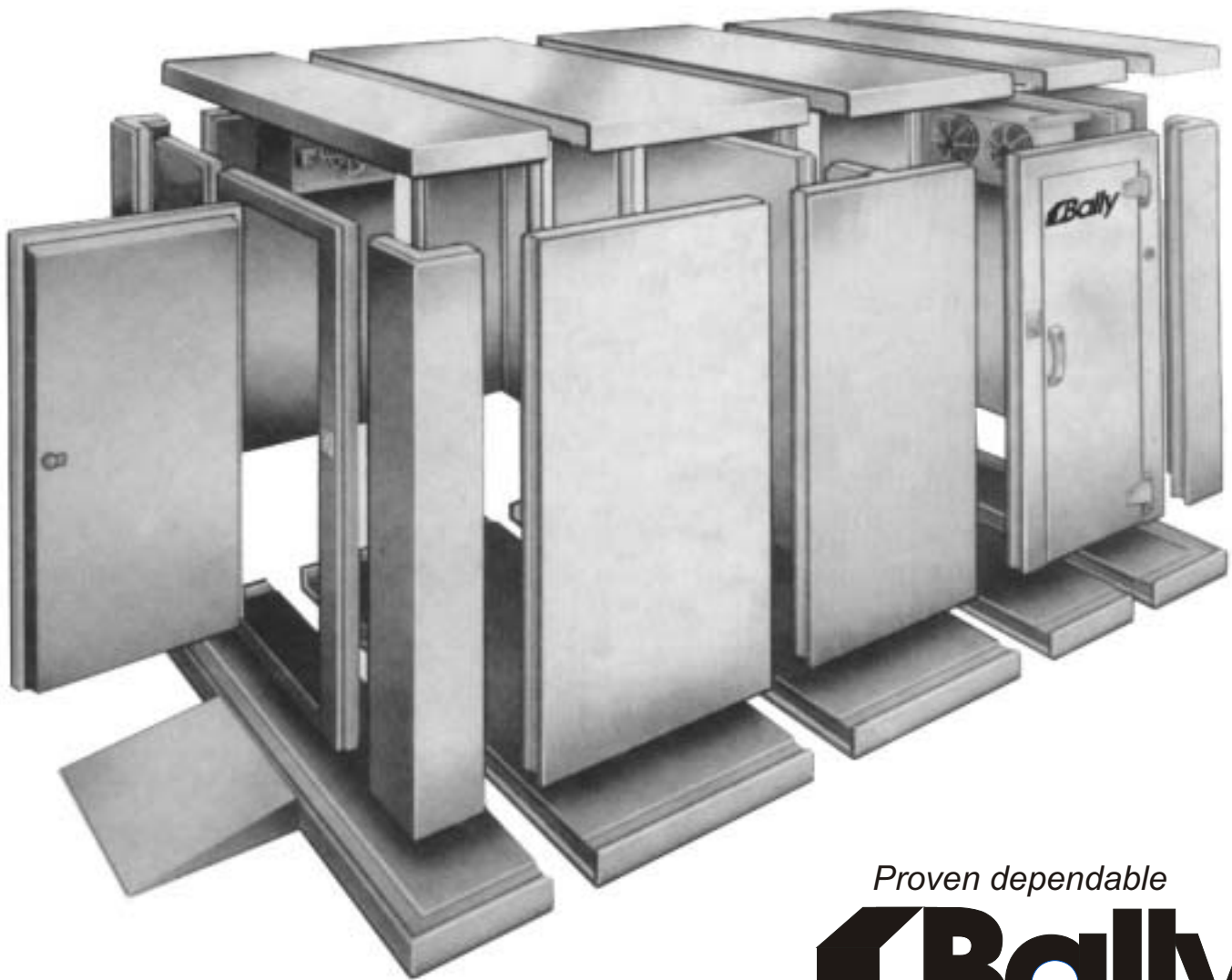


# SERVICE MANUAL

## Bally pre-engineered walk-in coolers/freezers



*Proven dependable*

**Bally**  
REFRIGERATED BOXES, INC.™

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## Installation information

Please fill in the spaces below and retain this manual for easy reference.

Purchaser's name and address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Date installed: \_\_\_\_\_

Name of installer: \_\_\_\_\_

Installer's phone number: \_\_\_\_\_

Walk-in serial number (from plate above door): \_\_\_\_\_

\_\_\_\_\_

Refrigeration system model numbers and serial numbers:

\_\_\_\_\_

\_\_\_\_\_

Notes: \_\_\_\_\_

**For immediate service, call Bally's Parts and Service Hotline toll-free: 1-800-344-9302**

## 1. Routine maintenance

- A. Walk-in panels should be periodically wiped clean with a damp cloth. Use only mild soap to clean the panels--never abrasive pads or powders that could mar the finish.
- B. Heater wires should be checked for proper function. Feel for warmth around the door frames and the perimeters of the doors and pressure relief ports, if applicable. Note: Ice buildup around doors indicates leakage or heater failure. Contact a serviceman immediately.
- C. Keep door gaskets clean with a solution of water and mild soap.
- D. Inspect refrigeration units periodically.
- E. Never flush the inside of the walk-in with water.
- F. Don't overload the walk-in with product. Maintain orderly storage to permit good airflow within the unit.

## 2. Adjusting self-closing hinges on reach-in doors

- A. Hinges shown in Fig.1 are for left-hand swinging doors. A mirror image of this hinge is used for right-hand swinging doors.
- B. Do not oil door hinges. If dirt accumulates on the Delrin cams and causes them to bind, apply dry silicone spray lubricant.
- C. Begin by determining whether the hinge is correctly adjusted. When the strap of the hinge is flush with the flange, there must be clearance as shown in Fig. 1. Without clearance, the door may not close. Adjust the hinge by following these steps:
  1. Open the door 90 degrees and lift the door from its hinge bases.
  2. Adjust the hinges as shown in Fig. 2.
  3. Replace the door on its hinge bases. Check to make sure door operates properly.

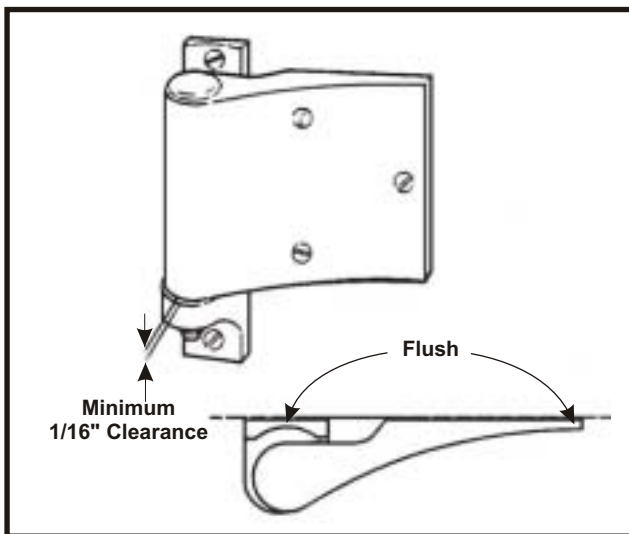


Fig. 1

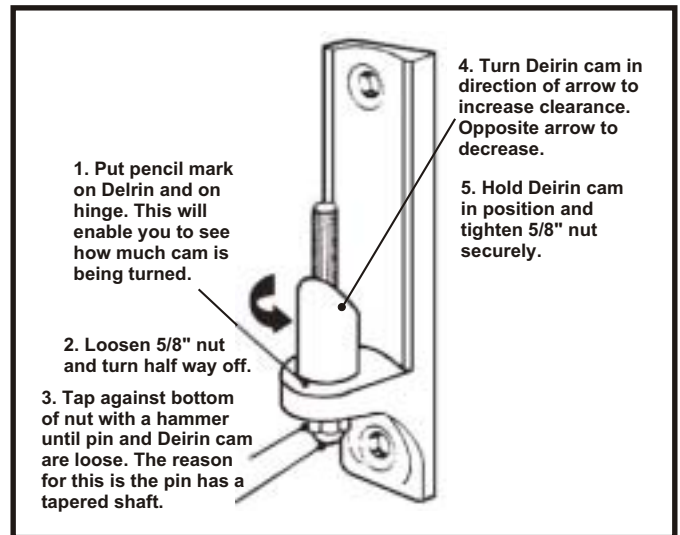


Fig. 2

## 3. Non-adjustable D-125 spring-loaded hinges

- A. The spring compression of D-125 hinges (as shown in Fig. 3) is factory-set and never needs adjustment. The self-closing cam is factory-positioned for the proper closing force, and cannot be field-adjusted.

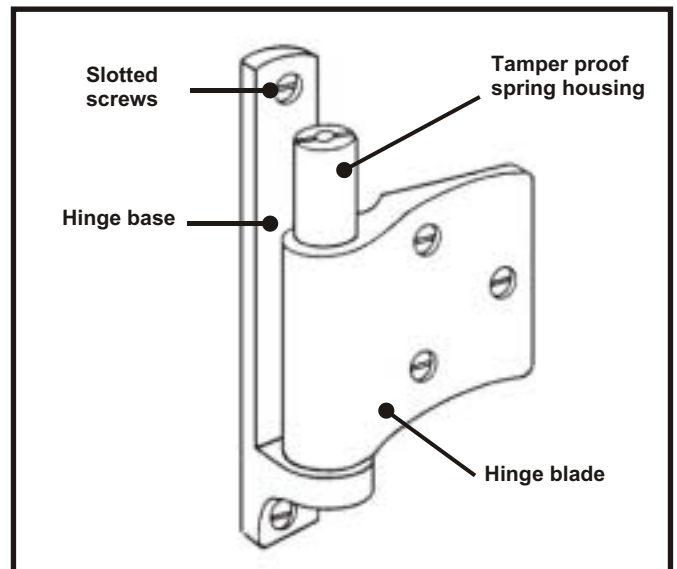


Fig. 3

## 4. Shimming walk-in door hinges

- A. If the walk-in door is installed properly, no shimming is required. Shim only where improper structural procedures at the walk-in site, mis-application or poor installation of the door panel have caused the door cap to seal improperly. If the door cap toes outward at the top or bottom of the latch side of the panel, shim the diagonally opposite hinge base outward, forcing the corner of the door cap back into alignment with the door frame for a positive seal. See Fig. 4.

- B. To shim hinges on walk-in doors, loosen the machine screws on the base of the hinge enough to slip the required number of shims into place behind the base. See Fig. 5. Where tamper-proof screws are used, loosen them by tapping the screw head counter-clockwise with a center punch and hammer as shown in Fig. 6.
- C. Retighten machine screws and check door cap for proper seal.

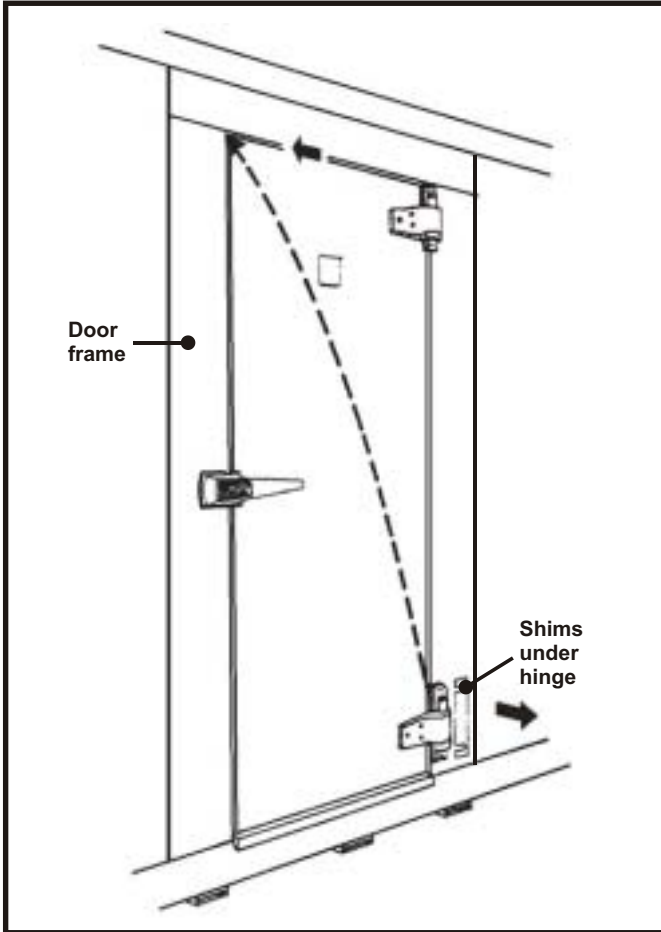


Fig. 4

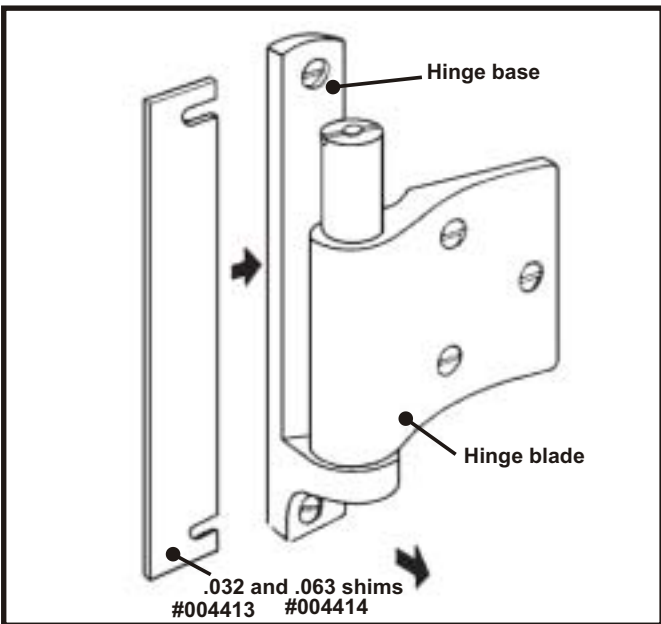


Fig. 5

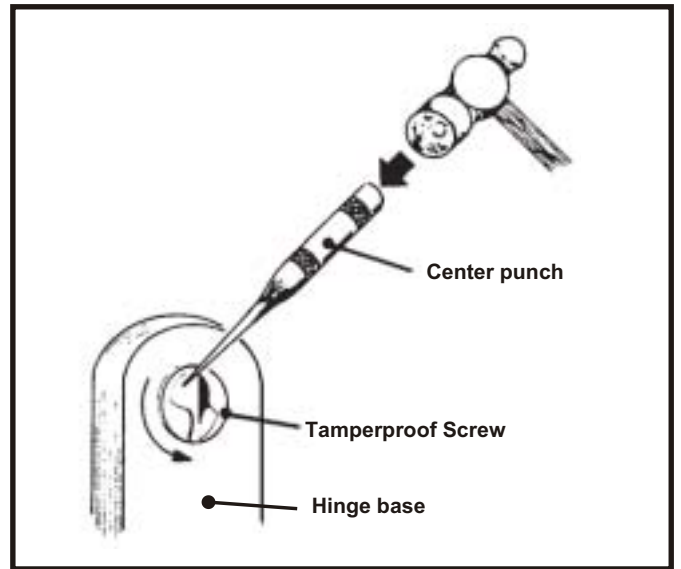


Fig. 6

## 5. Replacing klixon on pressure relief port

- A. Disconnect power at its source.
- B. Remove the electrical junction box cover above the pressure relief port.
- C. Remove the screws located in flanges on the exterior of the pressure relief port unit, and lift the unit from the panel.
- D. Disconnect the appropriate wire nuts in the junction box. Remove and replace the defective klixon (#017083). See Fig. 7.
- E. Caulk around the perimeter of the opening, and replace the pressure relief port. Rewire and replace the junction box cover. Reconnect electrical power. See Fig. 8.

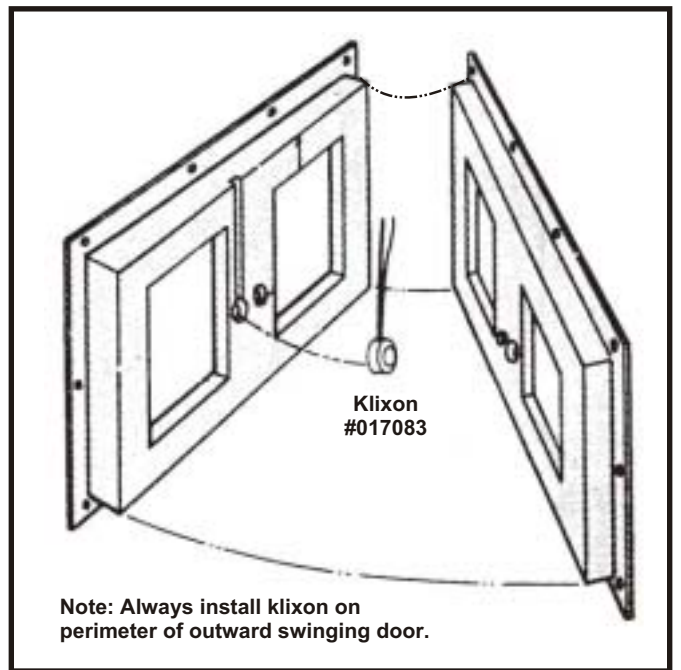


Fig. 7

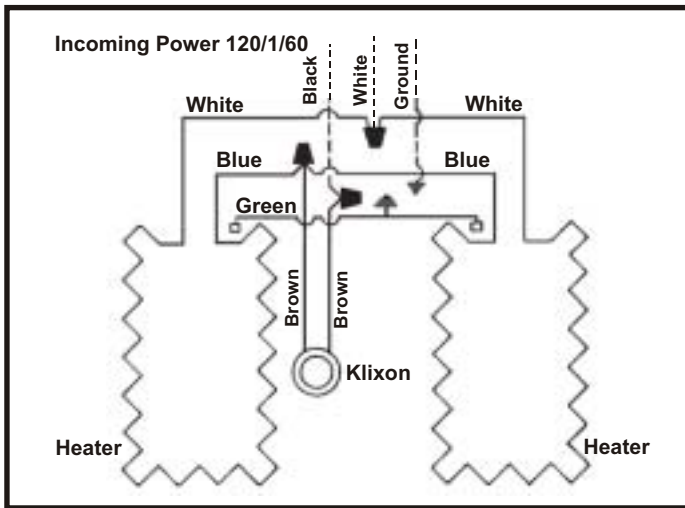


Fig. 8

## 6. Replacing anti-condensate heaters on pressure relief ports

- A. Disconnect the power supply at its source.
- B. Remove the port door by removing the two screws from the poly-hinge at the top of the door.
- C. Remove the stainless steel door strikes by removing the two screws in the top and bottom flanges.

Disconnect the defective anti-sweat heater in the junction box at the top of the door. Discard the old heater.

- E. Place the new heater (#015628) where the old one was and reassemble the door strikes. Be careful not to pinch the heater beneath the door strikes.

- F. Replace the port door on the door frame and refasten the screws. See Fig. 9.

- G. Reconnect the electrical power.

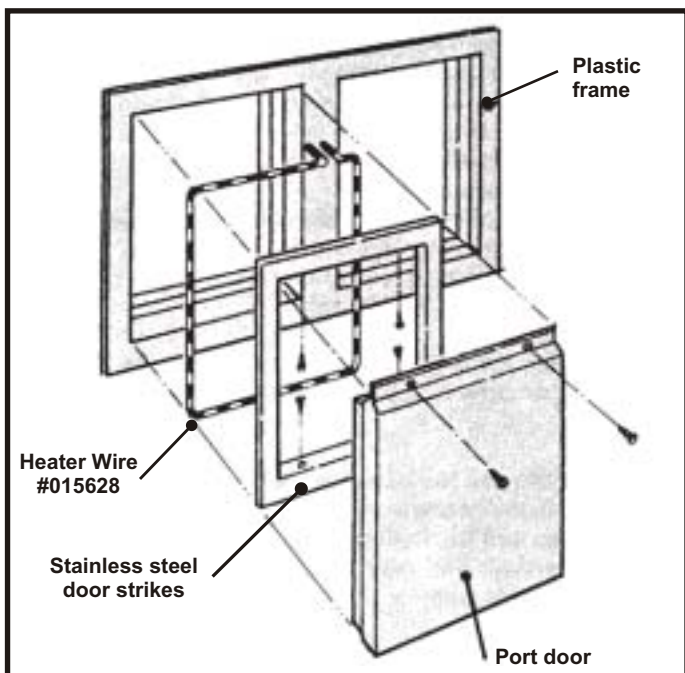


Fig. 9

## 7. Replacing magnetic gasket on pressure relief port

- A. Remove the port door by removing the two screws from the poly-hinge at the top of the door. See Fig. 10.
- B. Remove the interior plastic panel from the door by removing the screws around its perimeter beneath the magnetic gasket.
- C. Remove and discard the defective gasket.
- D. Position the new gasket (#016597) and the interior plastic panel on the door; secure with screws.
- E. Reinstall the door.

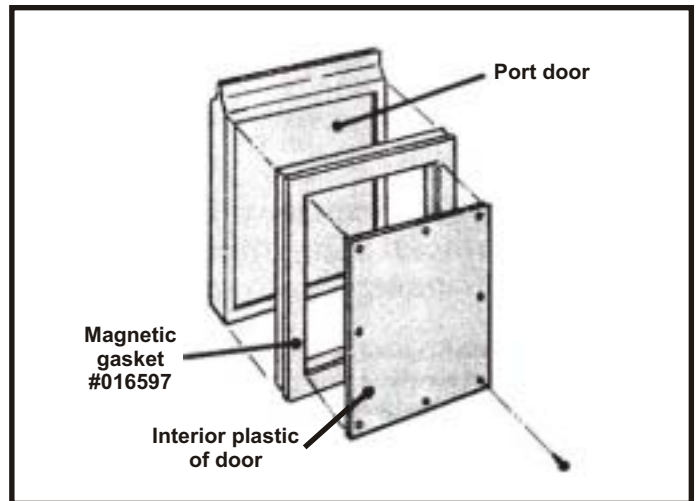


Fig. 10

## 8. Replacing magnetic gasket on hinged reach-in doors

- A. To replace the magnetic door gasket, it is necessary to remove the door from the walk-in. Simply open the door and lift it off the hinge bases. Lay the door face-down on a flat working surface.
- B. Remove the defective gasket and clean the surface where the new gasket will be placed.

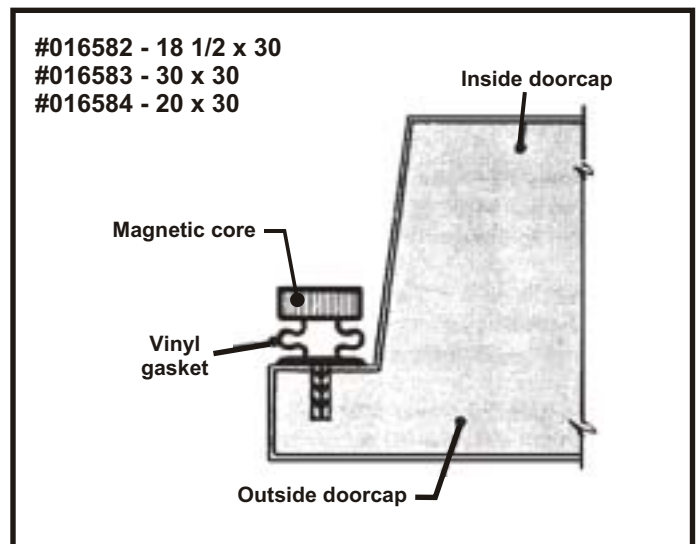


Fig. 11



- C. Position the new gasket and tap firmly into place with a wood block and hammer. Be sure the gasket lies flat as shown in Fig. 11.
- D. Place the door back on the hinges. Check the door for proper operation and seal.

### 9. Replacing magnetic door gasket on hinged walk-in doors

- A. Remove the old gasket and clean the surface where the new gasket will be placed.
- B. Position the new gasket, starting at the top corners. Tap it into place with a wood block and hammer. Do not stretch the gasket to make it fit. Be sure the gasket lies flat as shown in Fig. 11. Replace the door.

Check door for proper operation and seal.

C.

### 10. Replacing anti-condensate heater element around door frame of hinged reach-in doors

- A. De-energize the outside power source leading to the door frame junction box. Open the door a full 180 degrees and lift it from the hinge bases.
- B. Remove the screws from the stainless steel door strikes around the door frame. Remove the strikes. See Fig. 12.
- C. Remove the cover plate from the junction box on the inside of the door frame. Locate and disconnect the defective heater element from the door frame.
- D. Remove the defective heater element from the door frame.
- E. Apply a small bead of silicone sealant around the perimeter of the door frame to retain the new heater element. Press the new heater element firmly into the corner around the perimeter of the door frame. The heater element may also be taped into position with UL-approved electrical tape. See Fig.12. Run the heater leads into the junction box.
- F. Reconnect the heater element to the outside power source. Recaulk the opening in the door where the heater wire passes into the junction box.
- G. Replace the door strikes and junction box cover plate. (Be careful not to break or pinch the heater element.) Replace the door on the hinge bases.
- H. Re-energize the power source to the door frame junction box. Check the door for proper operation and seal.

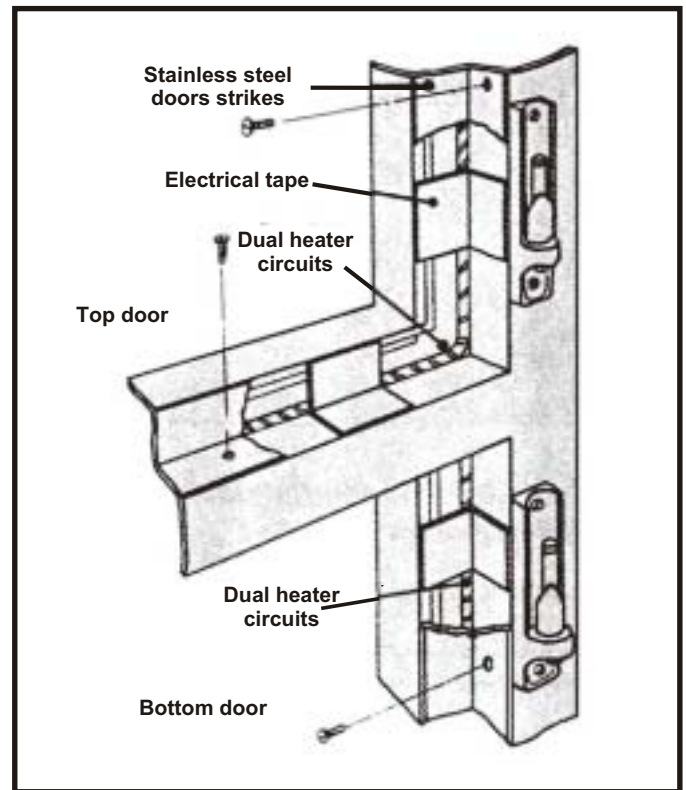


FIG. 12

### 11. Replacing anti-condensate heater element around door cap of hinged walk-in door panel (if applicable)

- A. De-energize the outside power source leading to the door frame light junction box.
- B. In order to replace the heater element, it is necessary to remove the door from the walk-in. First, disconnect the crossover cord from the light junction box on the door frame. Remove the screws from the bases of the hinges which are mounted to the door frame. Disengage the door latch and remove the door. Lay the door face-down on a flat working surface. A large piece of cardboard or plywood can be used to close off the open doorway until the door can be remounted.
- C. Disconnect the defective heater element in the corner where the rubber cord protrudes through the inside door cap.
- D. Connect the new heater element to the defective one and use the defective one to pull the new one into the door to the proper location. Pull the entire element through, leaving just enough lead at the starting point to make a splice into the rubber cord.
- E. After the heater element is pulled around the perimeter of the door, make splices to the rubber cord. See Fig. 13 for wiring connection.

- F. Shim the door in order to relocate the hinge base mounting screws and replace the screws. Rewire the crossover cord to the light junction box on the door frame.
- G. Re-energize the outside power source to the door frame light junction box.
- H. Check door for proper operation and seal.

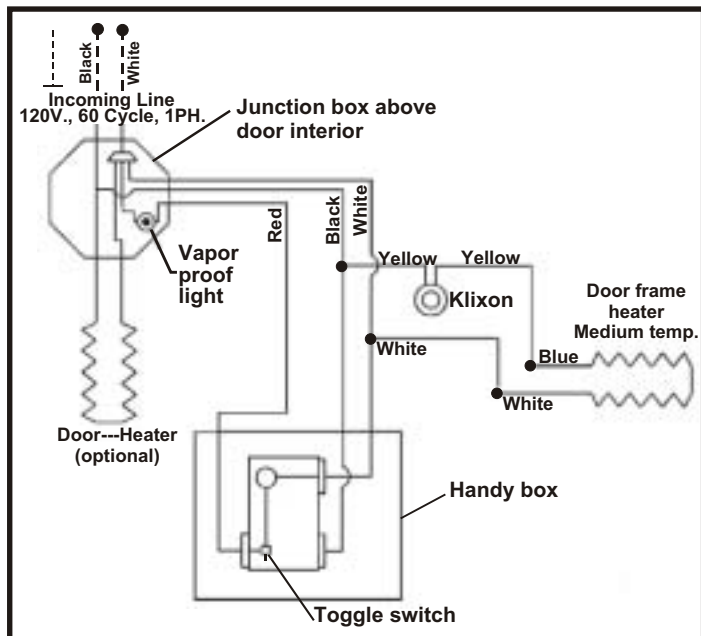


Fig. 13

## 12. Replacing anti-condensate heater element around door frame of hinged walk-in doors

- A. Disconnect the outside power source leading to the door frame light junction box. Open the door 180 degrees. A large piece of cardboard can be used to close off the open doorway until the door is remounted.
- B. Remove the light switch on the exterior of the door panel. Disconnect the heater wire leads by unscrewing the wire nuts. Remember how the wires are connected so you attach the proper leads on the new wire.
- C. Remove the screws from the door strikes around the door frame. Remove the strikes. See Fig. 14.
- D. Remove the screws which secure the stepplate. Remove the stepplate.
- E. Remove the defective heater element from the door frame and the grooved hardboard at the base of the frame. Take note of the position of the heater element in the grooved hardboard before removing it. (For replacement or update heaters, a new hardboard will be supplied with an installation diagram.)
- F. Apply a small bead of silicone caulking around the perimeter of the door frame to retain the new heater element until the door strikes can be reinstalled.

- G. Guide the leads of the new heater element into the switch box containing the light switch. Note: Only heater wire leads are to protrude into the switch box--this will prevent premature heater burnout. Press the heater element firmly into the corner around the perimeter of the door frame. Locate and press the heater element back into the grooved hardboard exactly the same way it was removed. When the heaters are first energized, they will contract. If the wire is not pressed into the corners, it could short out by pulling too tight against the edges of the strikes and sillplate.
- H. Replace and secure the stepplate to the walk-in floor. Replace the door strikes. Be careful not to pinch the wires when remounting the hardware.
- I. Reconnect the new heater element to the heater wire leads. Recaulk the opening in the door frame where the heater wire passes through into the junction box. This is very important.
- J. Re-energize the outside power source to the door frame light junction box.

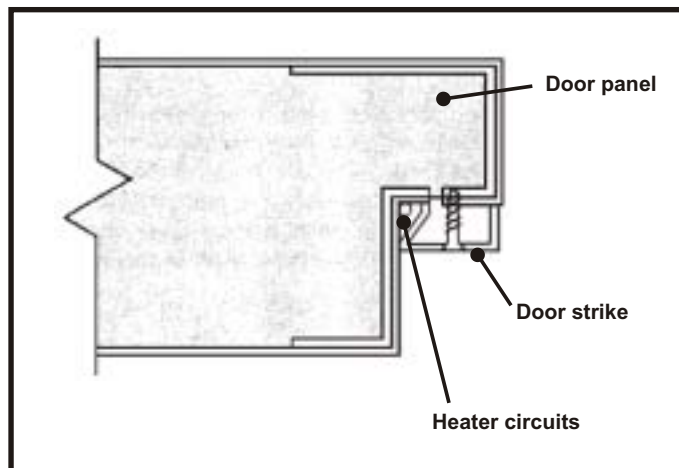


Fig. 14

### 13. Replacing wiper gasket at bottom of hinged walk-in door

- A. Open the door 90 degrees.
- B. Grasp the old gasket and pull it away from the interior skin of the door. Clean the surface where the new gasket is to be placed.
- C. Position the new gasket; tap it into place with a wood block and hammer. Do not force the gasket into place; excessive force may damage the door cap.

If the gasket binds when the door is closed, the

- D. gasket is too wide. Be sure the gasket is properly centered, and trim the ends as needed. See Fig. 15

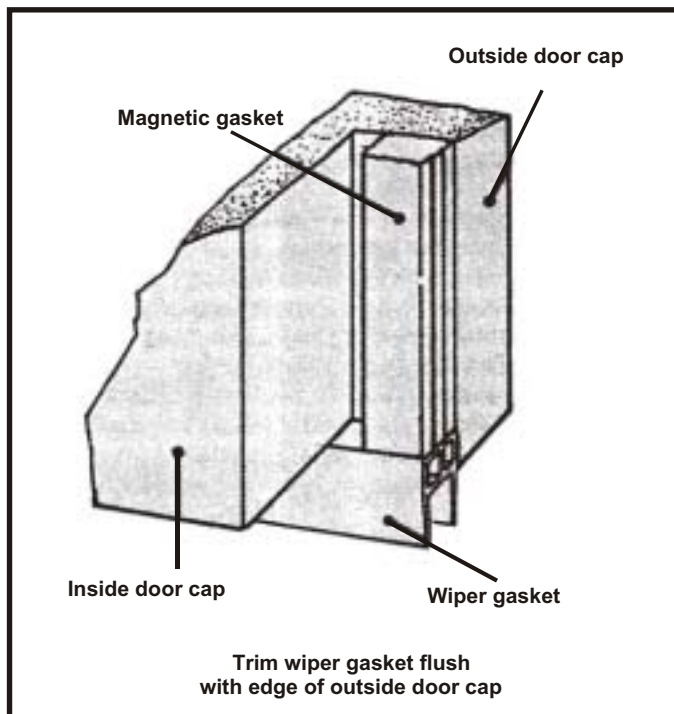


Fig. 15

### 14. Replacing D-125 spring-loaded hinges on walk-in door panels

- A. Close the door. Securely shim it between the outside doorcap and the door frame. Remove the slotted machine screws from the hinge base and blade. Refer to Fig. 6 if tamperproof screws are used. Remove the defective hinge assembly. Secure the new hinge assembly with a screwdriver by tightening the machine screws in the same holes.

Remove the shims around the perimeter of the door frame.

- B. frame.

Open the door and check for proper operation and

- C. seal.

### 15. Replacing hinges on reach-in door panels

- A. Close the door and shim the cap securely around the perimeter of the frame. Remove the slotted machine screws from the hinge base and blade. Refer to Fig. 6 if tamperproof screws are used. Remove the defective hinge assembly. See Fig. 16 for clarification.
- B. Secure the new hinge assembly using a screwdriver to tighten the slotted machine screws in the same holes.
- C. Remove the shims around the perimeter of the door frame.
- D. Open the door and check for proper operation.

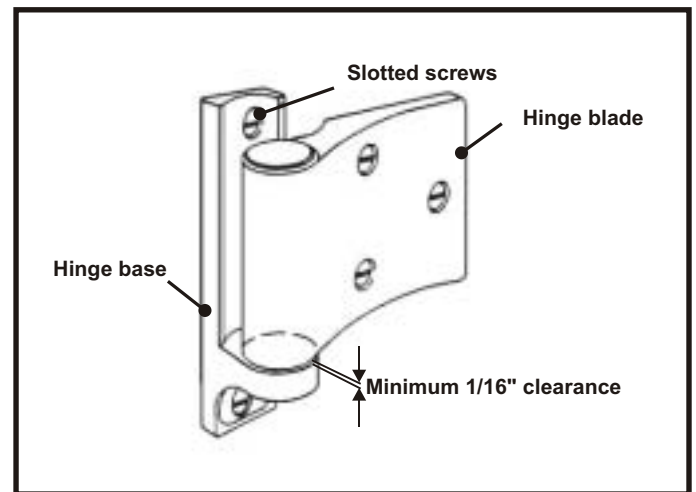


Fig. 16

### 16. Replacing the D-100 touch latch on walk-

- A. See Fig. 17. Remove the defective latch assembly. First remove the handle spring clip from under the handle at the back of the latch base, using a pair of needlenose pliers.
- B. Using a hammer and punch, punch out the latch handle pin and remove the latch handle pin. Remove the three 1/4-20 oval-head machine screws from the latch base and remove the base.
- C. From the inside of the walk-in, drill out the roll pin from the safety release handle and remove the handle. Pull the strike bolt from the outside away from the walk-in wall. The strike plate will fall away.
- D. Secure the new D-100 latch base to the walk-in door with three 1/4-20 oval-head machine screws.
- E. Insert the new strike bolt with attached strike plate into the holes on the door jamb panel.
- F. Locate the new safety release handle parallel with the strike bolt cam and tight against the interior of the walk-in wall. Drill a 1/8" d. hole into the strike bolt and insert the roll pin as shown in Fig. 17. The fit should be fairly tight when the handle is moved upwards.



**G.** Insert the latch handle spring into the indicated hole on the latch base. Slip the latch handle over the latch base and align all holes. Be sure the latch handle spring engages the latch handle tab on the underside of the handle. When the holes are aligned, insert the latch handle pin into the assembly and center the slot in the pin with the slot in the base.

**H.** With needlenose pliers, carefully insert the handle spring clip from the back of the latch and into the base slot and over the latch handle pin. This will secure the handle to the base. See Fig. 18.

**I.** Open and close the door several times to assure proper operation of the latch.

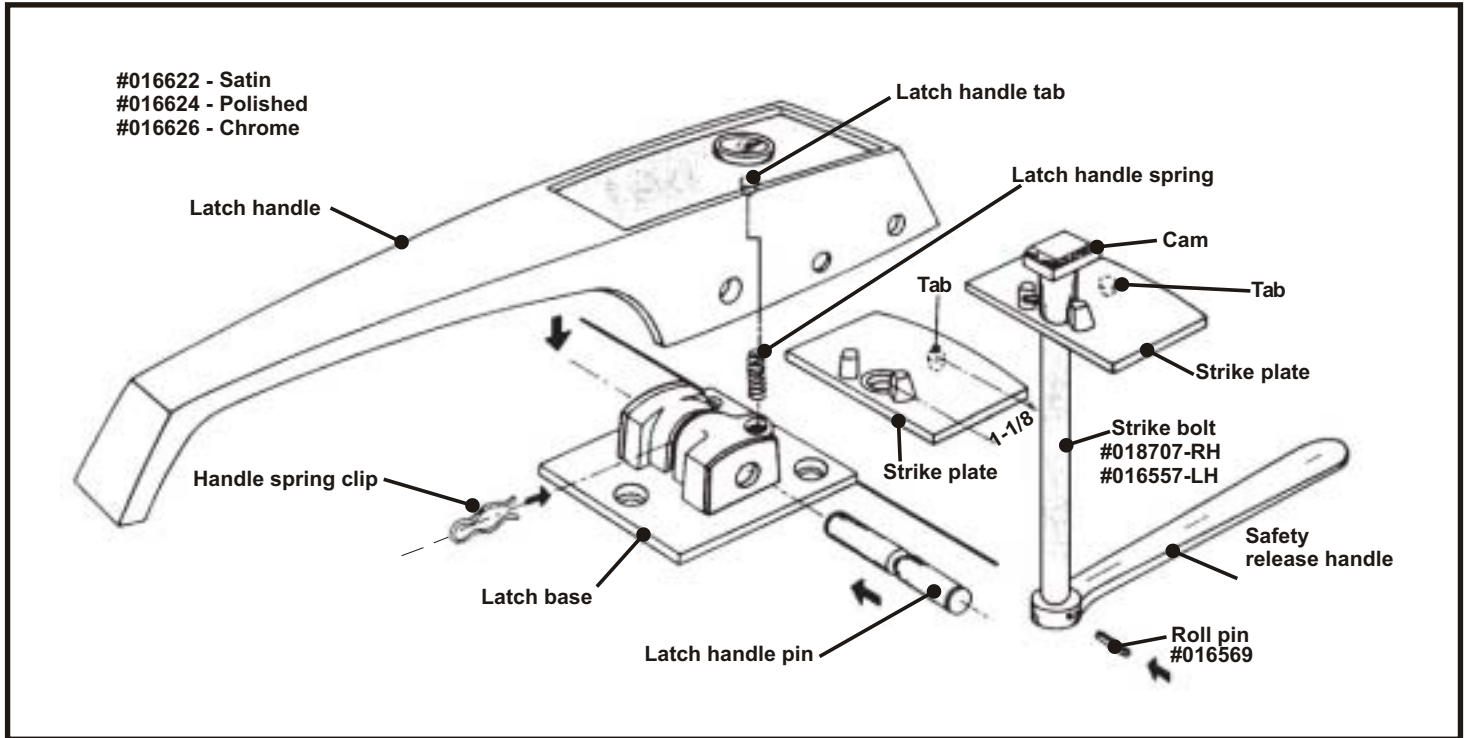


Fig. 17