



# Warming Cabinet Door Reversal



Read this manual before operating this table!

This information is necessary for the safe and efficient operation of the equipment.

Distributed by:

Skytron  
5085 Corporate Exchange Blvd. S.E.  
Grand Rapids, MI 49512 (616) 656-2900  
[www.Skytron.us](http://www.Skytron.us)

Manufactured by:



MAC Medical, INC.  
820 South Mulberry Street  
Millstadt, IL 62260 (618) 476-3550  
[www.macmedical.com](http://www.macmedical.com)

The base language for this document is ENGLISH. Any translations must be from the base language document.

Printed copies are not controlled documents.

Although current at the time of publication, Skytron'S policy of continuous development makes this manual subject to change without notice. If current manuals are required, contact your local Skytron representative or contact Skytron directly at the distribution addresses listed above.

## TABLE OF CONTENTS

TITLE	PAGE
<b>SECTION 1. REQUIRED TOOLS .....</b>	<b>2</b>
<b>SECTION 2. DOOR REVERSAL PROCESS OVERVIEW .....</b>	<b>2</b>
<b>SECTION 3. DETAILED DOOR REVERSAL PROCESS.....</b>	<b>2</b>
PROCESS 1. Remove the Panels .....	2
PROCESS 2. Remove the Header Assembly Box.....	3
PROCESS 3. Reverse the Door Hinges .....	5
Hinge Reversal for Glass Doors .....	5
Hinge Reversal for Steel Doors .....	7
<b>SECTION 4. REVISION HISTORY .....</b>	<b>10</b>



## WARNING

To avoid risk of electric shock, follow the facility's lock out and tag out procedures prior to performing door installation.

## SECTION 1. REQUIRED TOOLS

• Phillips Screwdriver	• Crescent Wrench
• 3/8" Wrench	• Power Drill
• Drift Punch	• 1/8" Drill Bit
• Hammer	• #8-32 Tap
• Pliers	• Measuring Tape
• Utility Knife	• Flathead Screwdriver

## SECTION 2. DOOR REVERSAL PROCESS OVERVIEW

This section provides a birds eye view of the door reversal steps. Later sections describe each of the following steps in detail.

1. Remove the panels - See "PROCESS 1. Remove the Panels" on page 2.
2. Remove the header assembly box - See "PROCESS 2. Remove the Header Assembly Box" on page 3.
3. Reverse the hinges
  - **For glass door warming cabinets** see "PROCESS 3. Reverse the Door Hinges" "Hinge Reversal for Glass Doors" on page 5
  - **For steel door warming cabinets** see "PROCESS 3. Reverse the Door Hinges" "Hinge Reversal for Steel Doors" on page 7
4. Replace the header assembly box, reverse the steps for "PROCESS 2. Remove the Header Assembly Box" on page 3.
5. Replace the panels, reverse the steps for "PROCESS 1. Remove the Panels" on page 2.

## SECTION 3. DETAILED DOOR REVERSAL PROCESS

### PROCESS 1. Remove the Panels

The following steps for panel removal apply to steel and glass door cabinets.

Before reversing door hinges, the header cam lock assembly must be reversed.

1. Unscrew the four top panel screws then lift off the top panel (Figure 1).
2. Unscrew the two screws, one on either side of the inside panel, and lift the inner panel out (Figure 1).



Figure 1. Remove Top Panels

3. Remove the screws located inside the cabinet (one on each side) near the bottom as in Figure 2 and Figure 3. (Door removed for clarity in these illustrations.)



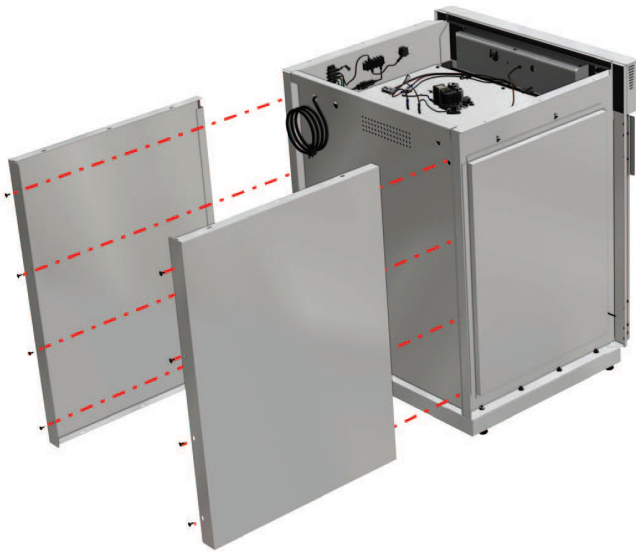
Figure 2. Remove interior cabinet screws - glass door unit





**Figure 3. Remove interior cabinet screws - steel door unit**

4. Remove the eight screws at the back of the cabinet (four on each side) and slide out both side panels (Figure 4).



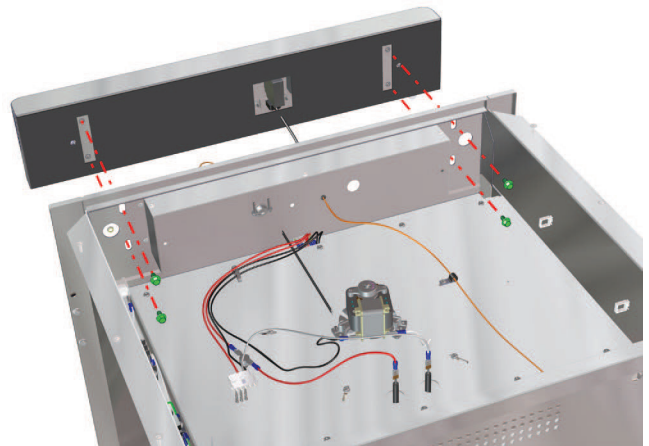
**Figure 4. Remove side panels**

## PROCESS 2. Remove the Header Assembly Box

The following steps apply to steel and glass door cabinets.

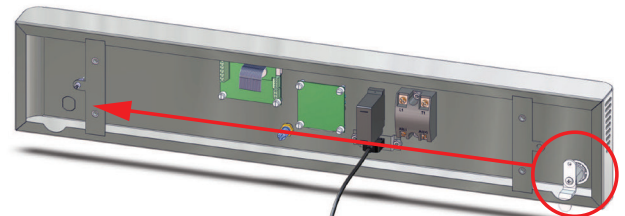
Cabinets are equipped with a cam lock in the header assembly. This must be moved to the other side of the header assembly box when the door hinges are reversed. The door itself has a cam lock plate which also must be moved near the new location of the cam lock (Note: Only top doors on multi-chambered have a cam lock plate.)

1. Purchase the parts needed for header cam lock reversal.
  - Felt Strips (part #ST0014)
  - Plug (part #W0098)
2. To remove the header assembly box, unscrew the four hex locking bolts from the header assembly box mounting plates, then remove the header assembly box. (Figure 5).

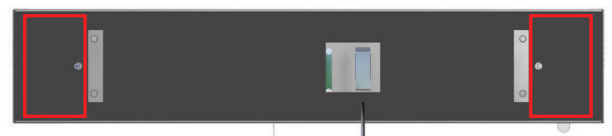


**Figure 5. Remove header assembly box**

3. The cam lock will need to be moved to the other side of the header assembly box (Figure 6). Cut areas out of the gasket cover in the locations shown by the red rectangles (Figure 7).

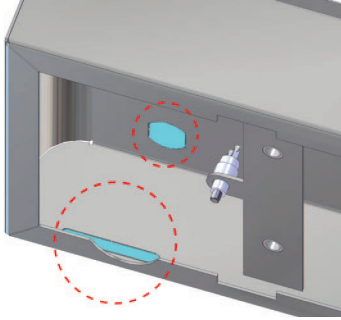


**Figure 6. Cam lock and new location**



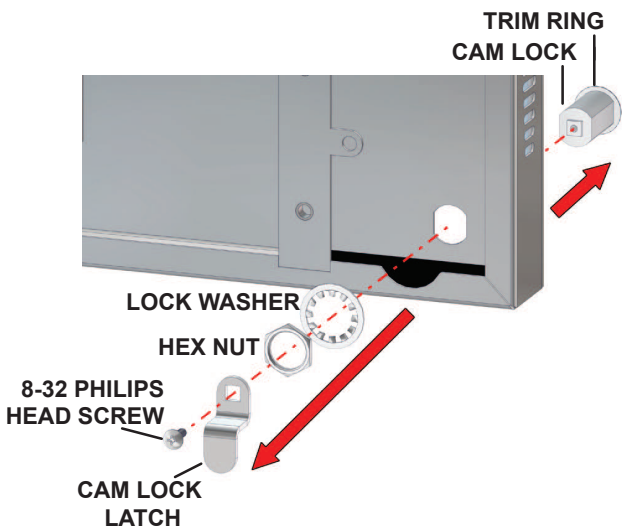
**Figure 7. Cut sections from the gasket**

4. At the new cam lock location, remove the two oblong knock-out areas highlighted in blue (Figure 8).



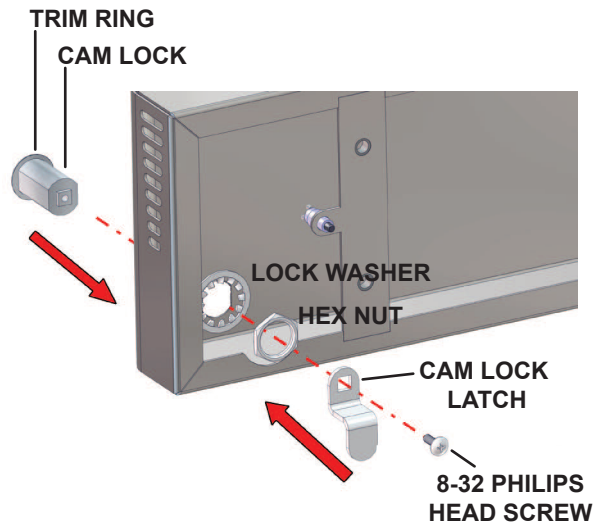
**Figure 8. Knock out areas**

5. Cut an oblong shape in the plastic overlay covering the short and wide oblong knock-out area to accommodate the cam lock when it is re-installed
6. Remove the cam lock assembly from the current location on the header assembly box (Figure 9).



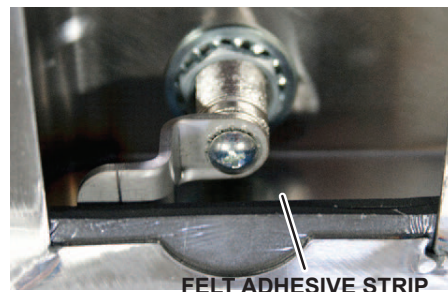
**Figure 9. Remove the cam lock**

- (g) To detach the cam lock assembly, unscrew the Phillips head screw from the cam lock latch (Figure 9).
- (h) Unscrew the hex nut and remove the lock washer (Figure 9).
- (i) Pull the cam lock body out from the face of the header assembly (Figure 9).
10. Install the cam lock on the opposite side of the header assembly box (Figure 10).



**Figure 10. Install the cam lock**

- (k) Insert the new plug into the hole originally occupied by the lock.
- (l) To re-install at the new position, slide the trim ring onto the barrel of the cam lock, insert cam lock body through the oblong hole at the new position in the face of the header (Figure 10).
- (m) Secure the cam lock body to the header by attaching the lock washer, then the hex nut (Figure 10).
- (n) Affix the cam lock latch to the cam lock body and secure it with a 8-32 Phillips head screw (Figure 10).
15. Insert the felt adhesive strip between the cam lock latch and the header (Figure 11). Position it to keep the cam lock latch from falling down when the key is in the lock. When activating the lock, the latch will rub the felt strip.



**Figure 11. Cam lock and felt strip**

16. Use a piece of felt adhesive strip to cover up the old oblong hole where the cam lock latch passed through the bottom of the header.
17. Re-install the header assembly and secure to the cabinet with the four screws.

## PROCESS 3. Reverse the Door Hinges

### Hinge Reversal for Glass Doors

Following are instructions for removing glass doors, reversing hinges on them, and re-installing them.

#### NOTICE

No additional parts are required to perform glass door hinge reversal. However, it may be necessary to drill holes in the bottom of the glass door to enable relocation of the cam lock plate to its new position. The following tools will be necessary for this procedure:

- 1/8" Drill Bit
- 8-32 Tap

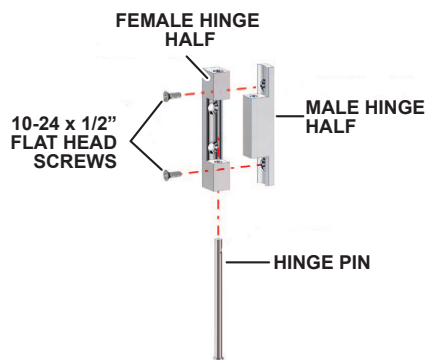


Figure 12. Glass door hinge parts

1. Using a drift pin (or a small headed screwdriver) and a hammer, detach the glass door from the unit by tapping lightly on the hinge pins, driving them through the two halves of the hinges (Figure 13). Then pull the door away from the unit to remove it.

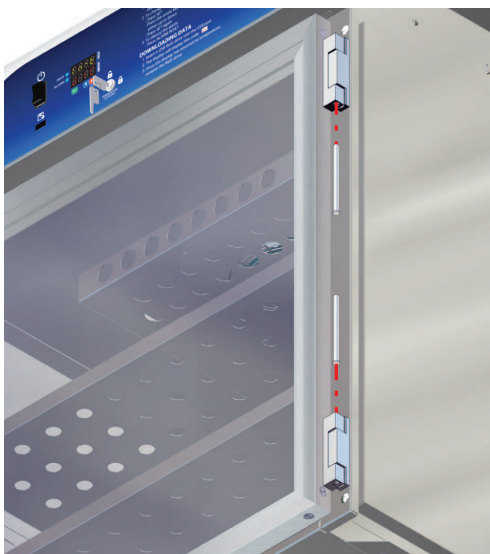


Figure 13. Remove the door hinges

2. Detach the male halves of the glass door hinge by unscrewing them from the warming cabinet (Figure 14). The hinge halves on the door should remain in place.



Figure 14. Detach glass door hinge - male half

3. Unscrew the door handle and cam lock plate from their present position (Figure 15).

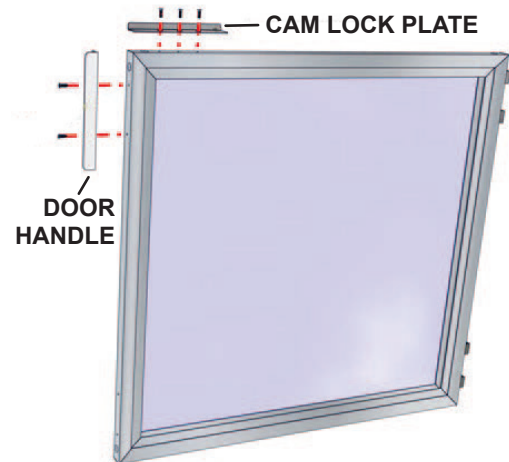


Figure 15. Remove the cam lock and handle

4. Drill holes for the relocation of the cam lock plate on the other side of the door, if necessary. Use the cam lock plate as a guide to mark the proper location for the holes to be drilled (Figure 16). Position it 1/8" in from the outer edge of the door (Figure 17).



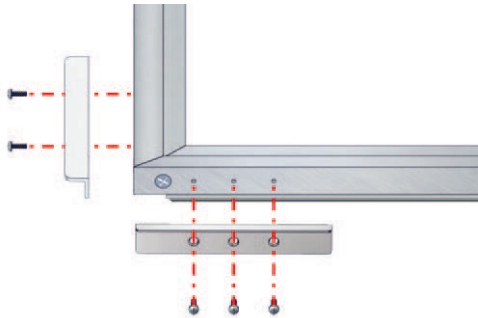


**Figure 16. Cam lock hole guide**



**Figure 17. Cam lock plate door gap**

5. Move both the plate and door handle to the new position (Figure 18). When installed, there should be at least a 1/4" gap between the cam lock plate and the face of the cabinet (Figure 19).

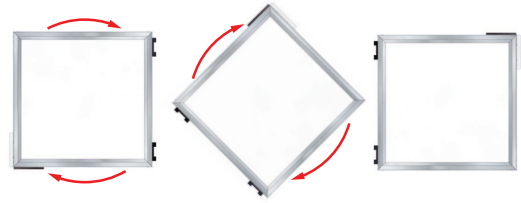


**Figure 18. Attach the cam lock plate and door handle**



**Figure 19. 1/4" cam lock plate door gap**

6. With the door handle and the cam lock plate in their new positions, rotate the door 180° (Figure 20).



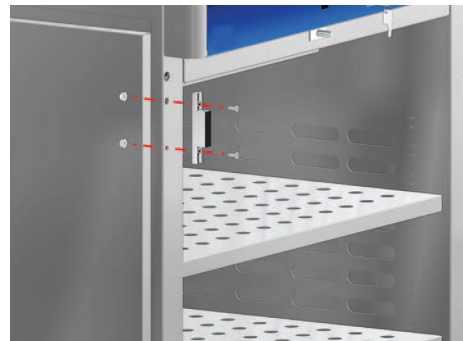
**Figure 20. Rotate the door 180 degrees**

7. Use a flathead screwdriver to remove the two smaller satin plugs (Figure 21 - circled in red) from the top and bottom of the opposite side of the cabinet. These are the new hinge positions.
8. Re-insert the 2 satin plugs (that were removed from the new hinge positions) in the old hinge positions (Figure 21).



**Figure 21. Remove satin plugs from new hinge position**

9. Re-install the male halves of the door hinges in these positions. Do not tighten the screws at this point (Figure 22).



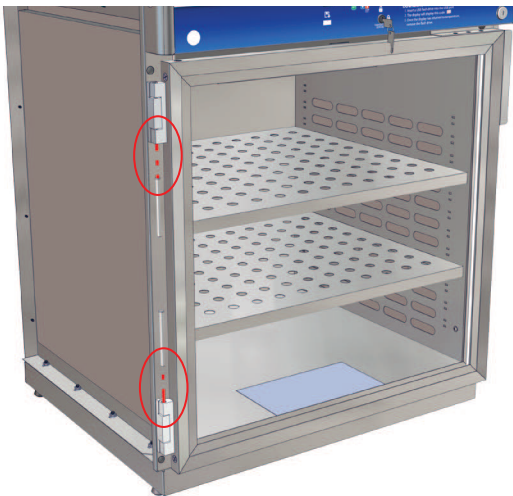
**Figure 22. Install male hinge halves**

10. Attach the glass door to the unit by fitting the two halves of the glass door hinges together. Before securing the door to its hinges, square the door by checking the door's alignment with the header assembly box (Figure 23). Then tighten the hinge screws.



**Figure 23. Check door alignment**

11. To secure the door to its hinges, drive the hinge pins through the two halves of the hinges. For the upper hinge, drive the pin in from the bottom. For the lower hinge, drive the pin in from the top. See Figure 24.
12. Re-attach and secure the side panels to the warming cabinet with its screws.
13. Re-insert the two interior cabinet screws near the bottom of the cabinet chamber.
14. Re-install the inner and outer top panels and secure with its screws.

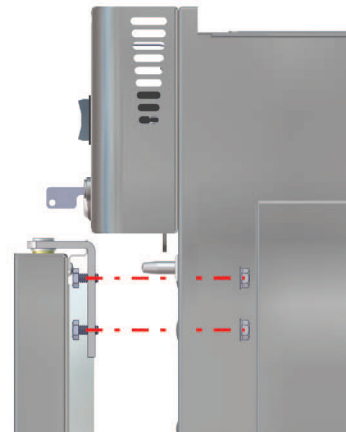


**Figure 24. Insert the hinge pins**

## Hinge Reversal for Steel Doors

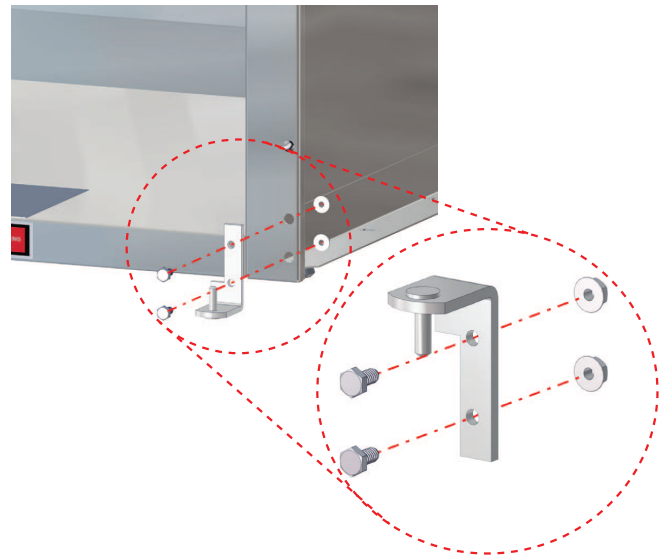
Following are instructions for removing stainless steel doors, reversing the hinges, and re-installing them.

1. Purchase the parts needed for steel door hinge reversal:
  - Intermediate Hinge (for multiple door units only) right hand or left hand. Obtain the intermediate hinge opposite of the currently installed hinge.
2. Loosen the nuts on the bolts that hold the top door hinge onto the unit. Hold the door as you remove the nuts so the door does not fall on you. Once the nuts are removed, the door can be leaned away from the unit and lifted off the bottom hinge (Figure 25).



**Figure 25. Remove steel door**

3. Remove the nuts that fasten the bottom hinge to the unit and remove the screws and bottom hinge (Figure 26).



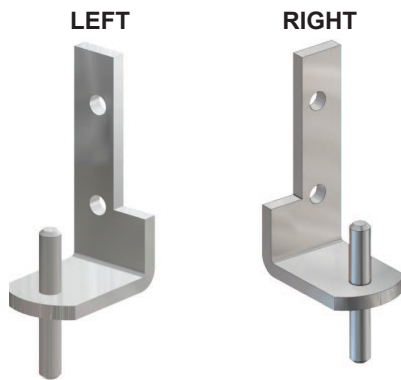
**Figure 26. Remove the bottom hinge**

**NOTICE**

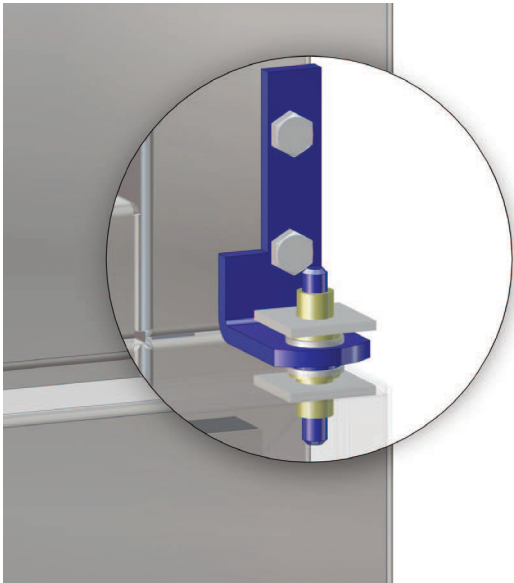
For warming cabinets with more than one door, an intermediate hinge (Figure 27) fits between the bottom of the top door and the top of the bottom door of the dual chambered warming cabinet shown in blue in Figure 28. (Middle doors on Triple chamber warming cabinets use only intermediate hinges for both top and bottom.)

Intermediate hinges come as either right hand or left hand hinges. Purchase the intermediate hinge that is the opposite of the current one on your warming cabinet.

If the units has multiple doors, remove the intermediate hinges by unscrewing them from the cabinet.

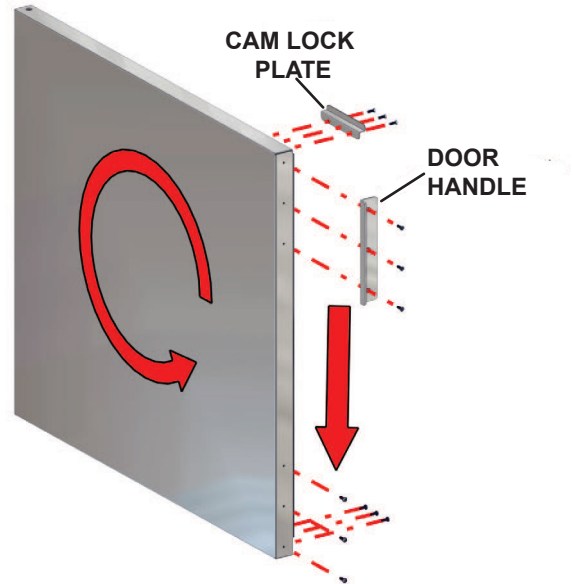


**Figure 27. Intermediate door hinge**



**Figure 28. Intermediate door hinge in place**

4. After the door is removed, unscrew the door handle and cam lock plate from their present position and move them to the bottom of the door. Be sure to “mirror” the cam lock plate so that its top flange will be flush against the warming cabinet when the door is re-installed in its new position (Figure 29).



**Figure 29. Move door handle and cam lock plate**

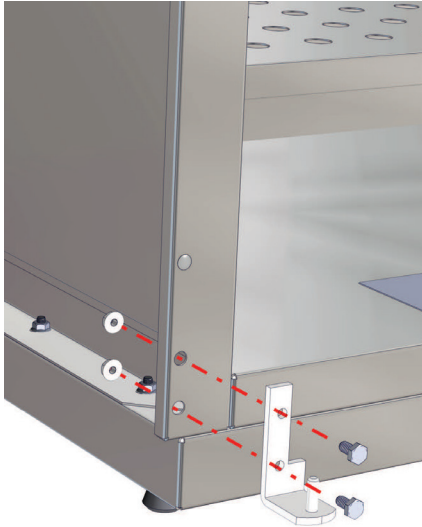
5. With the door handle and the cam lock plate transferred to their new positions, rotate the door 180°. This will be its orientation when re-installing the door on its new hinge position.
6. From the opposite side of the cabinet, use a flathead screwdriver to remove the two top satin plugs (Figure 30) from the top and the 2 lowest bottom satin plugs. These are the new hinge positions.



**Figure 30. Remove satin plugs from new hinge position**

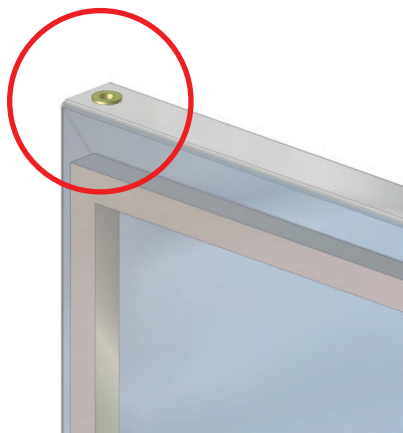


7. Re-insert the two satin plugs (that were removed from the new hinge positions) in the old hinge positions.
8. Attach the bottom hinge in the new position to the bottom of the unit using the hardware provided (Figure 31).



**Figure 31. Install bottom hinge in new position**

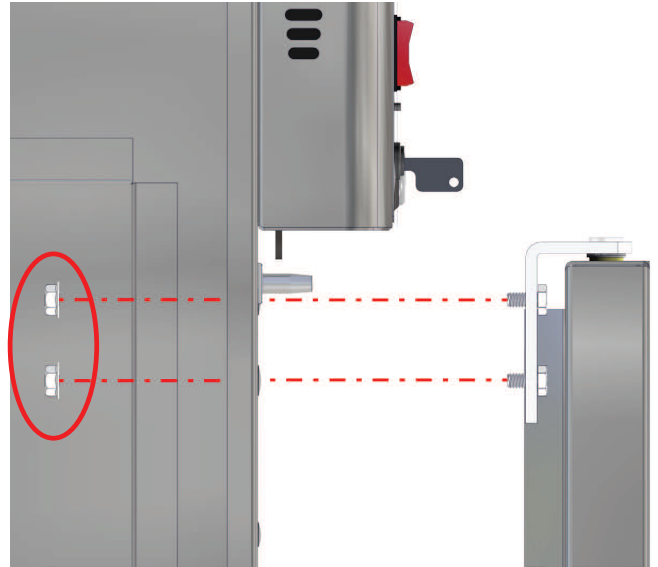
9. Look at the socket located on both the top and bottom of the door (circled in red in Figure 32). The pins of the door hinges will insert into these. Fit the bottom socket of the door onto the bottom hinge pin. Support the door on its bottom hinge while you prepare to affix the door to the top hinge.



**Figure 32. Door hinge socket**

10. Insert the screws into the top hinge (or intermediate hinge, if applicable). Then insert the hinge pin into the top socket of the door, aligning the hinge screws with the top (or intermediate) hinge holes on the unit as shown in Figure 33.

11. From the side of the unit, secure the door and top hinge with the hinge nuts shown circled in red in Figure 33.



**Figure 33. Install top hinge and secure door**

12. Square the door by checking its alignment with the header. Then tighten the hinge nuts. This applies to BOTH glass and steel door cabinets.



**Figure 34. Check alignment and square door**

13. Re-attach both side cabinet panels with its screws
14. Re-insert the two interior cabinet screws near the bottom of the cabinet chamber.
15. Re-attach the inner and outer top cabinet plates.



SECTION 4. REVISION HISTORY

Date	Revision	Revision History
04/08/2020	0	Initial release.

NOTES

---



NOTES

---



5085 Corporate Exchange Blvd. S.E.  
Grand Rapids, MI 49512 • 616.656.2900 • FAX 616.656.2906