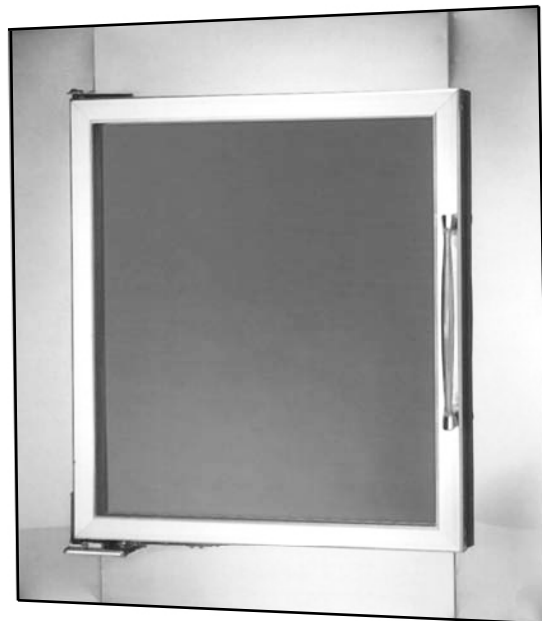




Anthony International Maintenance and Service Manual



Anthony Model 601B Outside Mount Door

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99-16105-S002

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TITLE: Maintenance and Service Manual**DOC ID:** 99-16105-S002**MODEL:** 6000, 6001 & 601B**INCEPTION:** 02/07/2006

Preliminary Considerations for Door and Frame Servicing Procedures

SAFETY

Proper safety equipment includes:

- safety glasses
- work gloves
- work shoes.

Confirm that power has been removed from the door. Use extra caution when working with or around the door glass package.

Remove electrical power to the door assemblies prior to starting work.

TOOLS

Do not use power tools for the following procedures. The tools required for this procedure include:

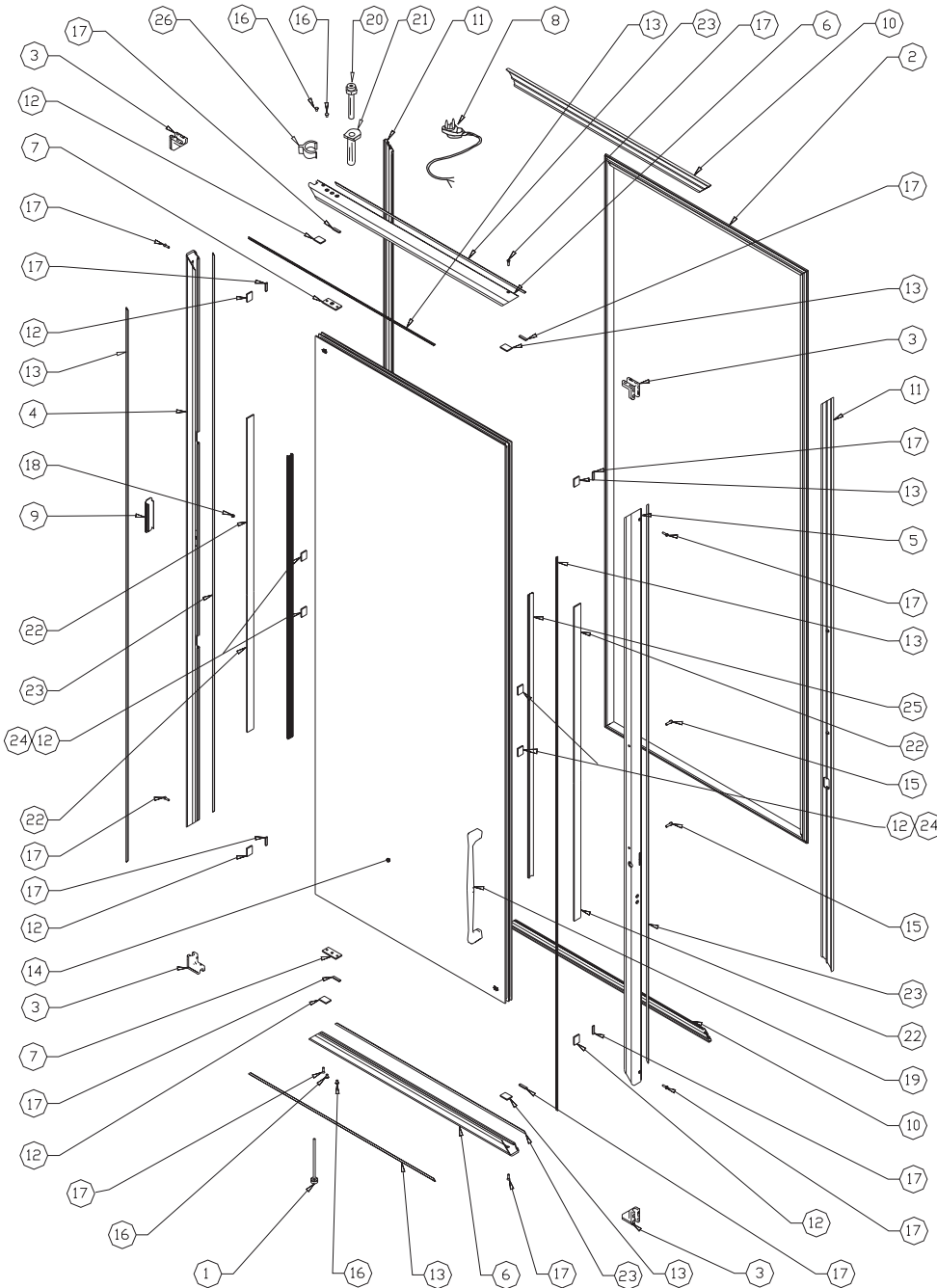
- #2 Phillips-head screwdriver
- Flat-head screwdriver
- Needle-nose pliers
- Rubber or plastic mallet
- $\frac{7}{16}$ " and $\frac{1}{2}$ " Hand Wrench
- $\frac{5}{32}$ " Hex Key
- Wire stripper and cutter
- Soldering iron
- Heat Gun
- Razor Knife

TIPS

- Complete replace of wire assemblies is recommended whenever required. Splice wires only if necessary using proper materials such as, electrical tape, wire nuts, flux core solder and heat shrink.
- Apply liquid soap to rail plastic covers and gaskets upon installation to facilitate insertion into mounting grooves.
- Keep doors clean for product efficiency. This can also help reduce energy consumption and potential health hazards.
- Whenever binding gasket or plastic parts, use food grade silicone.
- Whenever replacing fluorescent lamps, always replace lamp covers as well.
- Always use the correct tool for the job to be performed. This ensures proper installation and minimizes safety risks.
- If there is any doubt about the work to be performed, consult with a certified technician or Anthony representative.
- Preventative maintenance is recommended to ensure product longevity.

I. PARTS PLACEMENT

Diagram A: Model 601B Door Assembly



| No. | Description |
|-----|----------------------------|
| 1. | Torque Rod Assembly |
| 2. | Gasket with Magnet |
| 3. | Corner Pieces |
| 4. | Door Rail (Hinge side) |
| 5. | Door Rail (Handle side) |
| 6. | Top & Bottom Rail |
| 7. | Hold Open Backing Plate |
| 8. | S.J. Cord |
| 9. | Access Hole Cover |
| 10. | Top & Bottom Rail Cover |
| 11. | Side Rail Covers |
| 12. | Wedge Spacer |
| 13. | Vinyl Glazing |
| 14. | Glass Pack Assembly |
| 15. | 10-28 x 5/8" Screws |
| 16. | 3/16" x 3/8" x 3/8" Rivets |
| 17. | 8-32 x 5/8" Screws |
| 18. | #42 Steel Rivets |
| 19. | Slimline Handle |
| 20. | Hinge Pin |
| 21. | Hinge Pin Adapter |
| 22. | Sealant |
| 23. | Foam Mounting Tape |
| 24. | 3M Hot Melt Sealant |
| 25. | Door Handle Rail Insert |
| 26. | Hinge Pin Locking Clip |

**Diagram B: Model 6000 & 6001 AOM Door Parts Placement
(1983 to 1995)**

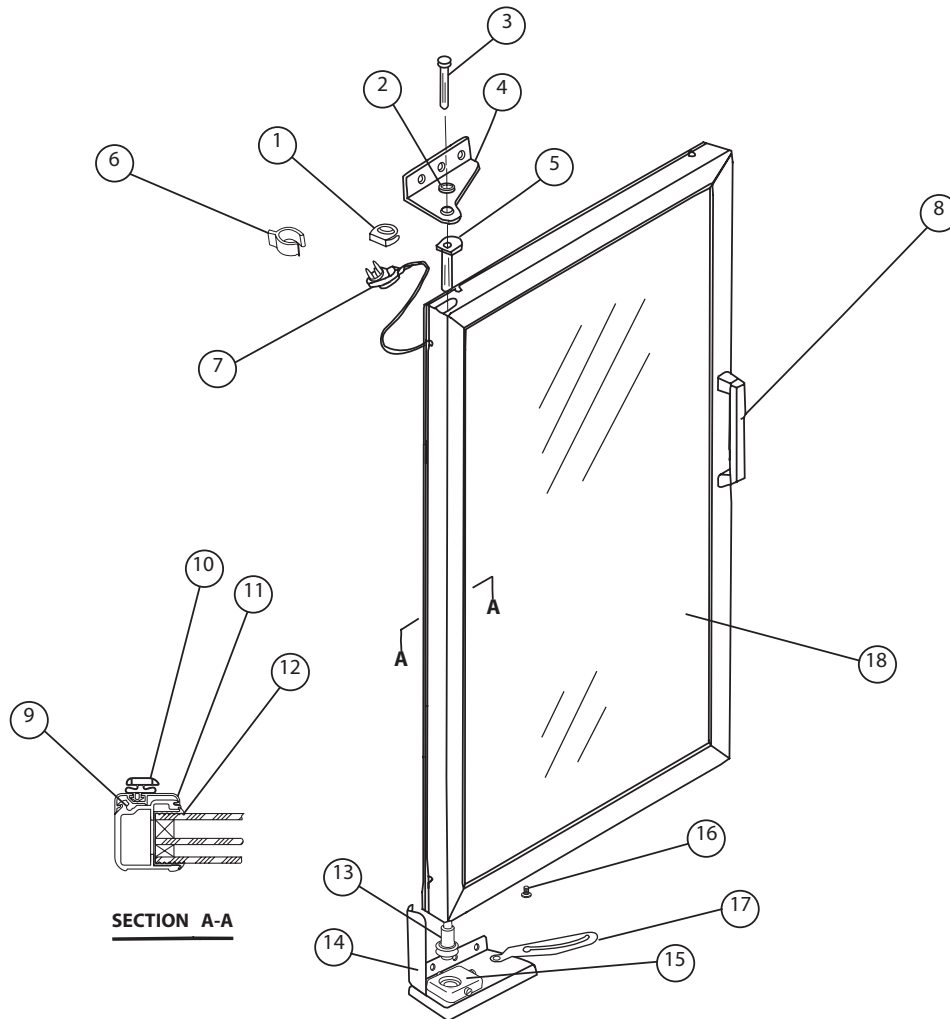


Table 1: Diagram Parts Listing

| No. | Description | No. | Description | No. | Description |
|-----|---------------------|-----|-----------------|-----|----------------|
| 1. | Pin Retainer Cap | 7. | S.J. Cord | 13. | Hex Torque Rod |
| 2. | Bushing | 8. | Handle | 14. | Bottom Bracket |
| 3. | Drop-In Hinge Pin | 9. | Heater Wire | 15. | Torquemaster |
| 4. | Right Angle Bracket | 10. | Gasket | 16. | Hold-Open Stud |
| 5. | Hinge Pin Bushing | 11. | Plastic Cover | 17. | Hold-Open Arm |
| 6. | Hinge Pin Lock Clip | 12. | Glazing Channel | 18. | Door Assembly |

**Diagram C: Model 6000 & 6001 AOM Door Parts Placement
(1995 to 2005)**

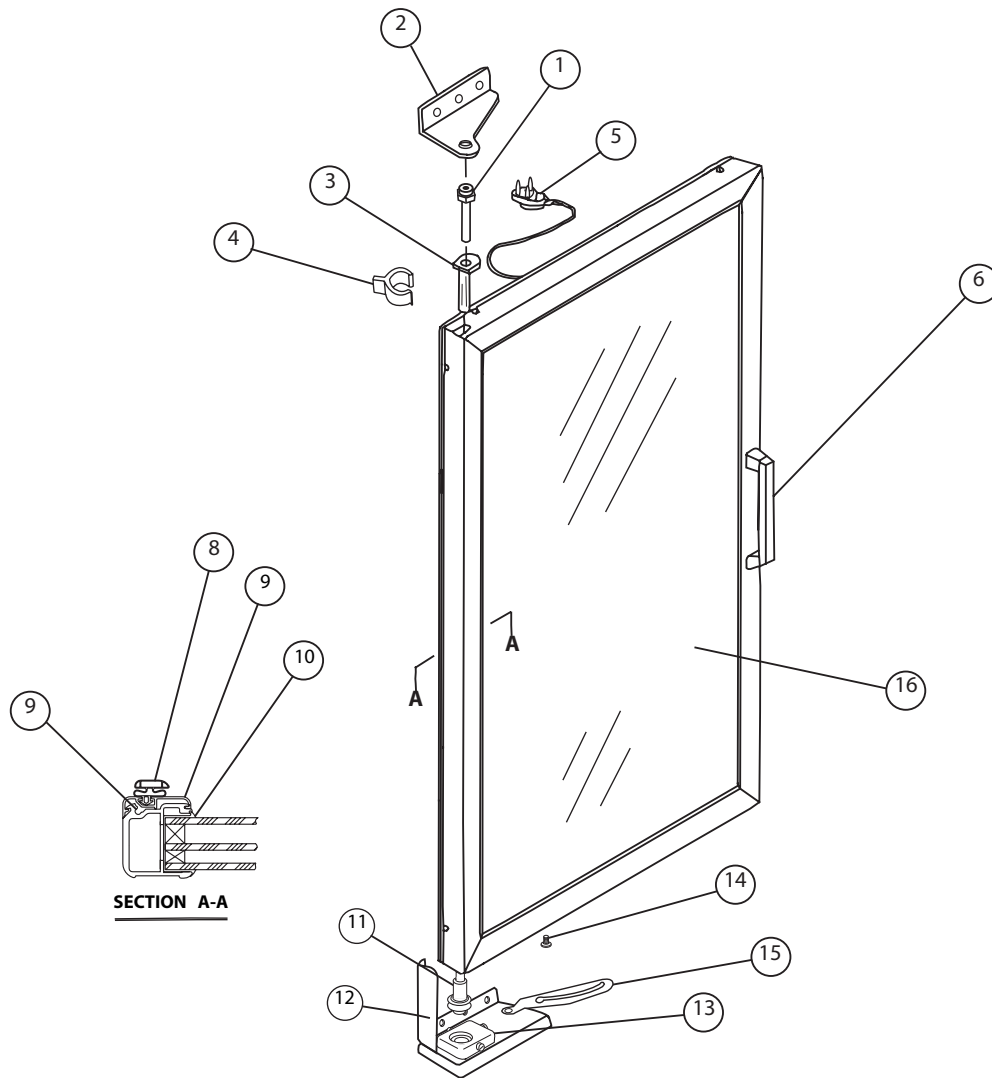


Table 1: Diagram Parts Listing

| No. | Description | No. | Description | No. | Description |
|-----|---------------------|-----|-----------------|-----|----------------|
| 1. | Threaded Hinge Pin | 7. | Heater Wire | 13. | Torquemaster |
| 2. | Right Angle Bracket | 8. | Gasket | 14. | Hold-Open Stud |
| 3. | Hinge Pin Bushing | 9. | Plastic Cover | 15. | Hold-Open Arm |
| 4. | Hinge Pin Lock Clip | 10. | Glazing Channel | 16. | Door Assembly |
| 5. | S.J. Cord | 11. | Hex Torque Rod | | |
| 6. | Handle | 12. | Bottom Bracket | | |

**Diagram D: Model 601B AOM Door Parts Placement
(April 2005 to Present)**

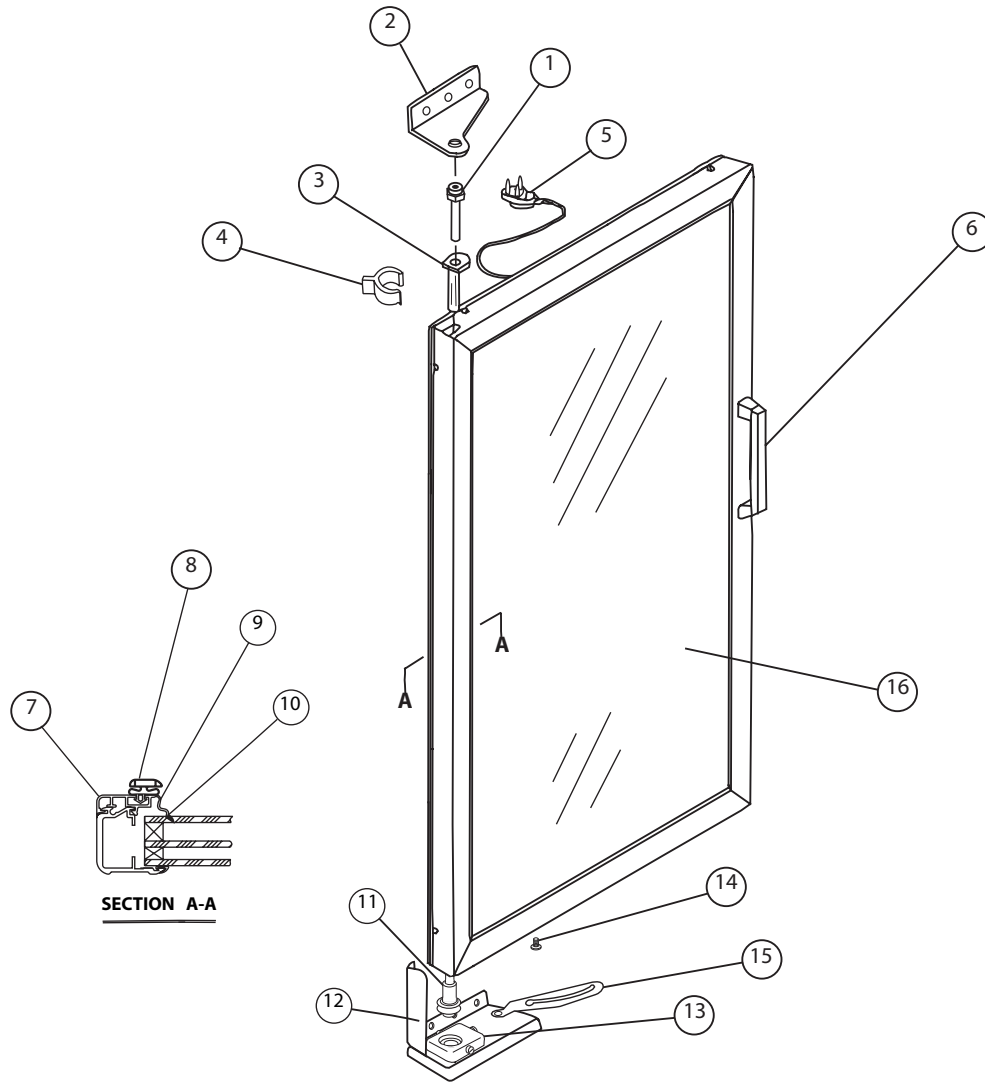


Table 1: Diagram Parts Listing

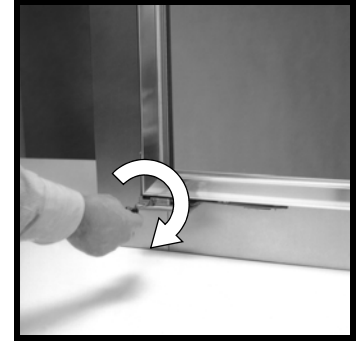
| No. | Description | No. | Description | No. | Description |
|-----|---------------------|-----|-----------------|-----|----------------|
| 1. | Threaded Hinge Pin | 7. | Heater Wire | 13. | Torquemaster |
| 2. | Right Angle Bracket | 8. | Gasket | 14. | Hold-Open Stud |
| 3. | Hinge Pin Bushing | 9. | Plastic Cover | 15. | Hold-Open Arm |
| 4. | Hinge Pin Lock Clip | 10. | Glazing Channel | 16. | Door Assembly |
| 5. | S.J. Cord | 11. | Hex Torque Rod | | |
| 6. | Handle | 12. | Bottom Bracket | | |

Door and Hardware Removal

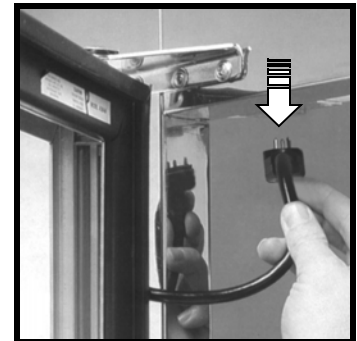
Door Removal Procedures

Removing the 6000 door assembly top hinge.

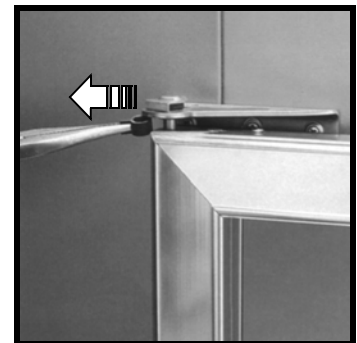
1. Access the Torquemaster located at the bottom door hinge.
2. Using a slot or flat-head screwdriver, turn the front torque adjustment screw clockwise for several turns until tension is removed from the torque rod (A).
3. Using a phillips-heads screwdriver, loosen the fastener securing the power cord plug to the power receptacle.
4. Carefully remove plug by pulling the plug from the power receptacle in the case frame (B).
5. Using needle nose pliers, remove the Hinge Pin Lock Clip by gripping the clip flange and pulling out away from the hinge pin (C).
6. Remove the hinge pin retainer cap from the hinge pin and the top hinge mounting bracket (D).
7. Acquiring assistance, brace the door before proceeding any further.



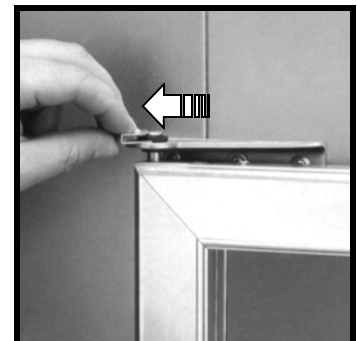
A



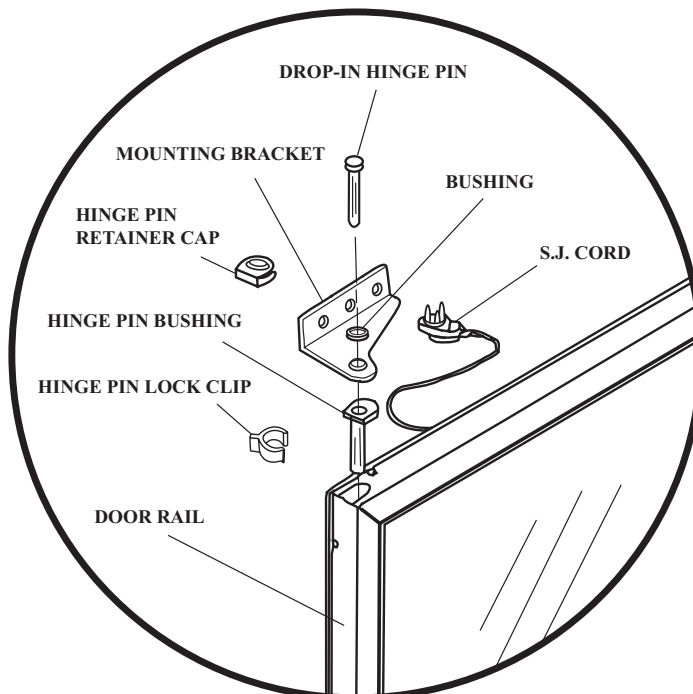
B



C



D



Removing the 6000 Door Assembly Bottom Hinge

NOTE: Bracing the door before removing the hinge pin is necessary to avoid the door assembly from falling, which could cause severe damage and injury.

1. Remove hold-open door stop from bottom door rail.(E).

NOTE: Acquire additional assistance before proceeding any further with the door removal.

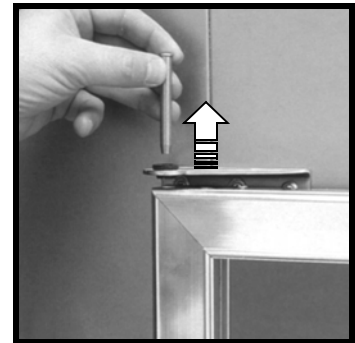


WARNING: Use extreme caution when lifting and moving the door assembly to prevent damaging the door. Using safety gloves when handling the unhinged door is recommended.

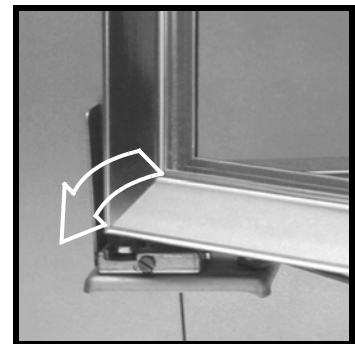
2. Lift and remove the hinge pin from the hinge pin socket in the top door rail (F).
3. Carefully tilt the top of the door away and down from the case frame, no more than 15 degrees (G).
4. Carefully lift the door up and out of the Torquemaster socket completely (H).
5. Once the door has been removed, handle with care when carrying, storing, returning or discarding.



E



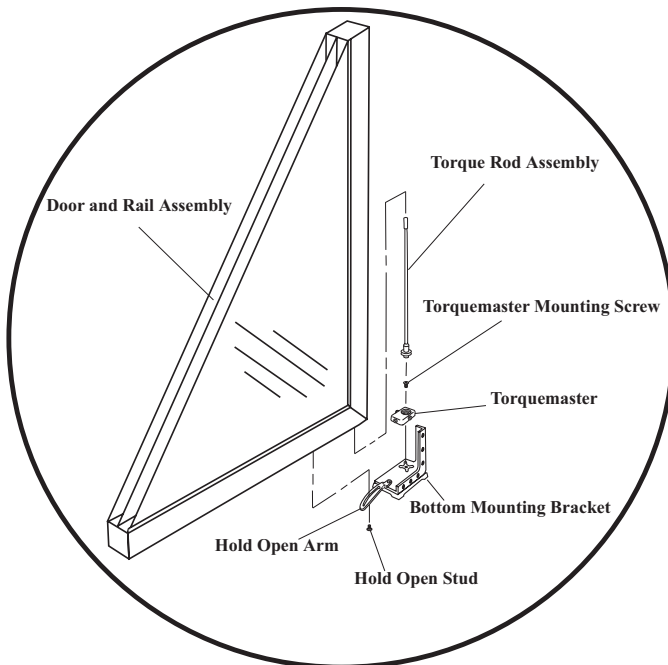
F



G



H



Door and Hardware Installation

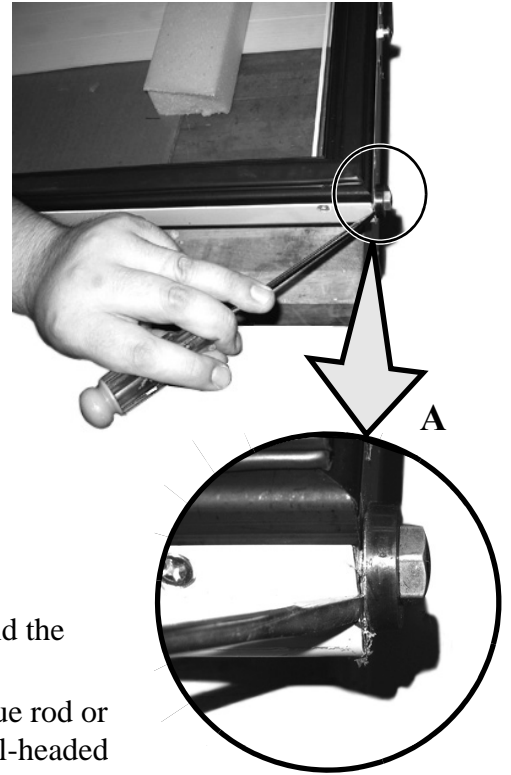
Preliminary Considerations.

SAFETY

Be sure to use the proper safety equipment before beginning work, including the required safety glasses, gloves and work shoes. Confirm that power has been removed from the door. **ALWAYS** exercise extra caution whenever working with sharp-edged or powered tools. The glass pack is made with tempered glass. Use caution when working around the glass pack.

INSTALLATION CONSIDERATIONS

- Use Anthony approved hinge and bracket support systems for use with the case body and door rails.
- Door rails and plastic cover materials must be compatible with the Anthony magnetic gasket seal.
- For a proper seal of the magnetic gasket, correct magnetic case material is required with net dimensions of the frame, or case opening at two (2) inches, or 5.1 cm, smaller than the door dimensions.
- Confirm that the case, frame and structure support are adequate prior to door installation.



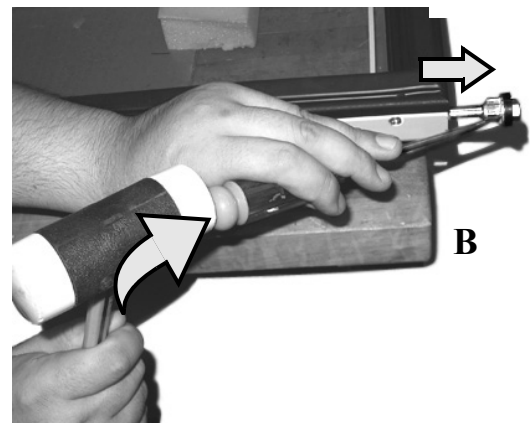
Installation and Replacement Procedures

Removing the Torque Rod.

1. Carefully place a flathead screwdriver between the door rail and the washer beneath the torque rod (A).
2. Dislodge the torque rod from its mount by pushing on the torque rod or tap it loose using a plastic or rubber mallet. **DO NOT** use a steel-headed hammer (B).

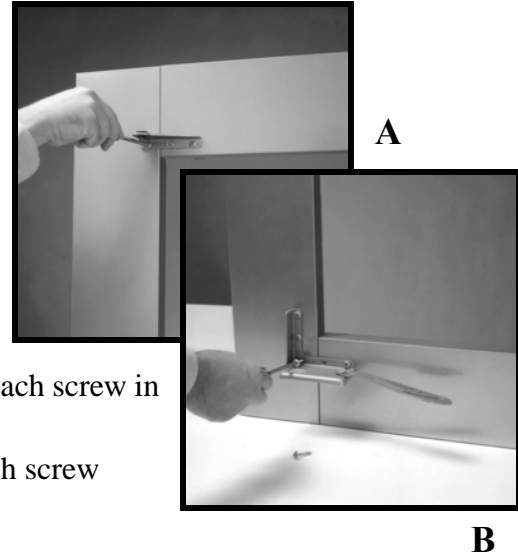
NOTE: Use caution when striking any tool with another tool. **DO NOT** use excess force when striking the screwdriver and potentially damaging either tool.

3. Continue to carefully tap the torque rod, if necessary, until the torque rod and rod end come loose.
4. Carefully pull the torque rod assembly out.
5. Reverse the process to re-install the torque rod assembly into the door rail.
 - Insert torque rod into the bottom of the door until it is fully seated.
 - If required, tap the torque rod assembly into the torque rod socket, using a plastic or rubber mallet until the torque rod is fully seated into the receptacle.



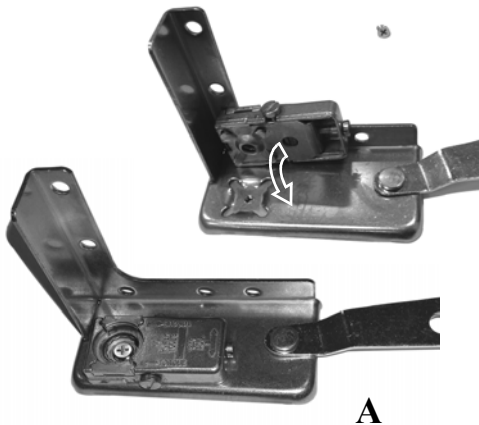
Installing the Door Hinge Brackets

1. Place the upper hinge bracket onto the door rail.
2. Align the bracket mounting holes with the door mounting holes.
3. Insert mounting screws into mounting holes and twist each screw in a clockwise direction until the threads catch.
4. Using a phillips head screwdriver, continue turning each screw clockwise until they are fully tightened (A).
5. Place the lower hinge bracket onto the door rail
6. Align the bracket mounting holes with the door mounting holes.
7. Insert mounting screws into mounting holes and twist each screw in a clockwise direction until threads catch.
8. Using a phillips head screwdriver, continue turning each screw clockwise until all of them are fully tightened (B).

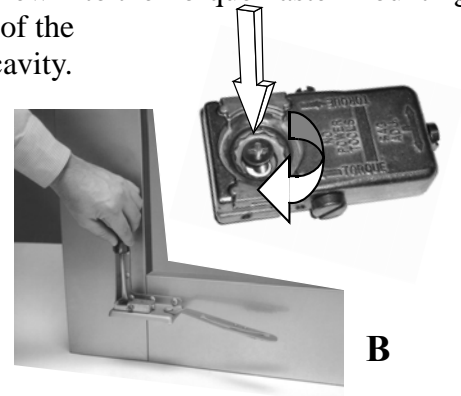


Torquemaster Installation

1. Place Torquemaster onto bottom door bracket.
2. Align the mounting cut-outs on the bracket with the mounting flanges located on the bottom of the Torquemaster, and insert the flanges into the lower bracket cut-outs until fully seated (A).



3. Insert the mounting screw into the Torquemaster mounting hole located in center of the torque rod mounting cavity.
4. Using a phillips-head screwdriver, turn the mounting screw in a clockwise direction until it is tightened, securing the torque-master (B).



Installing the 6000 Door Assembly (1983 to 1995)

1. Carefully inspect the entire door assembly and verify that the following items are in order:
 - Door rails are intact, including handle and glass seal.
 - Glass pack is sealed and free of cracks or damage.
 - Torque rod is properly installed and tight.
 - Electrical power cord is intact.

Installing the 6000 Door Assembly (1983 to 1995 cont'd)

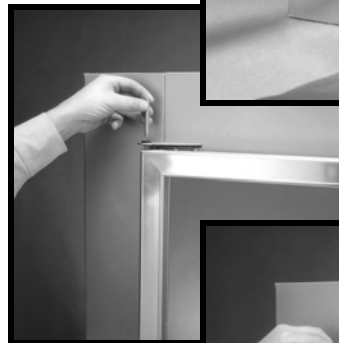
2. Carefully place door onto bottom bracket, inserting the large end of the torque rod into the cavity in the Torquemaster (A).
3. Confirm torque rod installation by checking rod end and verifying that it is fully seated into the Torquemaster (B).
4. At the top hinge, insert the hinge pin adapter between the bracket and the top hinge pin socket of the door.
5. Align the hinge pin adapter with the hinge pin hole of the top mounting bracket.
6. Place the hinge pin bushing onto the hinge pin mounting hole on top of mounting bracket and align it with the mounting hole.
7. Insert the hinge pin into the hinge pin socket and press it in until it is fully seated. If necessary, strike the pin with a plastic or rubber mallet to facilitate full installation (C).
8. Install the hinge pin retaining cap around the mounting bracket and onto the hinge pin. Verify that the retaining cap is securely in place (D).
9. Insert the hinge pin lock clip in-between the adapter and the top of the door rail, around the shaft of the hinge pin. Verify that the hinge pin lock clip is securely in place (E).



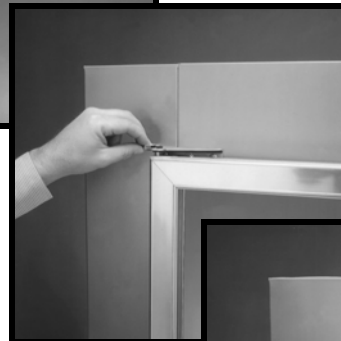
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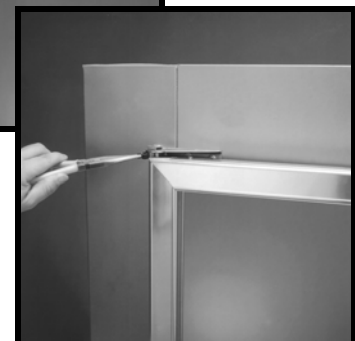
B



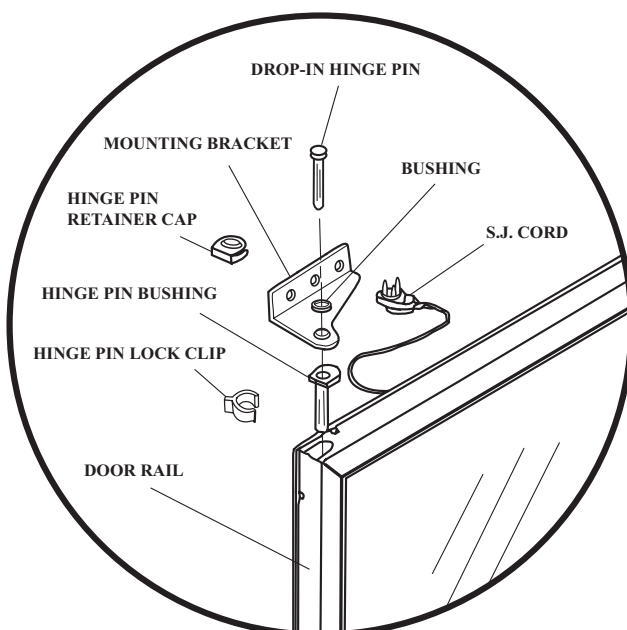
C



D



E



10. Check the door installation and verify both the stability and door operation.

NOTE: Replacement doors are very heavy. ALWAYS use extra caution when handling the door assembly, for removal or replacement, to avoid possible damage and injury.

Installing the 6001 and the 601B Door Assembly (1995 to Present).

1. Carefully inspect the entire door assembly and verify that the following items are in order:
 - Door rails are intact, including handle and glass seal.
 - Glass pack is sealed and free of cracks or damage.
 - Torque rod is properly installed and tight.
 - Electrical power cord is intact.
2. Carefully place door onto bottom bracket, inserting the torque rod-end fitting into the cavity in the Torquemaster (A).
3. Confirm torque rod installation by checking rod end and verifying that it is fully seated into the Torquemaster (B).
4. Insert the hinge pin into the hinge pin socket of the top door rail and press it in until it is fully seated.(C).
5. Align the threading on the top of the hinge pin with the threaded hole in the top mounting bracket, slightly lifting the hinge pin into the hole.
6. Twist the hinge pin in a clockwise direction to catch the threads and continue twisting until the hinge pin is installed into the top bracket; then tighten using a 1/2 inch, open-end hand wrench.
7. Insert the hinge pin lock clip in-between the adapter and the top of the door rail, around the shaft of the hinge pin. Verify that the lock clip is securely in place (D).
8. Check the door installation and verify both the stability and door operation.



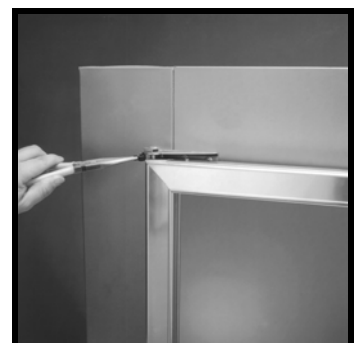
A



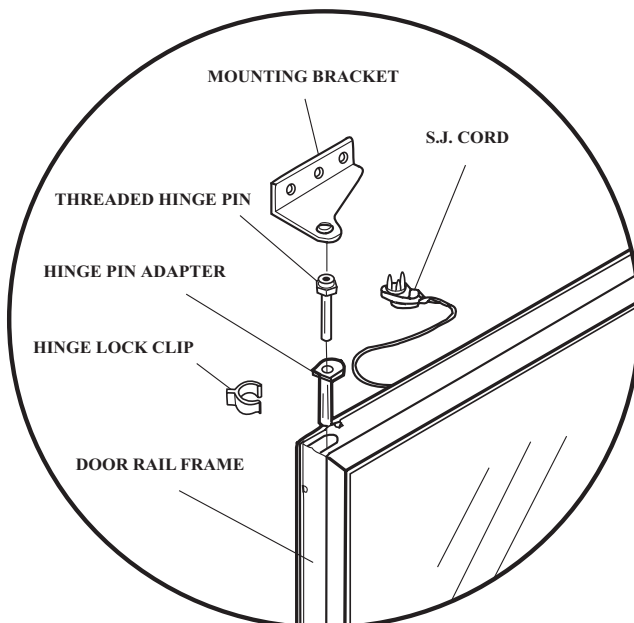
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C



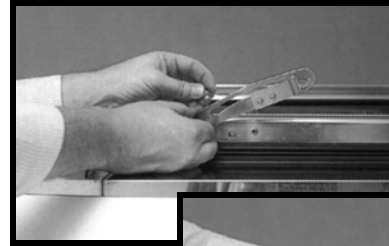
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Door and Hardware Installation

Installing the Door Hold-Open Device

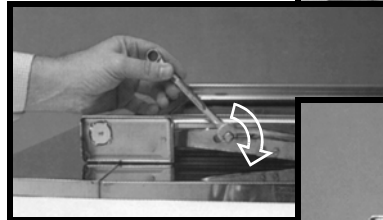
1. Insert the hold-open stud through the slot in the hold-open arm, located in the bottom door mounting bracket hold-open lever (A).
2. Align the end of the stud with the mounting hole in the bottom of the lower door rail (B).
3. Turn the stud in a clockwise direction until the threads catch.
4. Using a 7/16 inch open-ended hand wrench, continue turning the stud until it is secure (C).
5. Check the completed assembly and confirm that it is fastened correctly and that it is fully functional (D).
6. Make adjustments to the fastener, as needed, to regulate the door-stop operation.



A



B



C

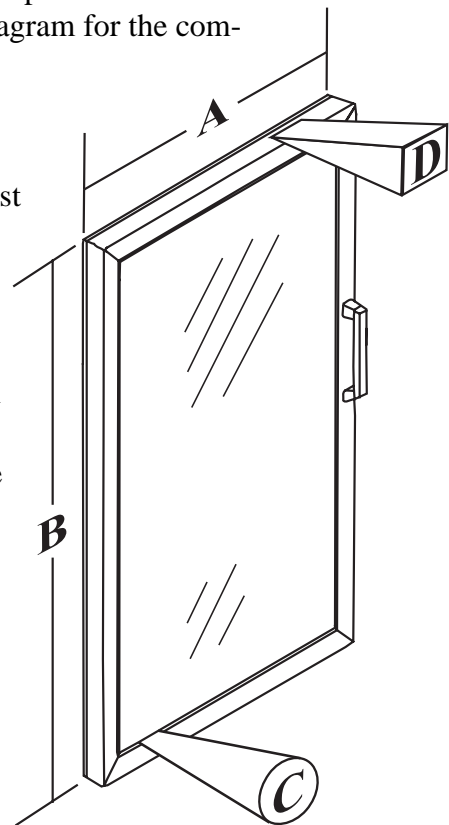


D

Ordering Replacement Doors

When ordering replacement doors, call Anthony International customer service at 800.772.0900 and specify to the representative the need to order a replacement door. Be sure to provide the all of the required specifications (refer to diagram for the complete door ordering configuration):

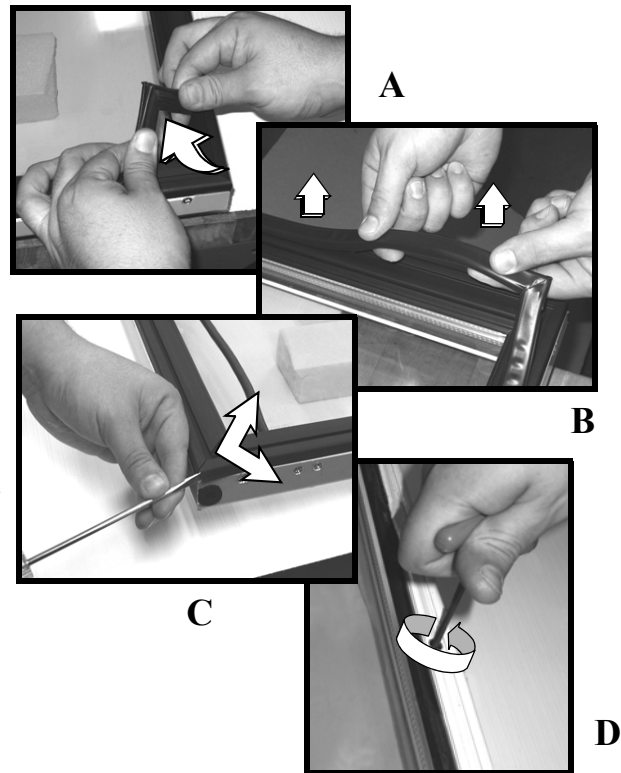
- Measure and specify the width (A) of the door to the nearest 1/16".
- Measure and specify the height (B) of the door to the nearest 1/16".
- Furnish the date of the original order or the Anthony invoice number. (the original manufacturing date will be stamped on the spacer bar, between panes of glass (C).
- Specify whether the replacement door will require a heated glass-pack or not.
- Which way does the door hinge (left or right) as well as the type of hinge will need to be specified.
- The Anthony representative will need to know if the replacement door is for a cooler or a freezer.
- The need for door locks and installation hardware must be specified.
- The correct electrical voltage is required for the order.
- Are there any custom items with the original order, if so please specify them as well as the details of those items.
- Work Order number from Data Tag (if present-D).



Removing the Door Gasket, Plastic and Handle

1. Perform the following procedures to remove the handle door rail assembly.

- Begin removing the door gasket by carefully lifting the corner (A).
- Pull the gasket out of the plastic covers (B).
- If there are no access holes to the door handle mounting screws in the plastic cover, remove the plastic cover from the door rail using a slot-head screwdriver (C).
- Insert a 5/32" Hex key or Allen Wrench into the door rail openings and into the screw head securing the door handle (D).
- Turn the screw in a counter-clockwise direction to loosen and remove it. (D)

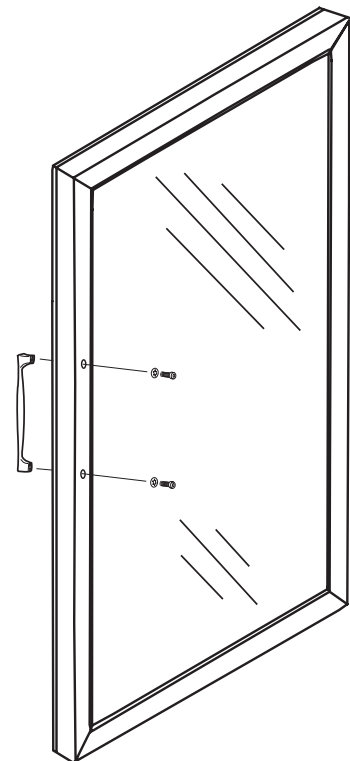


NOTE: In the event that the screw heads are obstructed with adhesive, refer to product notification 601B (Appendix A) for instructions detailing the removal of the obstruction.

- Repeat the preceding steps with the second mounting screw and remove the handle assembly from the door.

Replacing the Door Handle

1. Confirm that the replacement handle assembly kit is complete, including all threaded screws and washers.
2. Place the lock washers over the threaded end of the screws and slide washers all of the way to the socket head.
3. Carefully insert both replacement screws all of the way into the mounting holes into the gasket side of the door rail.
4. Insert the 5/32" hex key or Allen Wrench into the socket-head of one of the screws in the upper door mounting hole. Place the handle onto the door rail, aligning the handle's upper mounting hole with the end of the screw that is protruding from the upper mounting hole in the door rail.
5. Turn the screw in a clockwise direction, catching the threads of the screw into the mounting hole of the handle.
6. Insert the 5/32" hex key into the lower mounting hole and screw head then turn the lower screw to catch the threads of the lower mounting hole of the door handle.
7. Continue turning each screw until both are tightened and the handle is fully seated against the door rail.

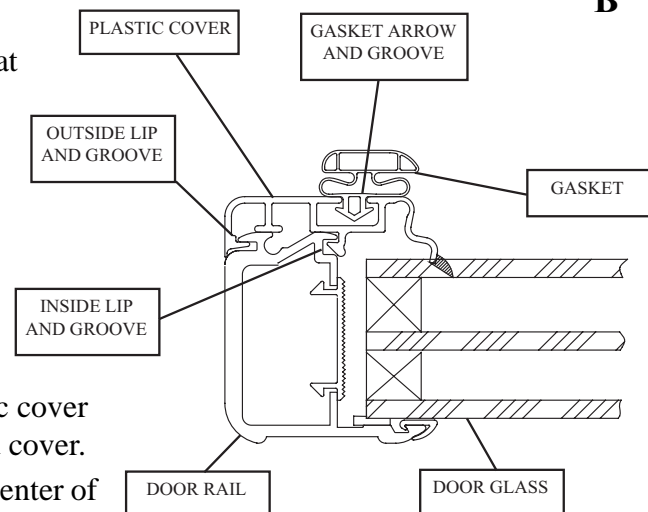
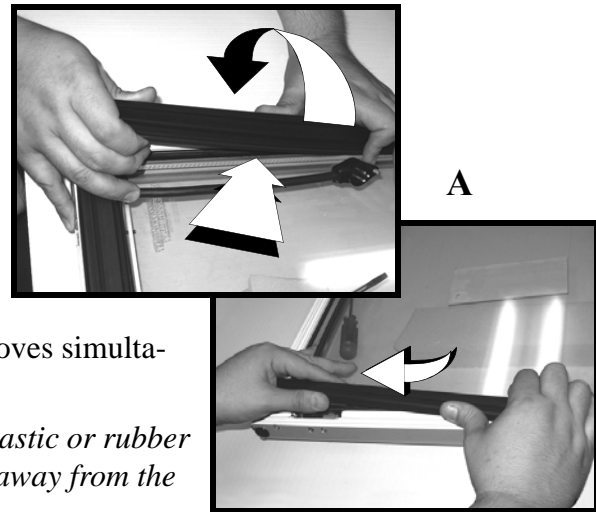


Replacing the Door Plastic Cover

1. Insert the inner edge of the plastic cover into the inside groove of one of the door rails (A).
2. Insert the outer lip of the plastic cover into the outside groove of the door rail (A).
3. Push the plastic cover down and outward, away from the center of the door (A).
4. Slide along the entire length of the plastic cover while firmly applying pressure against, as well as down along the length of the door rail, inserting both the outside lip and the inside lip into the grooves simultaneously (B).

NOTE: Carefully tapping the plastic cover using a plastic or rubber mallet, with deliberate strokes, outward and away from the glass, may help seat the lips of the plastic cover into the grooves of the door rails.

5. Check the entire plastic cover and confirm that both the inside and outside lips are fully inserted into the door rail grooves.
6. Repeat this procedure, aligning each mitered corner, with all remaining plastic covers until all four plastic covers are properly installed onto door rails.



Replacing the Door Gasket

1. Carefully place and align gasket onto a plastic cover with the gasket arrow facing the door rail and cover.
2. Press the gasket arrow into the groove in the center of the plastic cover until the edges of the gasket arrow catch and the arrow is fully inserted into the groove of the plastic cover.
3. Press the gasket firmly against the plastic cover and slide along the gasket, applying full pressure against the gasket to force the gasket arrow into the remainder of the groove in the plastic cover (C).
4. Continue sliding along the gasket, pressing very firmly, until the all of the gasket arrow is inserted into the grooves, around the entire door rail assembly (if necessary, a plastic or rubber mallet can be used to facilitate the arrow into the groove by applying a swift stroke onto the gasket- DO NOT damage the gasket).
5. Confirm that the entire gasket arrow has been inserted into the all four plastic cover groove.



Repair and Replacement Procedures

Cylinder Lock Repair and Replacement

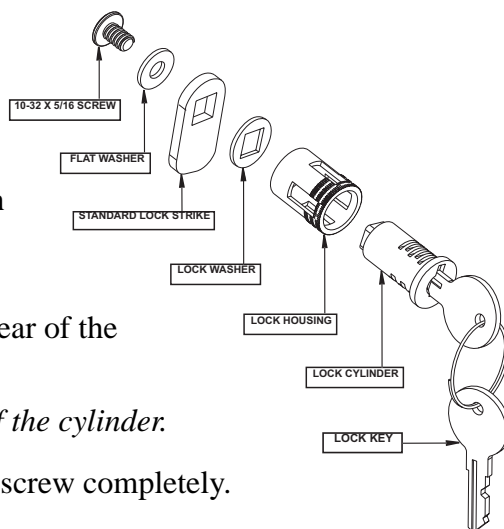
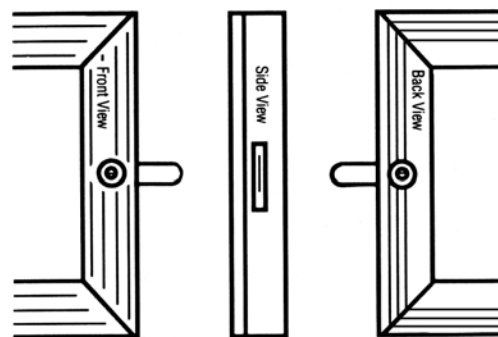
1. Remove gasket from door rail containing the lock (leave the gasket on the remaining door rail assembly).
2. Remove plastic cover from the door rail containing the lock assembly.
3. Insert a large phillips-head screwdriver into the lock access in the back of the door rail.
4. Turn the lock screw counter-clockwise to loosen the screw.

NOTE: Once the lock screw has been removed, the screw washers and lock latch will come loose. Be certain that these components are secure prior to the removal of the lock screw, or they will become lost if dropped inside of the door rail.

5. Carefully remove the screw, lock washers and lock latch from the back of the lock assembly (B).
6. If necessary, replace the latch.
7. Remove the lock assembly out of the lock housing and through the front of the door rail.
8. Replace lock assembly into housing inside rail.
9. Replace the latch washer, latch, lock washer and screw to the rear of the lock assembly and assemble in the correct order.

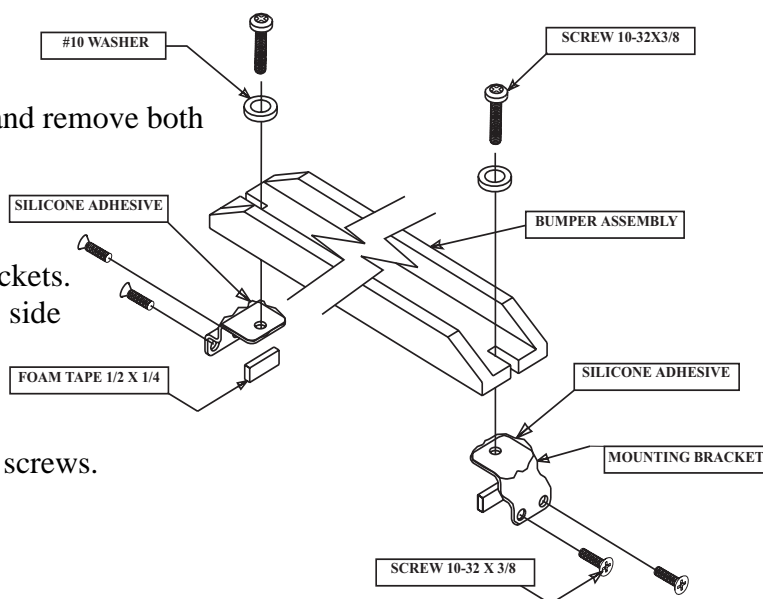
NOTE: Be certain that the latch is correctly seated onto the end of the cylinder.

10. Turn lock screw clockwise to catch the threads and tighten the screw completely.
11. Test lock and confirm that it works properly.
12. Replace the plastic cover and gasket (refer to plastic cover and gasket replacement instructions).



Door Bumper Removal and Replacement

1. Using a phillips-head screwdriver, loosen and remove both self-threading screws and washers at each end of the bumper assembly; then remove bumper.
2. If necessary, remove bumper mounting brackets.
 - Remove plastic covers from the longer, side door rails.
 - Using a razor knife, carefully cut the silicone adhesive.
 - Loosen and remove bracket mountings screws.
 - Carefully remove mounting brackets.

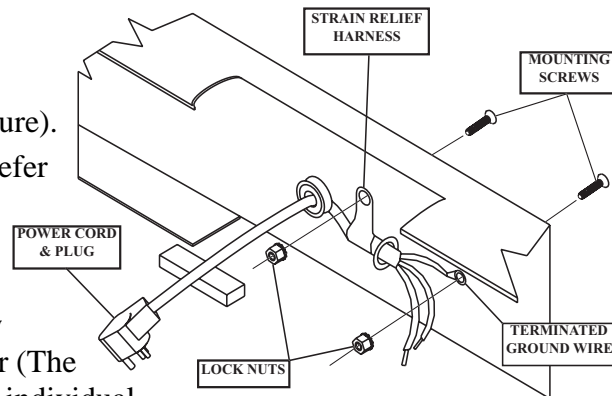


Door Bumper Removal and Replacement (cont'd)

3. Replace door bumper assembly mounting brackets.
 - Completely clean each bracket of silicone adhesive residue.
 - Apply a generous amount of fresh silicone adhesive to the outside of each mounting bracket.
 - Insert new self-threading 10-32 X 3/8" screws into the bracket mounting holes and into the door rail mounting holes.
 - Using a phillips-head screwdriver, turn the screws clockwise until all four screws are tightened and both mounting brackets are securely fastened.
 - Apply silicone adhesive along the seams of each bracket to ensure a proper seal.
 - Allow for silicone adhesive to cure.
4. Replace the plastic covers to the door rails (refer to plastic cover replacement procedures).
5. Replace bumper assembly to the door.
6. Align the mounting holes in the bumper assembly with the mounting holes in the mounting brackets.
7. Insert new self threading 10-32 X 5/8" screws into the bumper assembly mounting holes.
8. Using a phillips-head screwdriver, turn the screws clockwise until each screw is tight and the bumper assembly is securely mounted.

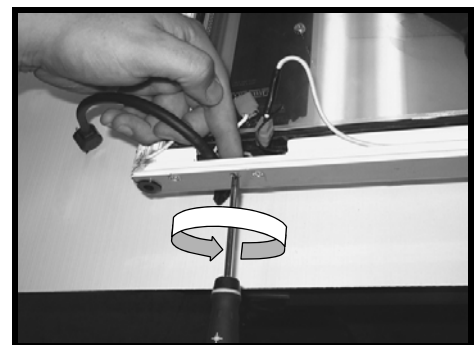
Door Heater Wire Replacement

1. Remove door gasket (refer to door gasket removal section for gasket removal procedure).
2. Remove plastic cover from all door rails (refer to plastic cover removal section for the removal procedure).
3. Remove power cord plug from socket. The power cord wiring assembly is usually located in one of the top corners of the door (The wiring configuration differs per model and individual facility requirements).



A

4. Locate the cord mounting plate (if applicable) and two mounting screws for the cord and wire harness mounts, on the outside of the adjacent door rail (**A**).
5. Using a phillips-head screwdriver, loosen and remove each screw (**B**).
6. Carefully pull out and remove strain relief harness as well as the loop terminal for the ground (green) wire.
7. Locate the heater wire in the grooves of all four door rails. The heater wire is usually shielded with a fiberglass weave or sleeve.
8. Locate and remove the wire terminals from the door rails (Page 15-D).



B

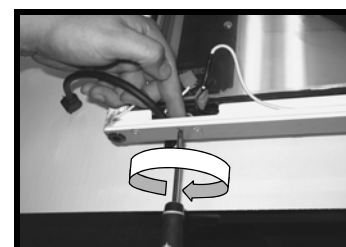
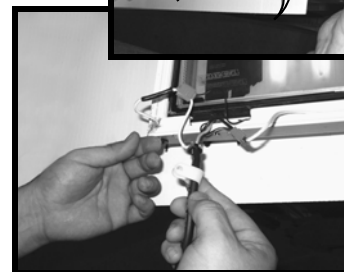
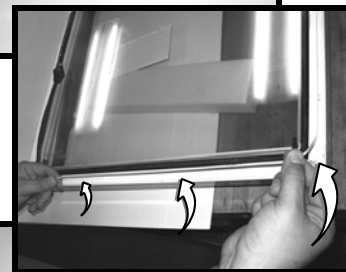
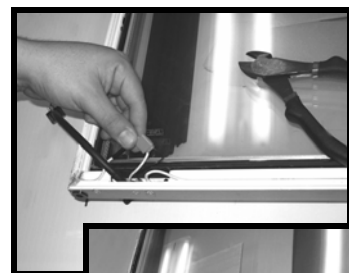
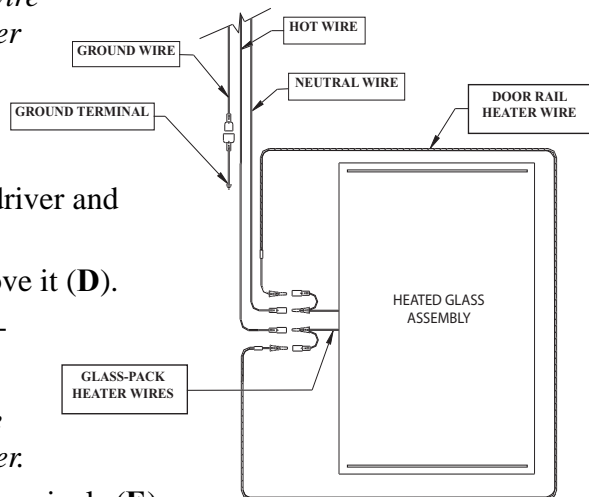
Door Heater Wire Removal and Replacement (cont'd)

NOTE: Two terminals adjoin the ends of the heater wire with the hot and neutral wires from the power cord. Two different methods can be used to disconnect the heater wire from the power cord.

9. Open the wire terminals using a flat-head screwdriver and remove the terminated heater wire ends (C).
10. Pull the heater wire out from door rails and remove it (D).
11. Install the terminated wire ends from the replacement heater wire, then close the wire terminals.


NOTE: If the replacement heater wire does not have terminated ends, then splice the wires together.

1. Cut the (black and white) power wires after the terminals (E).
2. Strip at least 1/2" of insulation from each wire, exposing the end of the each cut wire.
3. Strip a minimum of 1/2" of shielding from each end of the heater wire.
4. Insert one two inch heat-shrink tube (not supplied) over each end of heater wire.
5. Slide each tube down, away from the wire ends.
6. Join the exposed end of each stripped power wire, from the power cord, with each end of the stripped heater wire.
7. Twist the wire ends together and solder the adjoined wire ends using a soldering iron and solder.
8. Slide each heat-shrink tube back up the heater wire and over the soldered wires joints.
9. Using a heat gun, apply a steady flow of heated air onto each shrink tube and soldered wire joints, to shrink the tubing and insulate the joints.
10. Insert the entire replacement heater wire into the groove inside the door rails and arrange the wire assembly to the same configuration that it had prior to disassembly.
11. Carefully re-install the wire assembly into the door rail and the power cord into strain relief. Be certain to match the original wire installation configuration (E).
12. Mount power cord and strain relief to the door rail using the mounting screws with new lock nuts (F).
13. Replace plastic covers and gasket to the door.



Door Glass Installation

Glass Pack Replacement Procedures

 **WARNING:** Use extreme caution when working with a razor knife or handling the glass-pack. Using safety gloves for this procedure is recommended*.

1. Carefully remove the door assembly from the hinge mounts.
2. Carefully place the door assembly on a flat, clean and elevated surface or table.
3. Remove the door gasket (refer to the gasket removal section for removal procedures).
4. Remove the plastic covers from the door rails (refer to the plastic cover removal section for removal procedures).
5. Remove the screw fasteners securing the power cord to the door rail.
6. Carefully pull power cord out from the door rail and locate the glass-pack heater wires.
7. Open each terminal housing, exposing the wire connections.
8. Remove the terminated wires from the terminals.

***NOTE:** The terminated wire ends of the glass pack wire may not be accessible or removed. If so skip steps 7 and 8 and proceed to step nine.*

9. Carefully cut the glass-pack wires at 1/2" inch from the glass pack assembly (A).
10. Using a sharp razor knife, carefully insert the knife blade in-between the glass-pack edge and the door rail (B).
11. Cut into the adhesive adjoining the glass pack to the door rail and slice along the seam between the glass-pack edge and the rail (C).
12. Continue slicing the glass-pack away from all four door rails (D).
13. Confirm that the adhesive has been cut completely through as well as all around the glass-pack.
14. Place a piece of thick foam block underneath the glass-pack at each end of the door assembly.
15. Press down firmly on each corner of the door rail frame assembly to initiate the separation of the glass-pack from the door rail frame assembly (E).



A



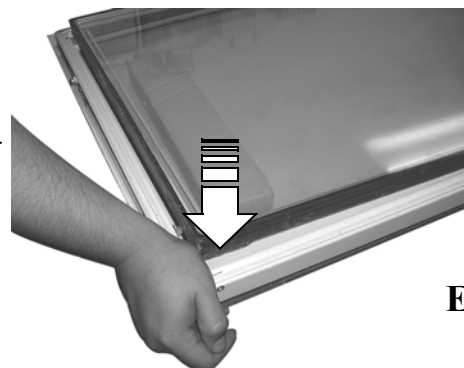
B



C



D

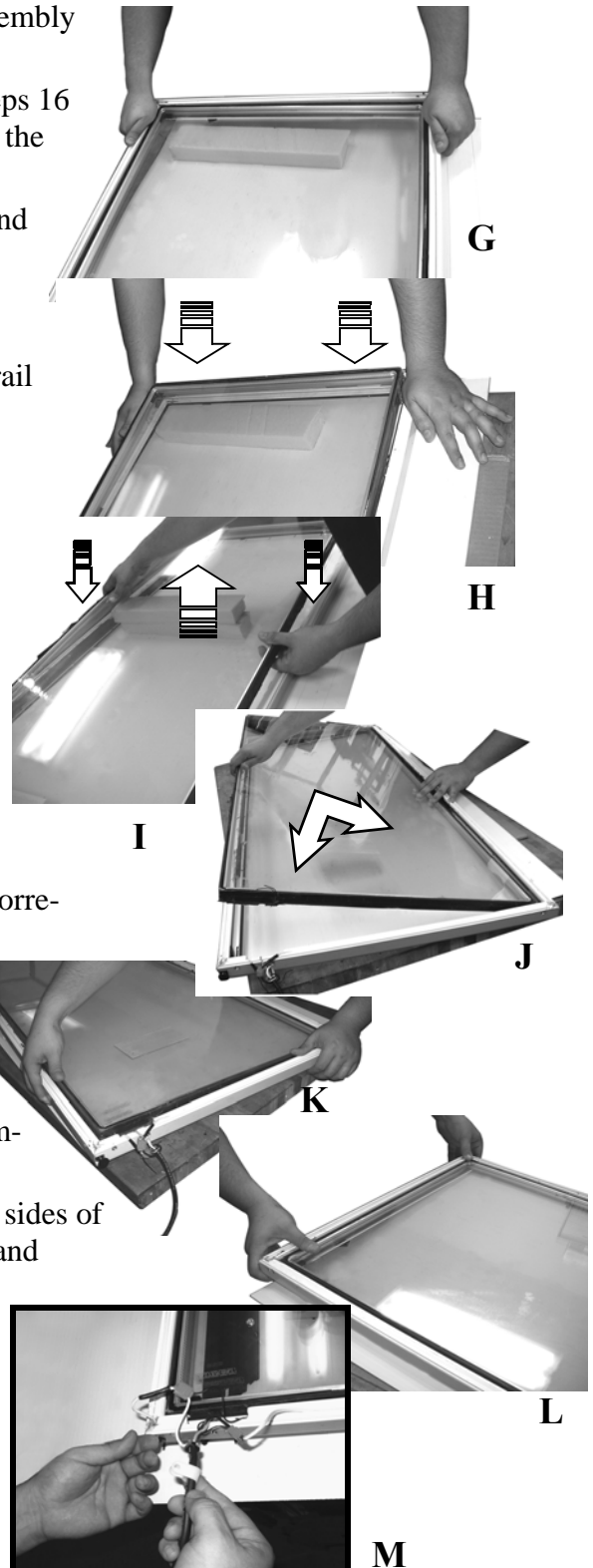


E

* Referential pictures shown without gloves for clarity.

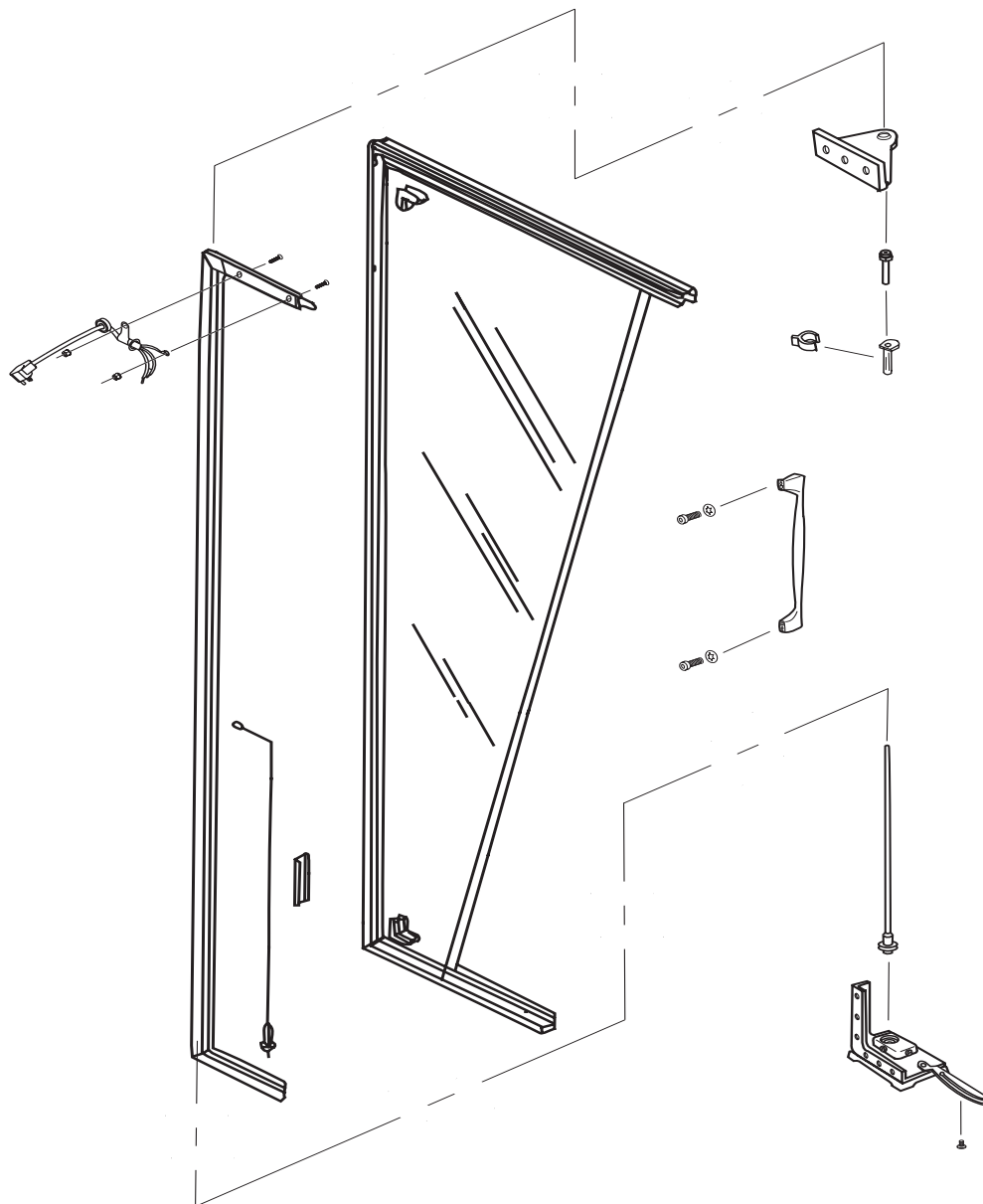
Glass Pack Replacement Procedures (cont'd)

16. Once all four corners of the glass-pack have been loosened, go to one end of the door assembly and place one hand on each corner of the door rail frame assembly (**G**).
17. Press down firmly on both corners of the door rail frame assembly, forcing it down and separating the frame assembly from one end of the glass pack (**H**).
18. Go to the other end of the door assembly and repeat steps 16 and 17 to separate the other end of the glass-pack from the door rail assembly.
19. If necessary, stack two foam blocks atop one-another and work the door rail frame downward to facilitate a complete separation of the glass-pack from the door rail frame.
20. Carefully lift and remove the glass pack from the door rail assembly (**I**).
21. Remove foam blocks from the tabletop.
22. Install foam mounting tape along the interior of the frame assembly inside each rail.
23. Apply a thin strip of silicone adhesive to the interior of the door rail frame, along-side the foam tape.
24. Using extreme care, check and confirm that glass-pack heater wires are aligned with the power cord assembly in the door rail frame assembly. Be certain that the heater wires are away from the insertion point to avoid entangling the wires in the adhesive during installation.
25. Insert one side of the replacement glass-pack into the corresponding side of the frame assembly (**J**).
26. Gently insert the remaining side of the glass-pack into the inside of the rail frame assembly until the glass pack incompletely inserted into the rail frame. If necessary, use a plastic or rubber mallet and gently tap the edges of the glass-pack into the rail frame assembly (**K**).
27. Replace any loosened spacers and confirm that all four sides of the glass-pack are fully inserted into the rail assembly and evenly distributed within the frame (**L**).
28. If glass-pack wires are terminated, insert the terminated wire ends into the terminals. If the wire ends are stripped, then strip the cut wires from the power cord and insert a two inch heat shrink tube over each stripped wire and slide the tubes away from the stripped wire ends (**M**).



Glass Pack Replacement Procedures (cont'd)

29. Join the stripped wire ends from the power cord to the stripped heater wire ends and lightly twist.
30. Using a soldering iron or gun, solder the wire ends together.
31. Slide the heat shrink tubing over the solder joints of the adjoined wire ends and, using a heat gun, apply a steady flow of heated air onto each shrink tube to insulate the soldered wire joints.
32. Inject additional silicone adhesive into the seams between the glass-pack edges and the door rails.
33. Allow the silicone adhesive to cure.
34. Replace the plastic covers to the door rails (refer to plastic cover replacement procedures).
35. Replace the gasket to the door assembly (refer to gasket replacement procedures).
36. Install door assembly to the hinge mounts (refer to door mounting procedures).
37. Plug power cord into socket to restore power to the re-installed door assembly.



**MODEL
601B**

APPENDIX A
PRODUCT NOTIFICATION
Handle Assembly Removal

Date Effective: May 05, 2005
Doc ID: N050405
Model: 601B
Item: Door Handle

Issue:

When accessing the internally mounted door fasteners, interference with the fastener’s socket heads may be encountered.


When attempting to loosen or remove the fasteners, located inside the door rail, the obstruction should be circumvented or removed from the path of access.

Solution:

Perform the following steps to remove the door handle mounting fasteners:

PRELIMINARY CONSIDERATIONS:

1. The tools and materials required to perform this procedure are:
 - ◆ Power Drill
 - ◆ 5/16” Drill Bit
 - ◆ 5/32” Hex Key or Allen Wrench
 - ◆ Soapy water or mild lubricant
 - ◆ Flathead Screwdriver
 - ◆ Plastic or Rubber Mallet
2. Safety practices must be observed.


 **Always exercise caution when working with both sharp edged and powered tools.**

PROCEDURE:

1. Remove Gasket:
 - a. Starting at one corner of the door, carefully lift the corner of the magnetic gasket.
 - b. Gently pull up the gasket along the rail and plastic cover.



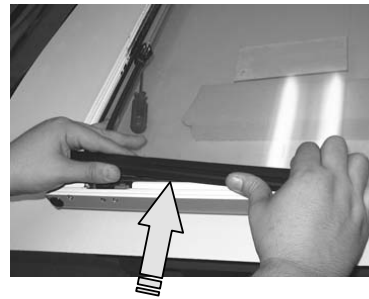
- c. Pull out gasket completely and set gasket aside.

 **Be sure to handle the gasket carefully to prevent damaging it.**

APPENDIX A

PROCEDURE (cont'd):

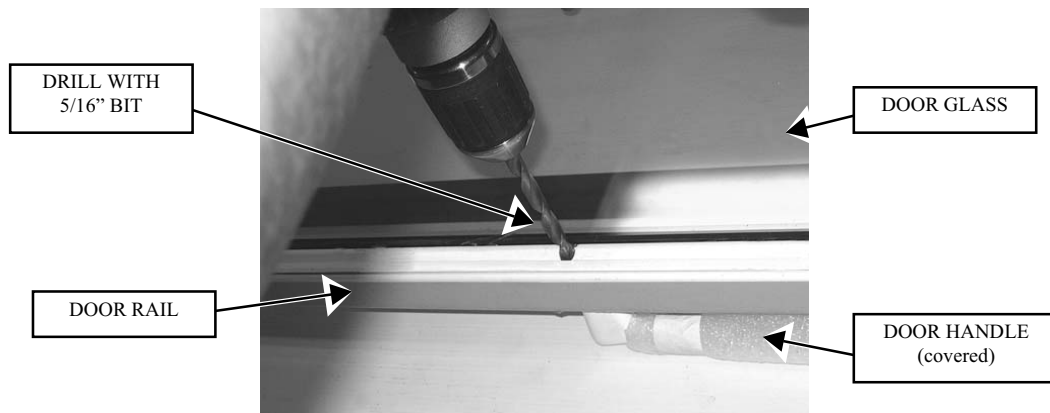
2. If the plastic is not pre-drilled with access holes, remove plastic rail cover on the handle side of the door only.
 - a. Insert flathead screwdriver in between plastic cover, corner miter and carefully pry it upwards.
 - b. Lift and remove plastic cover (once again- on door rail of handle side only).



3. Clear obstructive matter from the fastener heads.

⚠ Perform the following tasks with extreme caution to avoid damaging the fastener socket-head, as well as the door glass.

- a. Using a power drill with 5/16" drill bit, carefully insert the bit into the access hole of the door rail.
- b. Confirm that the drill aim is perpendicular to the rail and door.
- c. Gently apply power to the drill, spinning the bit at a low speed, while applying pressure to the obstruction, until the obstruction is cleared from the socket-head.



- d. The obstruction is composed of a reasonably soft material and should clear away relatively easy. DO NOT drill into the socket head.

NOTE: In the event that adhesive has settled inside the socket-head, use a 3/16" drill bit to carefully route the adhesive out of the socket head.

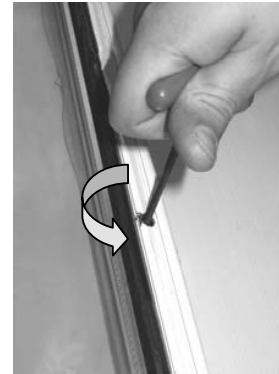
DO NOT strip the hex pattern within the socket head.

APPENDIX A

PROCEDURE (cont'd):

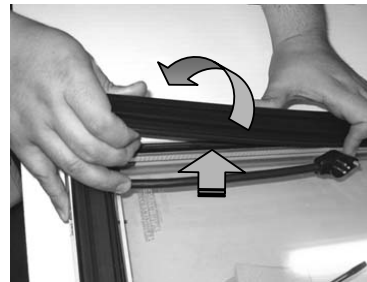
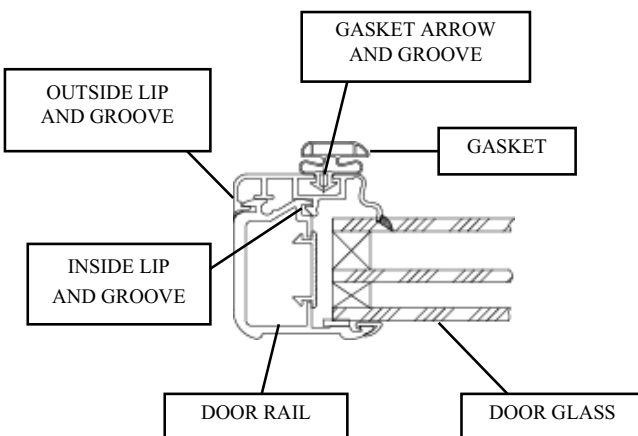
4. Remove and replace the handle fasteners from the rail.

- a. Once the obstructing matter has been cleared, insert a 5/32" into the socket head of the handle fastener, and twist it counter-clockwise to loosen the fastener and remove it.
- b. Once the fasteners have been removed, replace with NEW socket-head fasteners. Using the same fasteners to secure the door handle is NOT recommended.



5. Reassemble the door rail gasket.

- a. Replace plastic cover to the door rail.
- b. Insert the inside edge of the plastic cover into the inside groove of the rail.
- c. Push the plastic cover outward, away from the center of the door, in order to insert the outer lip into the outside groove of the rail.



- d. Replace the gasket to the plastic cover.
- e. Insert the gasket arrow into the groove in the center of the plastic cover until the edges of the arrow catch and are fully inserted into the groove.
- f. Press the gasket firmly against the plastic cover and (pressing hard) slide along the gasket, inserting the remainder of the gasket arrow into the plastic cover groove.
- g. Using the blunt side of a plastic or rubber mallet, strike the gasket onto the cover and rail to facilitate the gasket arrow into the groove of the plastic cover.

NOTE: If the gasket arrow is exhibiting difficulty when being reinstalled into the plastic cover groove, apply soapy water or a mild silicone based lubricant to the gasket in order to assist in inserting the gasket arrow into the groove of the plastic cover.

APPENDIX B ELECTRICAL INFORMATION

MODEL 601B ADM DOOR

Amperages @ 120 Volts

Table 1: Amperages

| DOOR SIZE | NORMAL TEMP • 2 PANE - N.H.G.* • 3 PANE - N.H.G.* • 2 PANE - N.H.G.* REFLECTIVE | NORMAL TEMP • 2 PANE - HEATED GLASS • 3 PANE - HEATED GLASS • 2 PANE - HEATED GLASS REFLECTIVE |
|-----------------------------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| $23\frac{3}{16} \times 34\frac{1}{16}$ | 0.08 | 0.42 |
| $23\frac{3}{16} \times 62\frac{13}{16}$ | 0.12 | 0.73 |
| $29\frac{7}{8} \times 34\frac{1}{16}$ | 0.09 | 0.52 |
| $29\frac{7}{8} \times 62\frac{13}{16}$ | 0.11 | 0.74 |
| $29\frac{7}{8} \times 34\frac{1}{16}$ | 0.13 | 0.93 |
| $29\frac{7}{8} \times 71\frac{1}{16}$ | 0.14 | 1.01 |

*N.H.G. = NON HEATED GLASS

STYLE: Normal temperature doors with heaters and 2-pane glass N.H.G.*

APPLICATION: Case temperature 38° F; in-store ambient temp. at 75° F and 63% relative humidity.

STYLE: Normal temperature doors with heaters and 2-pane glass heated glass (5.75 W/SQ. FT.)

APPLICATION: Case temperature 31° F; in-store ambient temp. at 75° F and 84% relative humidity.

STYLE: Normal temperature doors with heaters and 3-pane N.H.G.* or 2-pane Reflective heated glass.

APPLICATION: Case temperature 33° F; in-store ambient temp. at 75° F and 66% relative humidity.

STYLE: Low temperature doors with heaters and 3-pane glass heated glass (5.75 W/SQ. FT.)

APPLICATION: Case temperature -10° F; in-store ambient temp. at 75° F and 74% relative humidity.

NOTES:

1. Although the amperages are calculated at 120 volts, all doors are designed to operate without sweating, when used within application parameters, with a voltage range of +/- 10%.
2. Design parameters do not make allowances for factors, such as air leaks or unusual air flow patterns within cases; therefore some sweating may be encountered when upper limits of temperature or humidity occur.

APPENDIX C

DEW POINT CHART

NORMAL TEMPERATURE APPLICATIONS

| GLASS TYPE | ROOM TEMP (F) | CASE TEMPERATURE (F) | | | | |
|--------------------------|---------------|----------------------|----|----|----|----|
| | | 40 | 35 | 30 | 25 | 20 |
| TWO PANE NHG* | 70 | 69 | 65 | 61 | 58 | 55 |
| | 75 | 66 | 62 | 59 | 55 | 52 |
| | 80 | 63 | 59 | 56 | 53 | 50 |
| | 85 | 60 | 57 | 54 | 51 | 48 |
| | 90 | 57 | 55 | 52 | 49 | 47 |
| THREE PANE NHG* | 70 | 74 | 71 | 68 | 65 | 62 |
| | 75 | 71 | 68 | 65 | 63 | 60 |
| | 80 | 69 | 66 | 63 | 61 | 58 |
| | 85 | 66 | 64 | 61 | 59 | 57 |
| | 90 | 64 | 62 | 60 | 57 | 55 |
| TWO PANE REFLECTIVE NHG* | 70 | 77 | 74 | 71 | 68 | 65 |
| | 75 | 75 | 72 | 69 | 66 | 63 |
| | 80 | 72 | 70 | 67 | 64 | 61 |
| | 85 | 70 | 67 | 65 | 62 | 59 |
| | 90 | 68 | 65 | 63 | 60 | 58 |
| TWO PANE HEATED GLASS | 70 | 98 | 94 | 89 | 84 | 80 |
| | 75 | 93 | 89 | 84 | 80 | 76 |
| | 80 | 89 | 85 | 80 | 76 | 73 |
| | 85 | 85 | 81 | 77 | 73 | 70 |
| | 90 | 81 | 77 | 74 | 70 | 67 |

*NHG = Non Heated Glass

% REL HUMIDITY @ WHICH CONDENSATION FORMS ON GLASS

LOW TEMPERATURE APPLICATIONS

| GLASS TYPE | ROOM TEMP (F) | CASE TEMPERATURE (F) | | | | | | |
|--------------------------------|---------------|----------------------|----|----|-----|-----|-----|-----|
| | | +5 | 0 | -5 | -10 | -15 | -20 | -25 |
| 3-PANE HEATED REFLECTIVE GLASS | 70 | 84 | 81 | 79 | 76 | 74 | 72 | 70 |
| | 75 | 81 | 79 | 76 | 74 | 72 | 70 | 68 |
| | 80 | 79 | 77 | 74 | 72 | 70 | 68 | 66 |
| | 85 | 77 | 75 | 72 | 70 | 68 | 67 | 65 |
| | 90 | 75 | 73 | 71 | 69 | 67 | 65 | 63 |

% REL HUMIDITY @ WHICH CONDENSATION FORMS ON GLASS

CALCULATIONS DO NOT PROVIDE ALLOWANCE FOR AIR LEAKS OR UNUSUAL AIR FLOW PATTERNS WITHIN CASES. THEY ARE INTENDED TO BE USED AS A GUIDELINE ONLY.

Company Policies, Terms of Sale, and Warranty

The following terms and conditions shall apply to all transactions and agreements between Anthony Manufacturing Co., Inc.

("Anthony") and the other part to such transaction or agreement ("Buyer") with respect to the purchase of any goods from Anthony and/or the extension of credit by Anthony to Buyer for such purchase.

1. **PRICE.** Prices shown on the face of the sales invoice are F.O.B. factory, San Fernando, California, packaged for domestic shipment and subject to change without notice.

2. **TERMS OF CREDIT.** All credit terms are net 30 days from date of invoice. Any deductions from the net invoice amount must be approved by an authorized representative of Anthony. If credit is extended to Buyer, Anthony reserves the right to revoke such credit if Buyer fails to make timely payment for any goods delivered.

Anthony reserves the right to require payment or other assurances which it deems necessary prior to the shipment of any goods, if in Anthony's opinion, exercised in Anthony's subjective, good faith judgment, the Buyer's financial condition has deteriorated or the risk of non-payment has otherwise increased. Credit is subject to approval upon receipt of completed credit application. Any goods shipped prior to credit approval shall be shipped C.O.D., "Cashiers Check," or pre-payment. A \$25.00 charge will be applied for each returned check. Goods may not be returned for credit unless prior authorization and an authorization number have been granted by Anthony. A 1-1/2% per month charge will be assessed on past-due payments.

3. **SHIPMENT OF GOODS / RETURN OF GOODS.** Every effort will be made to ship the goods on the scheduled shipment date and to maintain production schedules consistent therewith. Anthony will not be liable, however, for any claims arising from the failure to meet any scheduled shipping dates. If Buyer refuses shipment of any standard catalog products under the acknowledged order and those products are consistent with that order, and are not delivered damaged or defective, then Buyer will be responsible for: (i) return shipment of the products to Anthony in original shipping containers; (ii) return freight to Anthony pre-paid by Buyer; (iii) a restocking charge, to be determined by Anthony, of not less than twenty-five percent (25%) of the sales price. Buyer assumes the risk of any return shipment damage or loss, the cost of which will be assessed by Anthony and added to the restocking charge. No custom products or custom sizes of catalog items may be returned to Anthony for credit unless those products are not consistent with an acknowledged order or they are defective. If they are defective, Anthony reserved the right to cure the defect at the ship-to location.

4. **RISK OF LOSS.** Subject to security interests retained by Anthony until payment for the goods is received in full, the title to such goods and risk of loss or damages thereto pass to Buyer upon completion of loading of goods on carrier at Anthony's factory. Buyer will unload shipments promptly and Buyer will be liable for any additional charges such as demurrage, storage, and labor incurred by its failure to do so. Any claims by Buyer for damages to the goods incurred during shipping shall be made to the carrier.

5. **WARRANTIES.** Effective November 1, 1997, the products manufactured and offered for sale by Anthony are warranted to: (i) be free from defects in materials and workmanship; (i) to perform in accordance with refrigeration standards as of the date of manufacture, provided that the installation and maintenance of such products have been performed strictly in accordance with Anthony specifications, (the "Warrant") for a period of fifteen (15) months from the date of shipment from Anthony's San Fernando, California (the "Warranty Period"), except that Anthony will provide replacement sealed glass units that are part of an original Anthony-manufactured door, if the seal breaks and the internal condensation

results for a period of 10 years from the date of shipment from Anthony. During the 15 month warranty period, Anthony shall provide all necessary parts and labor, at its cost, to provide the warranty. The extent of Anthony's liability under the warranty is limited to the repair or replacement, at Anthony's option, of any non-conforming products without charge, F.O.B. San Fernando, California, until such time as Anthony may change its warranty provisions in its sole discretion, at any time or without prior notification of such change. **THE ABOVE WARRANTY IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ANTHONY SHALL NOT BE RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES SUCH AS INJURY TO PERSONS OR PROPERTY.**

6. **CLAIMS BY BUYER.** All claims by Buyer against Anthony, including claims for alleged shortages, must be made in writing and delivered to Anthony within 30 days of receipt of the goods. Anthony shall thereupon be afforded a reasonable opportunity to inspect the goods. All claims not made in the time period and manner specified above shall be deemed waived. All actions, claims or defenses by Buyer shall be deemed waived unless commenced or asserted within 6 months of receipt of the goods.

7. **CANCELLATION.** Orders may not be cancelled after receipt and posting by Anthony unless Anthony consents to such cancellation. Cancellation will be granted only on terms indemnifying us against any loss resulting from such action. At minimum, Buyer will be liable for all cost incurred on the order though the cancellation date.

8. **CHANGES BY ANTHONY.** Anthony reserves the right to change design, colors and specifications of any goods without notice to Buyer.

9. **DEFAULT.** If Buyer defaults on the purchase of any goods or if a petition in bankruptcy is filed by or against Buyer, Anthony, in addition to other remedies, may repossess any goods which were previously delivered and for which payment has not been received and may refuse to make further shipment of goods. Buyer agrees to pay Anthony's costs and expenses of collection or repossession including the maximum attorney's fee permitted by law.

10. **ENTIRE AGREEMENT AND AMENDMENT.** The terms specified herein constitute the entire agreement between Anthony and Buyer with respect to the sale and purchase of the goods and any extension of credit. If Anthony and Buyer agree to amend or modify any terms and conditions specified herein, such amendment or modification must be expressly stated on the face of the sale invoice or by a written agreement duly executed by both parties. The terms specified herein shall control in the event of any variance between these terms and any terms contained in Buyer's purchase orders.

11. **GOVERNING LAW.** Agreements between Anthony and Buyer with respect to the sale and purchase of the goods and any extension of credit shall be governed by, construed and enforced in accordance with the laws of the State of California, County of Los Angeles. By entering into any agreement with Anthony, Buyer consents to the jurisdiction of the courts of the State of California. Service or process may be made by registered mail promptly addressed to the Buyer.

12. **SERVABILITY.** If any provision of the terms and conditions specified herein shall be deemed invalid or unenforceable, the remaining terms and conditions shall be construed as though such provision does not appear herein and shall be otherwise fully enforceable.

13. **HEADINGS.** The section headings contained herein have been inserted for convenient reference and shall not be considered in any question of interpretation or construction of any agreements between Anthony and the buyer.

Patents

Anthony International products are covered by one or more of the following United States Patents:

RE35,120; 4,905,347; 5,309,066; 5,315,211; 5,284,371; 5,605,237; 4,671,582; 4,696,078; 4,760,621; 5,002,320; RE35,149; 5,251,402; 5,297,863; 5,299,437; D332,564; RE 35,392; 5,301,092; 5,363,611; 5,544,454; 5,720,540; 5,879,070; 5,895,111; 5,910,083; 6,029,411; 6,031,338; 5,902,034; 5,959,816; 6,010,227; 6,122,869; 6,222,322; 6,260,255; 6,298,615; 6,302,036; 6,302,557; 6,318,027; 6,325,523; 6,367,223; 6,389,993; 6,490,983; 6,343,405; 2,987,782; 3,131,421; 3,295,634; 3,345,606; 3,399,784; 3,449,551; 3,475,594; 3,499,245; 3,508,361; 3,526,753; 3,629,972; 3,673,735; 3,696,360; 3,697,723; 3,837,119; 4,145,844; 4,261,179; 4,416,086; 4,428,096; 4,430,770; 4,641,461; 4,656,781; 4,691,486; 4,741,127; 4,753,043; 4,831,780; 4,852,303; 4,941,289; 4,998,382; 5,016,146; 5,024,023; 5,035,085; 5,116,274; 5,207,490; 5,214,877; 5,244,273; 5,255,473; 5,333,355; 5,111,618; 5,471,372; 5,622,414; 5,645,330; 4,004,370; 4,035,608; 4,080,756; 4,087,139; 4,127,188; 4,127,765; 4,221,443; 4,248,015; 4,260,876; 4,265,069; 4,306,140; 4,382,177; 4,477,129; 5,097,642; 5,113,628; 5,116,274; 5,207,490; 5,622,414; 4,691,486; 6,632,100; 6,637,093; 6,638,088.

Corresponding foreign patents issued and pending. Other U.S. and foreign patents pending.



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