



Model 1000, 1000R & 1200R Doors

**(Including Pass-Thru Door Models
2500/2700/3000)**

Service & Installation



November, 2012

99-20439-I001

Model 1000/1000R/1200R Door Service & Installation

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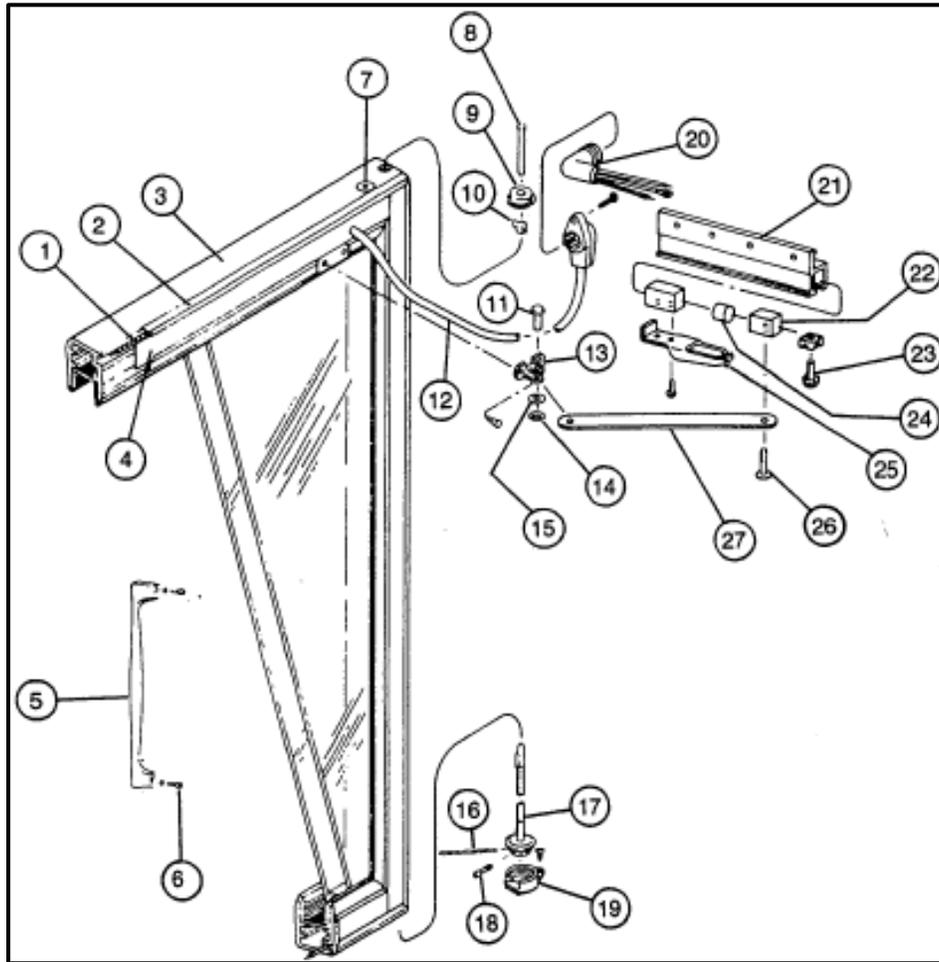
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1. Model 1000 Door (Non-Reversible) (Prior to 7/83)

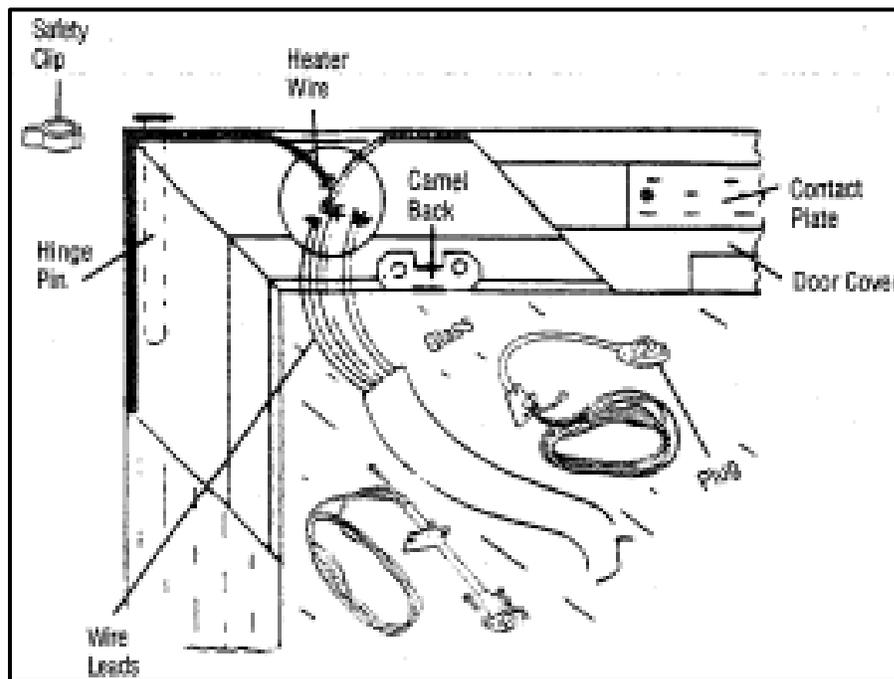


Description	Description	Description
1. Heater Wire	10. Safety Clip	19. Torque Casting
2. Plastic	11. Camel Back Hinge Pin	20. Female Plug
3. Door Rail	12. S.J. Cord	21. Door Stop Assembly
4. Contact Plate	13. Camel Back Hinge	22. Door Stop Sliding Block
5. Handle	14. Camel Back Hinge Pin Holder	23. Door Stop Nut & Bolt
6. Handle Screw	15. Camel Back Washer	24. Slide Stop Bumper
7. Corner Screw	16. Adjustment Pin	25. Hold-Open
8. Top Hinge Pin	17. Torque Rod	26. Door Stop Sliding Block Screw
9. Top Hinge Pin Holder	18. Set Pin	27. 10" Door Stop Arm

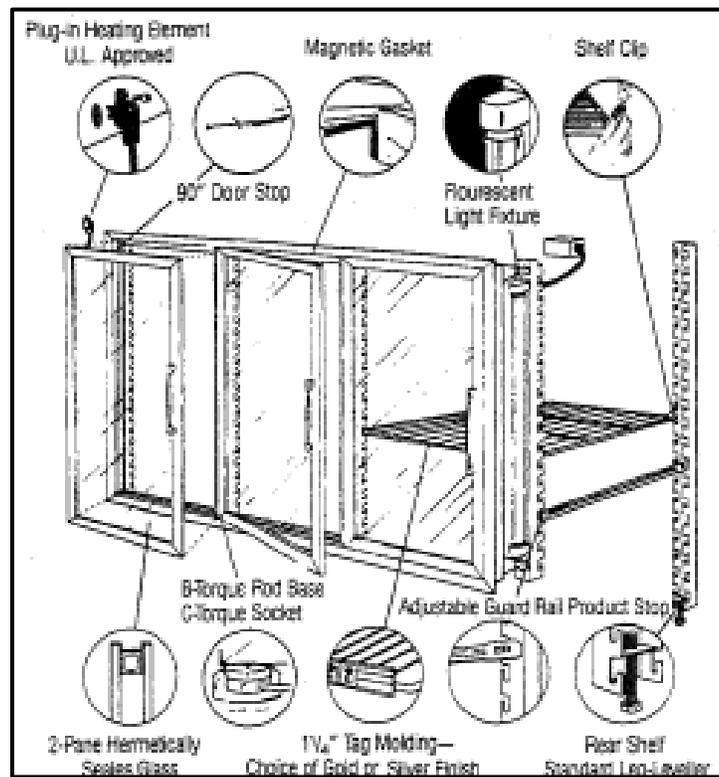
Model 1000/1000R/1200R Door Service & Installation

1.1. Drawings & Schematics

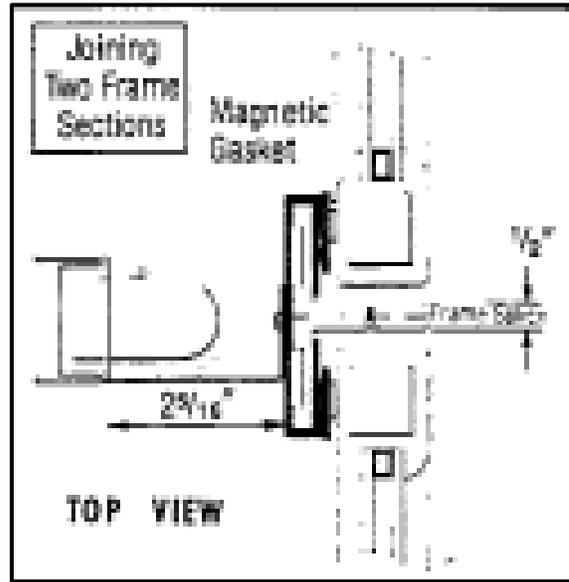
1.1.1. Product Prior to 1987



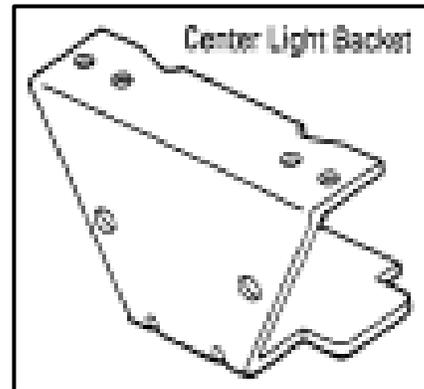
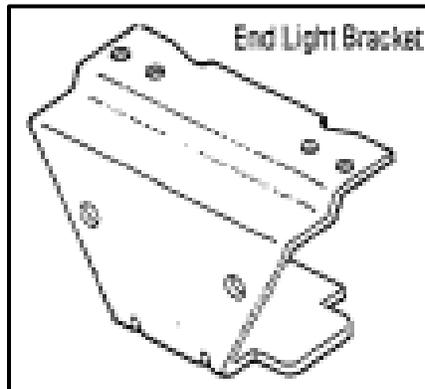
1.1.2. Prior to 1984



1.1.5. Joining Two Frame Sections

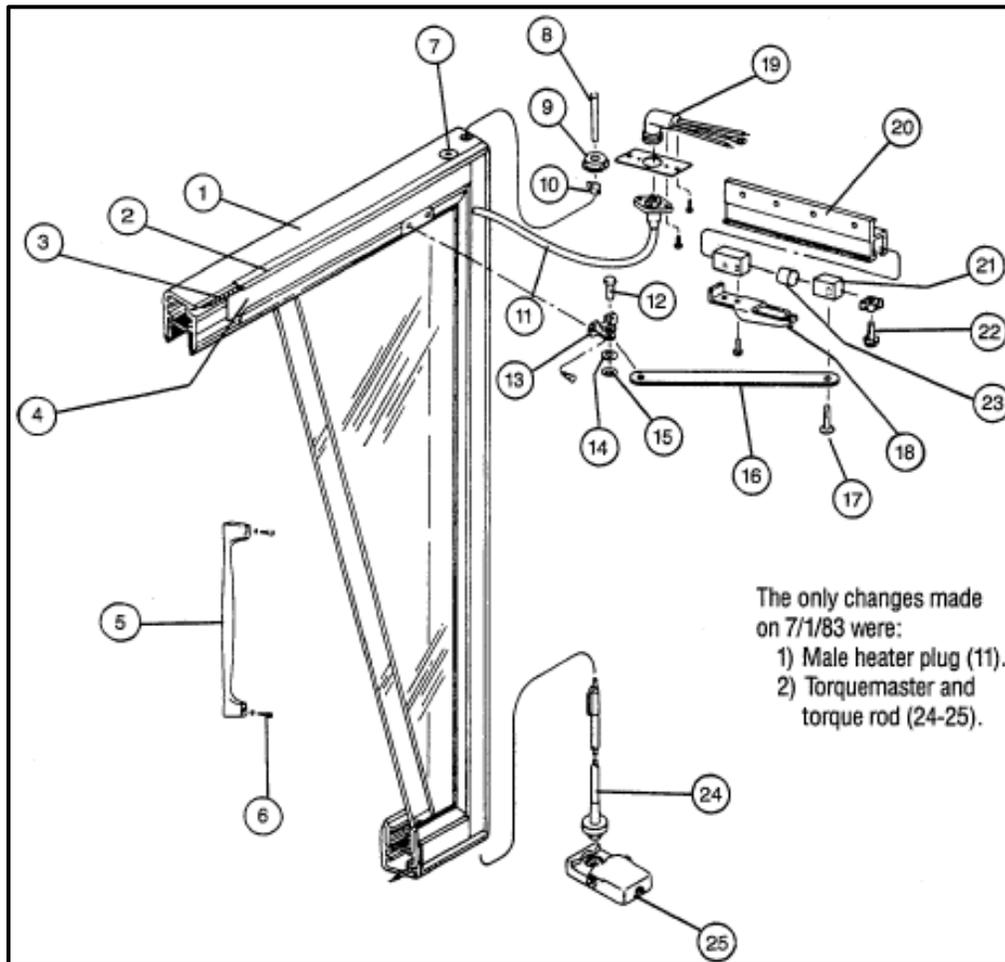


1.1.6. Brackets



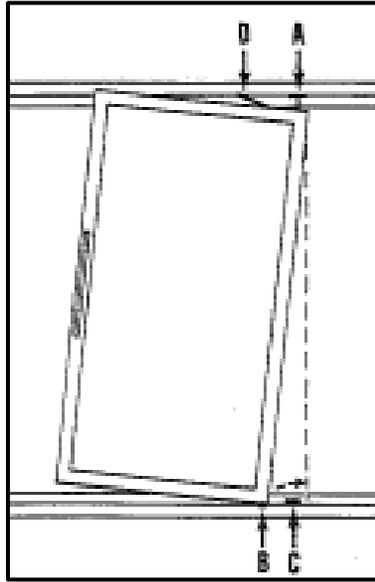
Model 1000/1000R/1200R Door Service & Installation

2. Model 1000 Door (Non-Reversible) (7/83 to 1/87)



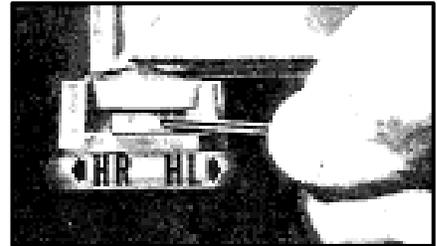
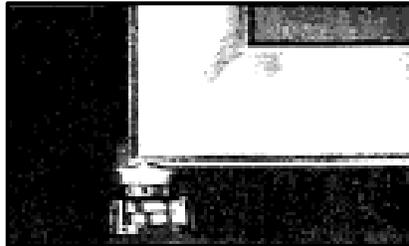
Description	Description	Description
1. Door Rail	10. Safety Clip	19. Female Plug
2. Plastic	11. Male Plug	20. Door Stop Assembly
3. Heater Wire	12. Camel Back Hinge Pin	21. Door Sliding Block
4. Contact Plate	13. Camel Back Hinge	22. Door Stop Nut & Bolt
5. Handle	14. Nylon Washer	23. Bumper
6. Handle Screw	15. Camel Back Hinge Pin Holder	24. Torque Rod
7. Corner Screw	16. 10" Door Arm	25. Torquemaster
8. Hinge Pin	17. Block Screw	
9. Pin Holder	18. Hold-Open	

3. Model 1000 Non-Reversible Door Installation (Prior to 1983)



1. Insert top of door into top hinge pin “A”.

Safety Precaution: Snap ring must be used on every door. Place snap ring on top hinge pin after installation of every door.



2. Lift up door and insert torque shaft “B” into socket “C”. Using two (2) long pins, adjust torque to desired tension and set with one (1) short pin. Both long and short pins are provided.

Note: *Do not over-adjust door as this will cause door to slam.*

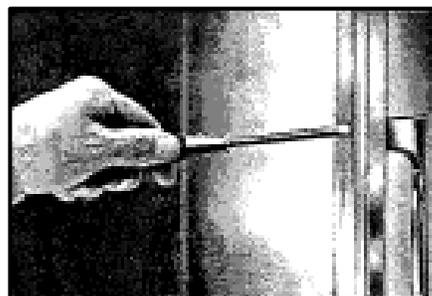
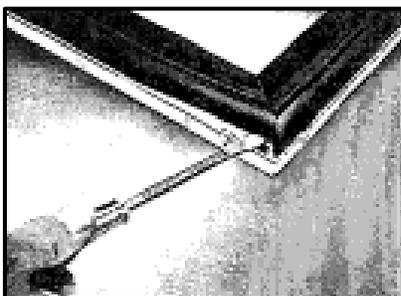
3. Connect 90° door stop arm “D” to slide block on frame. Secure with screw provided.
4. Reverse instructions to remove door.

Caution: *Before removing door, extract torque set pin and safety snap ring with a pair of pliers.*

Model 1000/1000R/1200R Door Service & Installation

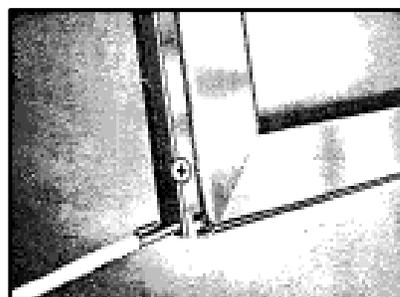
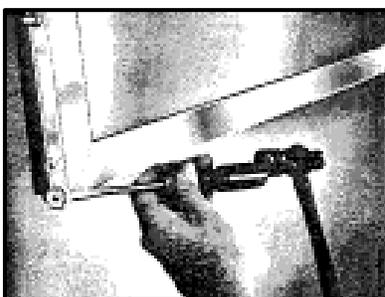
4. Model 1000 Non-Reversible Door Handle Replacement

1. To remove handle, insert 5/32" Allen wrench through back side of door frame. Handle screws are contained in door frame.



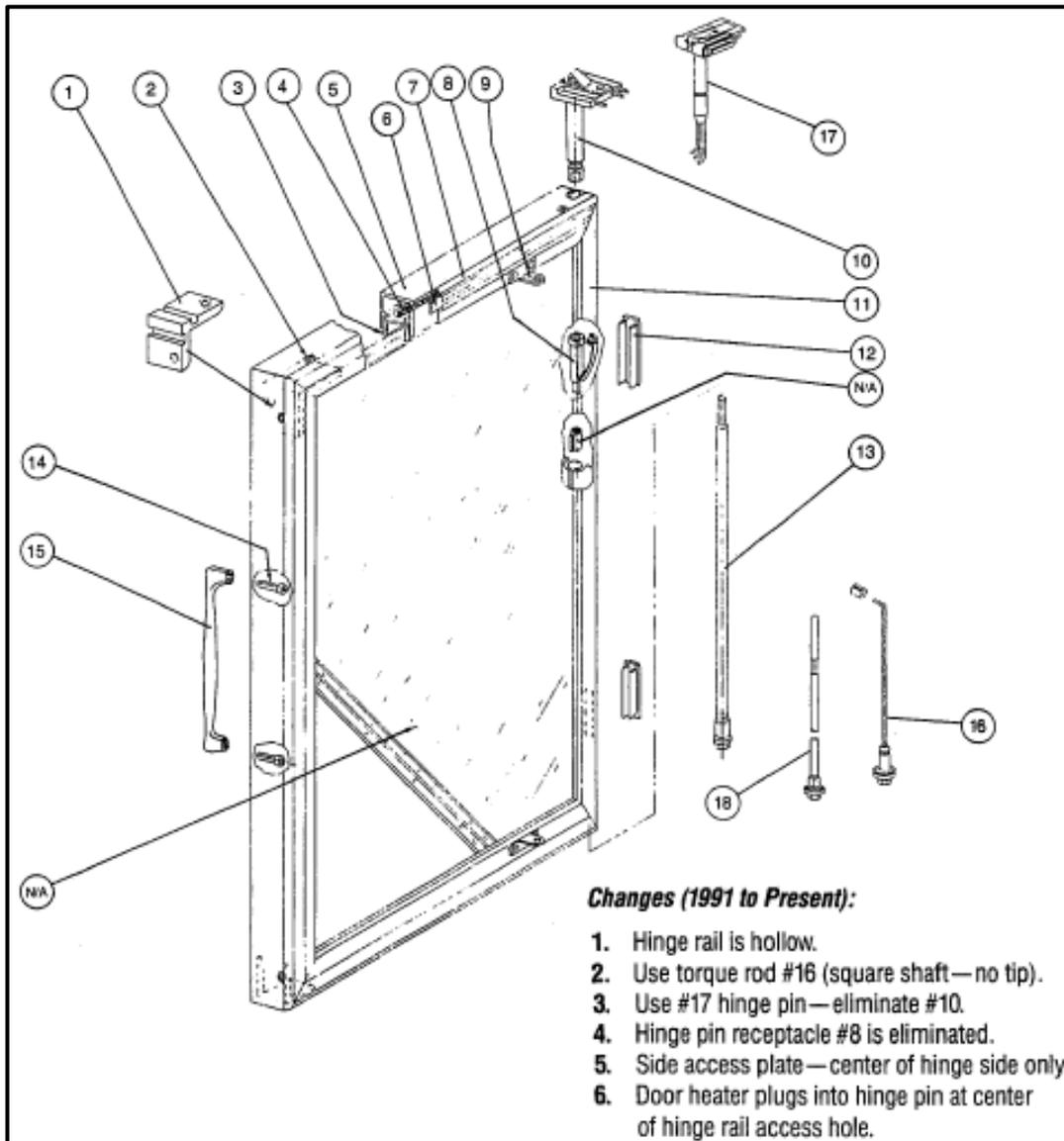
5. Model 1000 Non-Reversible Door Handle Replacement

1. Door does not have to be disassembled to replace torque rod. Drive tapered shaft of torque rod as shown below.
2. To replace new torque rod, align torque shaft with key way in door. Tapered shaft must be driven flush with bottom of door.



Model 1000/1000R/1200R Door Service & Installation

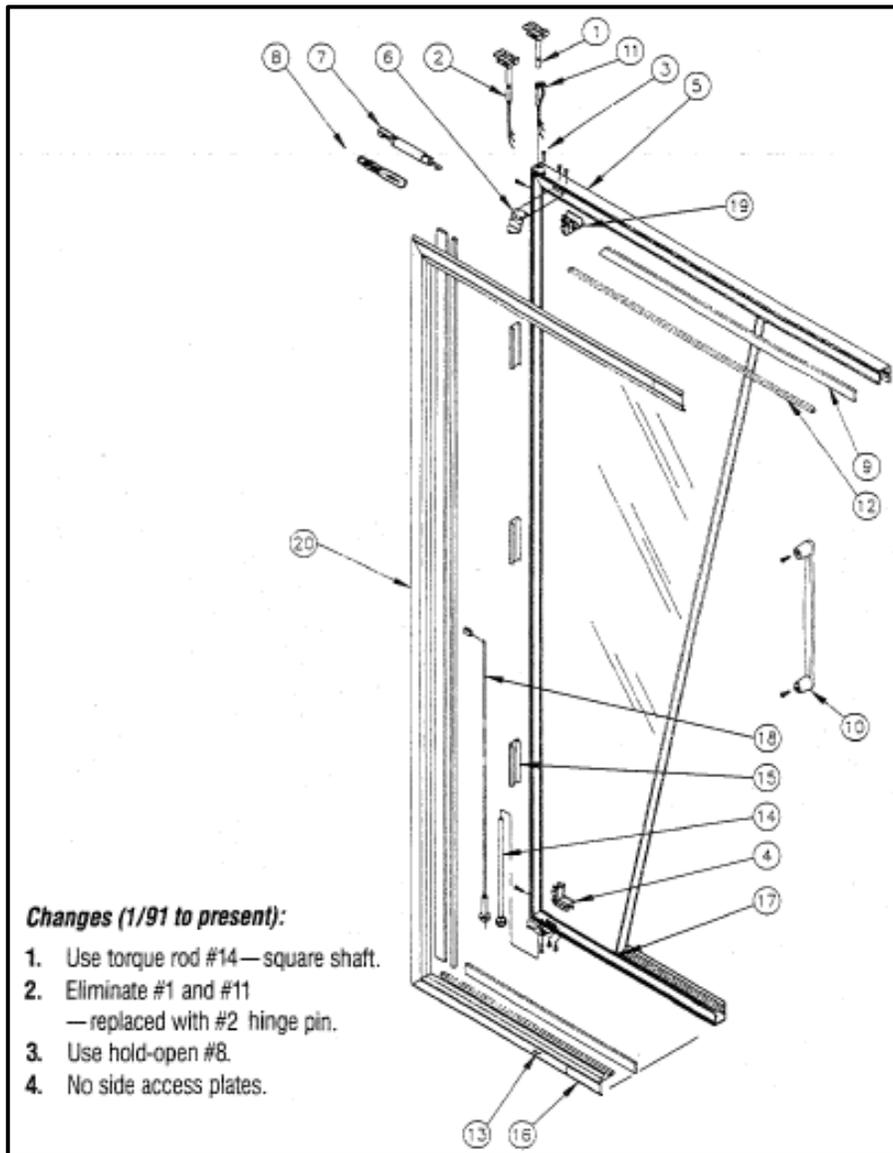
6. Model 1000R Door (Reversible) (1987 to 1991)



Description	Description	Description
1. Corner Piece	7. Door Plastic	13. Torque Rod
2. Corner Screw	8. Receptacle	14. Handle Screw
3. Glazing Channel	9. Camel Back	15. Handle
4. Heater Wire	10. Hinge Pin	16. Torque Rod (1987-1991)
5. Door Rail	11. Door Plastic	17. Hinge Pin (1991 to Present)
6. Contact Plate	12. Access Cover	18. Torque Rod (1991 to Present)

Model 1000/1000R/1200R Door Service & Installation

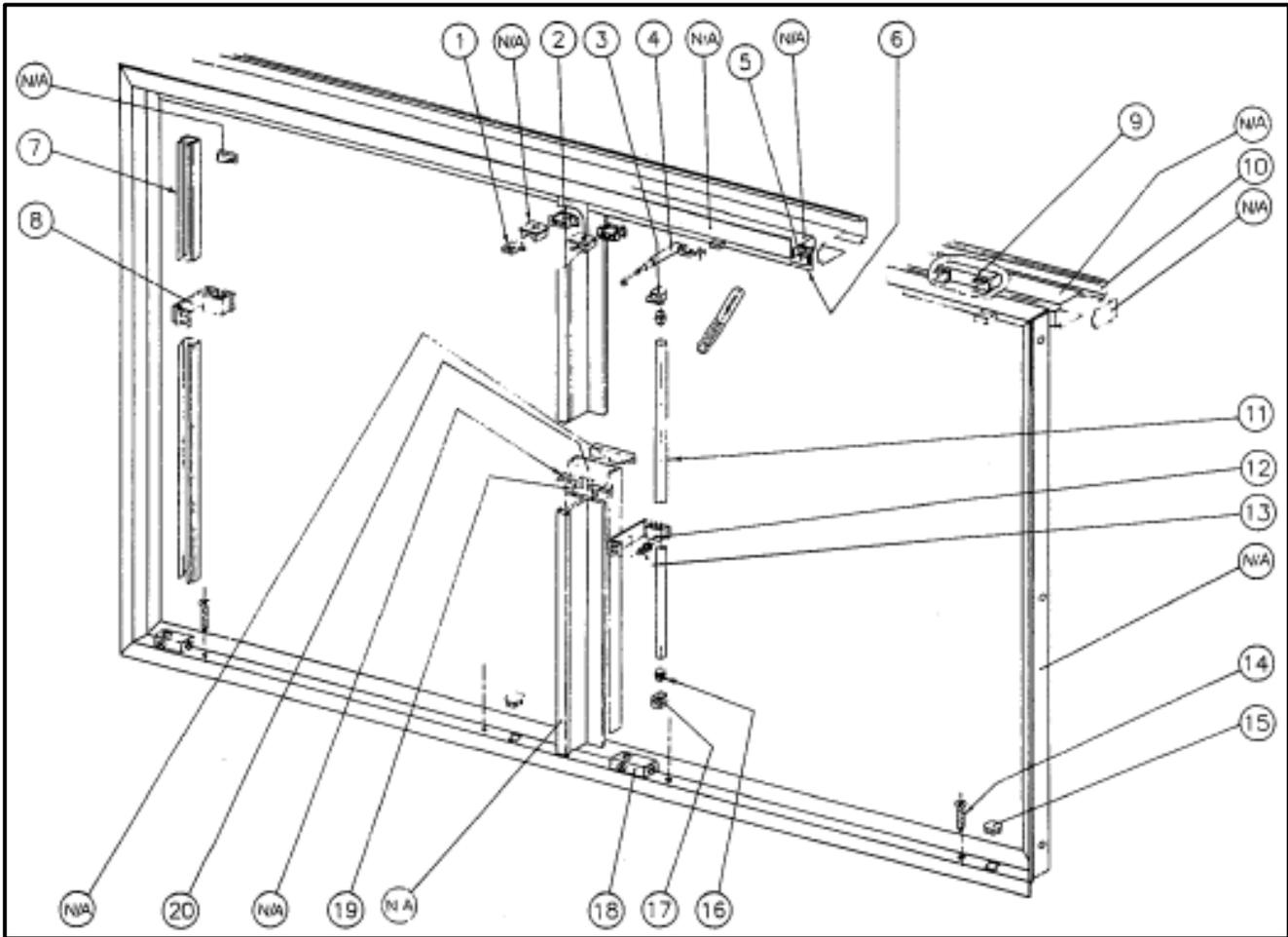
7. Model 1200R Door (Reversible) (Start 10/89)



Description	Description	Description
1. Hinge Pin	8. New Hold-Open	15. Access Hole Cover
2. Molded Hinge Pin	9. Door Foam	16. Contact Retainer
3. Corner Screw	10. Handle	17. Glazing Channel
4. Corner Piece	11. Female Receptacle	18. Torque Rod
5. Door Extrusion	12. Door Foam	19. Corner Piece
6. Camel Back	13. Contact Plate	20. Door Cover (Hinge Side)
7. Old Hold-Open	14. Torque Rod	

Model 1000/1000R/1200R Door Service & Installation

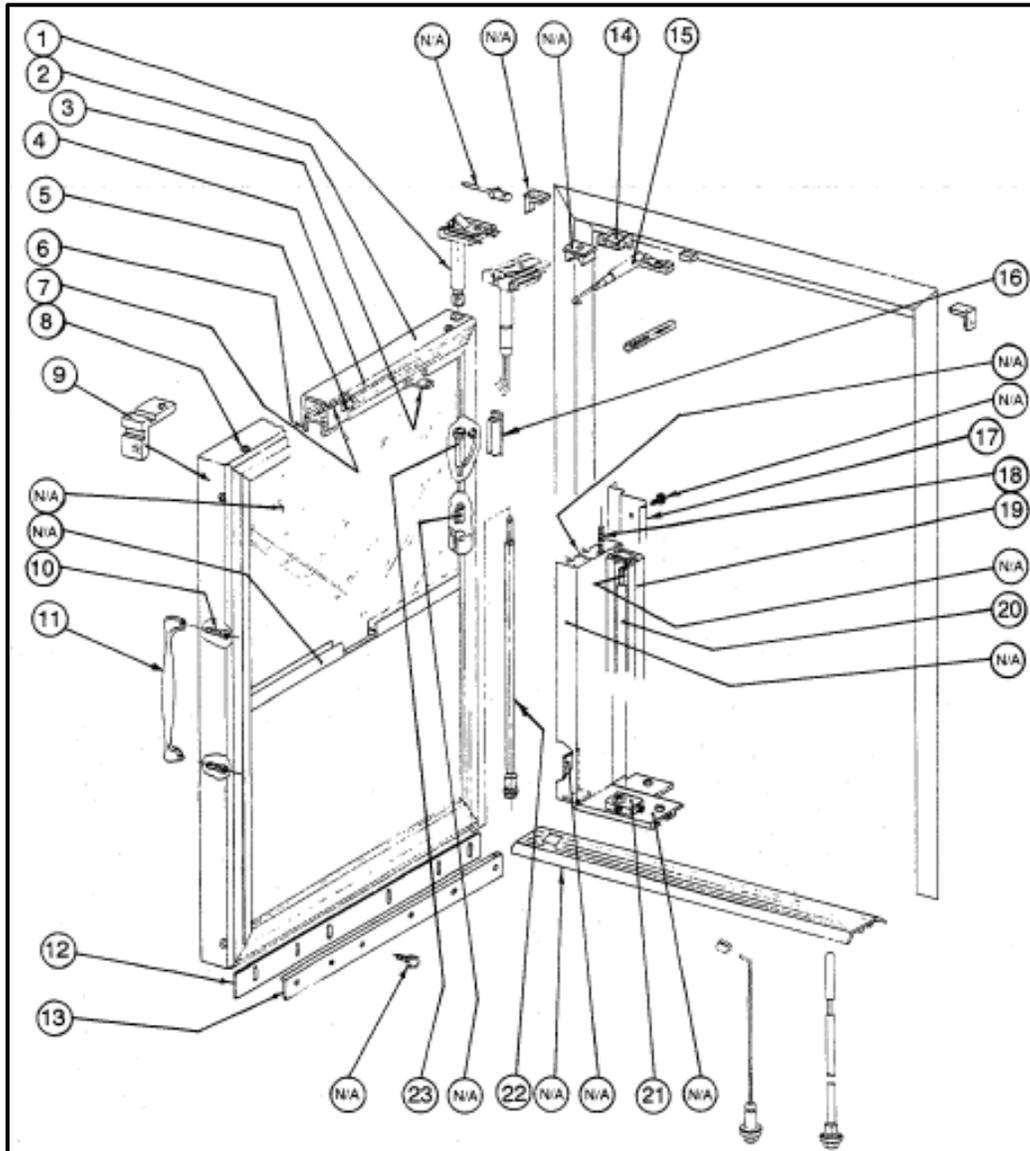
8. Model 1000, 1000R, 1200R Frame (Reversible)



Description	Description	Description
1. Safety Cover	8. End Bracket	15. Hole Plug
2. Socket	9. Ballast	16. End Caps
3. Light Socket	10. Raceway Cover	17. Socket
4. Hold-Open	11. Bulb	18. Torquemaster
5. Gasket	12. Center Bracket	19. Heater
6. Frame Cover	13. Screw	20. Center Fixture
7. End Light	14. Installation Screw	

Model 1000/1000R/1200R Door Service & Installation

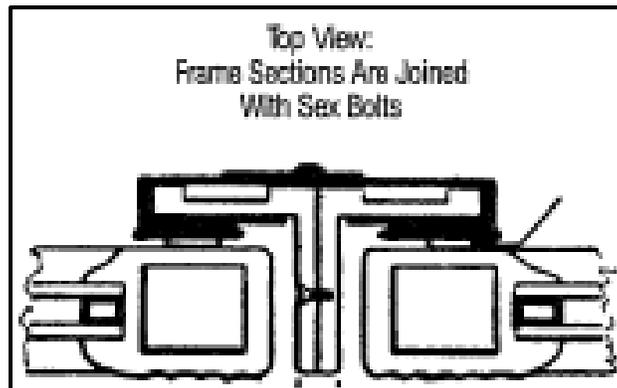
9. Models 2500, 2700, 3000 – Pass-Thru Doors (Start 1987)



Description	Description	Description
1. Hinge Pin	9. Corner Piece	17. Screw
2. Door Rail	10. Handle Screw	18. Heater
3. Camel Back Hinge	11. Handle	19. Mullion
4. Door Plastic	12. Rubber Flap	20. Frame Gasket
5. Contact Plate	13. Retainer	21. Torquemaster
6. Glazing Channel	14. Single Station Socket	22. Torque Rod
7. Door Heater	15. Hold Open	23. Female Receptacle
8. Corner Screw	16. Access Hole Cover	

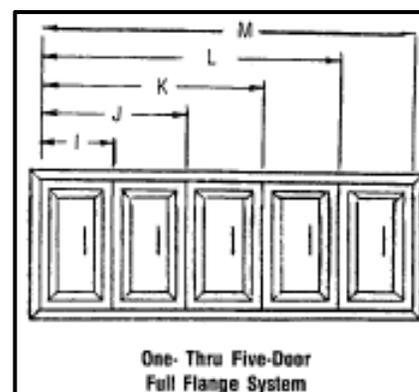
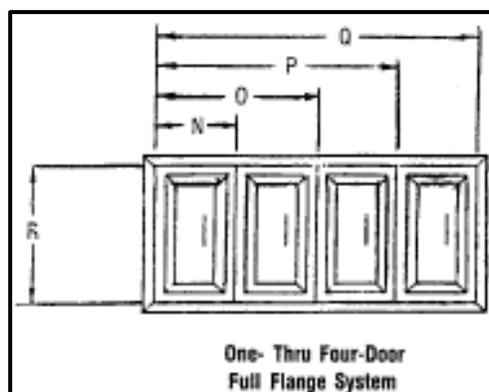
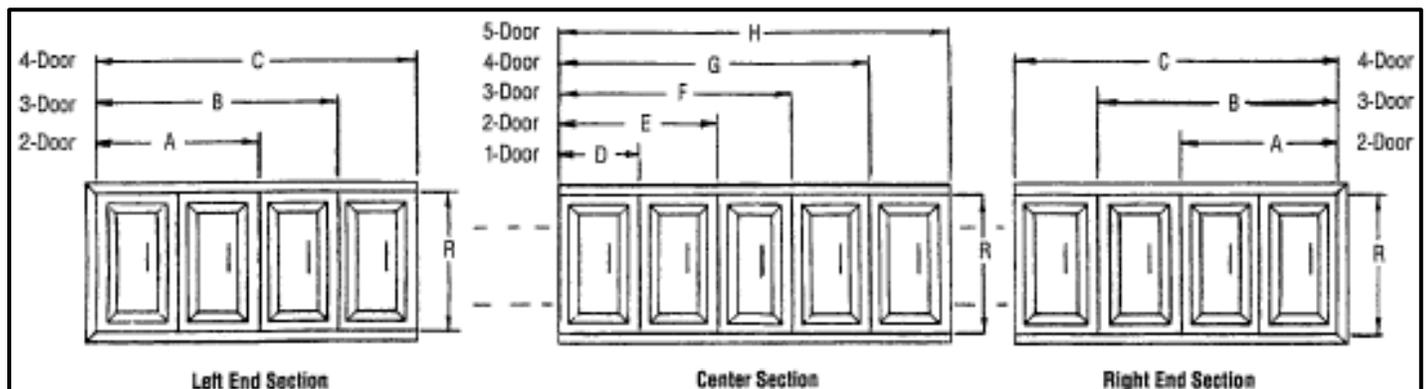
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10. Models 1000R, 1200R (Reversible) Frames – End & Center Sections, Full Flange Construction



10.1. Flange Placements

- a. **Left End Section** from customer side has no flange on right end of frame.
- b. **Center Section** from customer side has flanges on neither side.
- c. **Right End Section** from customer side has no flanges on left end of frame.
- d. **Full Flange Frames** have flanges on all four (4) sides.



Model 1000/1000R/1200R Door Service & Installation

10.2. Finished Frame Width Dimensions

Actual Door Width	Catalog Size	A	B	C	D	E
21-5/8"	23" C-C	46-1/2"	69-1/2"	92-1/2"	23"	46"
25-3/8"	26-3/4" C-C	54"	80-3/4"	107-1/2"	26-3/4"	53-1/2"
27-3/8"	28-3/4" C-C	58"	86-3/4"	115-1/2"	28-3/4"	57-1/2"
28-7/8"	30-1/4" C-C	61"	91-1/4"	121-1/2"	30-1/4"	60-1/2"

NOTE: C-C: Center-To-Center Dimension

F	G	H	I	J
69"	92"	115"	24"	47"
80-1/4"	107"	133-3/4"	27-3/4"	54-1/2"
86-1/4"	115"	143-3/4"	29-3/4"	58-1/2"
90-3/4"	121"	151-1/4"	31-1/4"	61-1/2"

K	L	M	N	O
70"	93"	116"	24"	47"
81-1/4"	108"	N/A	27-3/4"	54-1/2"
87-1/4"	116"	N/A	29-3/4"	58-1/2"
91-3/4"	122"	N/A	31-1/4"	61-1/2"

P	Q
70"	93"
81-1/4"	108"
87-1/4"	116"
91-3/4"	122"

10.3. Finished Frame Height Dimensions

Actual Door Height	Catalog Size	R
51"	54"	53-13/16"
64"	67"	66-13/16"
70"	73"	72-13/16"
72"	75"	74-13/16"
76"	79"	78-13/16"

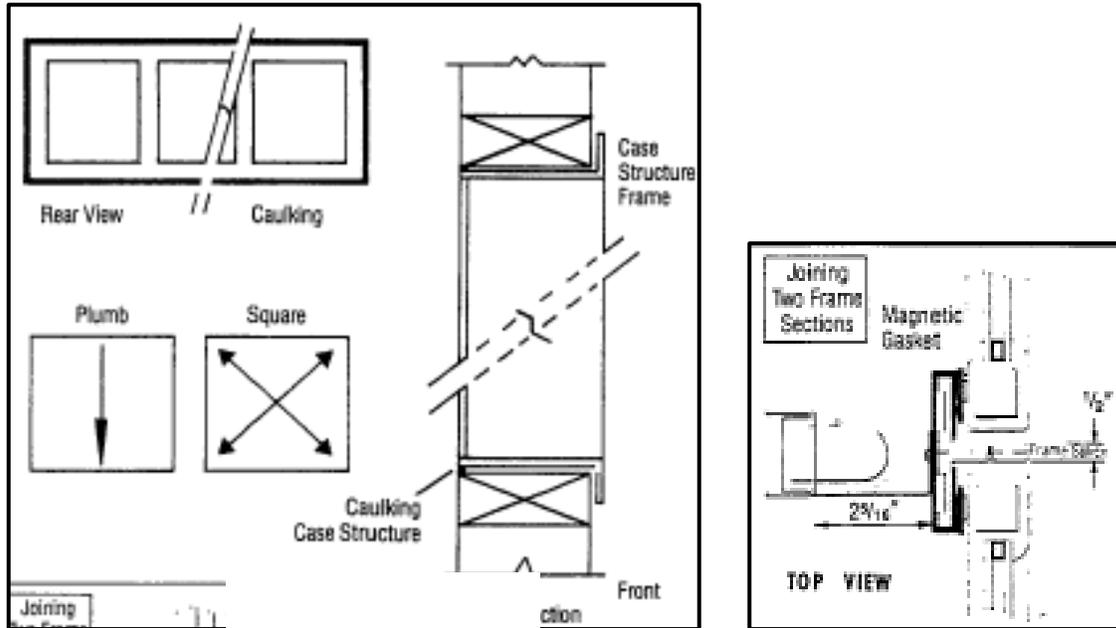
- Notes:**
1. Features A Thru Q denote actual finished frame dimensions.
 2. For outside to outside frame flange width or height, add 1-1/8" total for Decorator (Flat) Rail. Add 1-7/8" total for Serrated Rail.

11. Frame Installation

1. Read instructions completely before installing frames.
2. Openings must conform to net openings listed in Price Book or other.
3. Check size of finished frame to net opening.

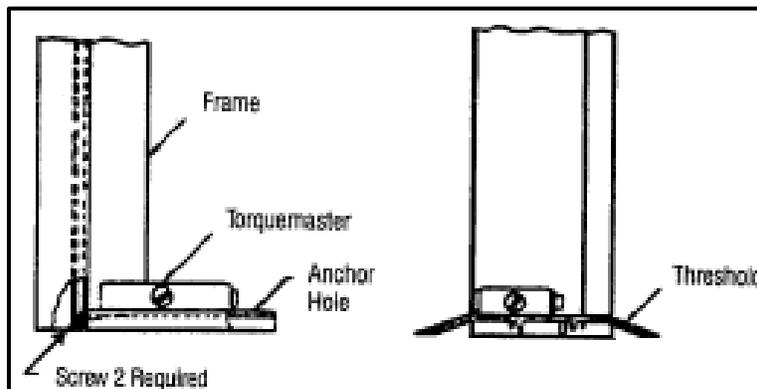
Model 1000/1000R/1200R Door Service & Installation

4. **Do not force frame into tight opening.**
5. Check cooler opening for plumb and square as shown below. Sill must be level left to right and front to back.
 - a. Jambs, header and sill should be wood for a secure installation.
 - b. Anthony door frame needs a sill of at least 1-1/2" for proper installation.



Frame Installation

6. Set frame in opening. For safety, partially install wood screws in top of frame. **Do not tighten.** Torquemaster (silver rectangular box) goes at bottom of frame. Hinge pin to top of frame.



Pass-Thru Cross-Section (with/without Threshold)

7. Check frame for square as shown. Shim as necessary. Ensure that shims are placed as close to installation holes as possible. When shimming is necessary, shim top to bottom and/or left end of frame and right end of frame to maintain square of frame in net opening.

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8. From the inside of case, **caulk all four sides of frame** between frame and case opening, as shown above.
9. Starting with frame sill, install mounting screws and tighten; first sides, then top. **(Do not over-tighten top screws as this will bow frame.)**
10. From inside the case, re-check caulking.
11. For joining frame sections without flanges on center section, or one end of left end and one of right end of frame, align top and bottom with end sections and join together with sex bolts provided.

12. Reversible/Cordless Door & Hold-Open Installation

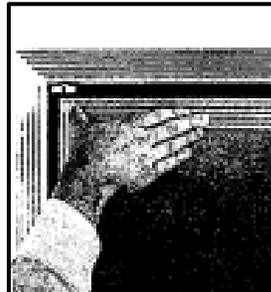
1. Align door with torque rod and insert into the Torquemaster socket at base of door.



2. Engage door with hinge pin plug inserted into hinge pin plug receptacle at top of frame.

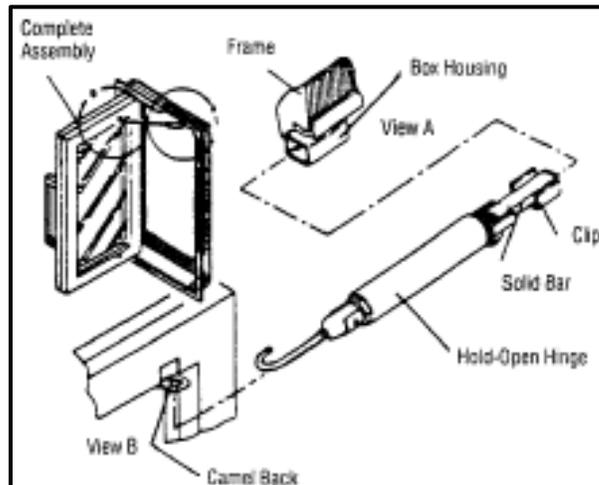


3. Push door into top frame with thumb until hinge pin plug snaps into place.

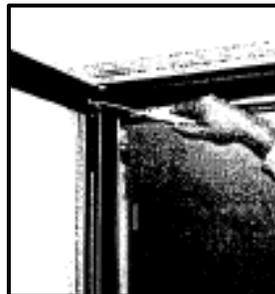


Model 1000/1000R/1200R Door Service & Installation

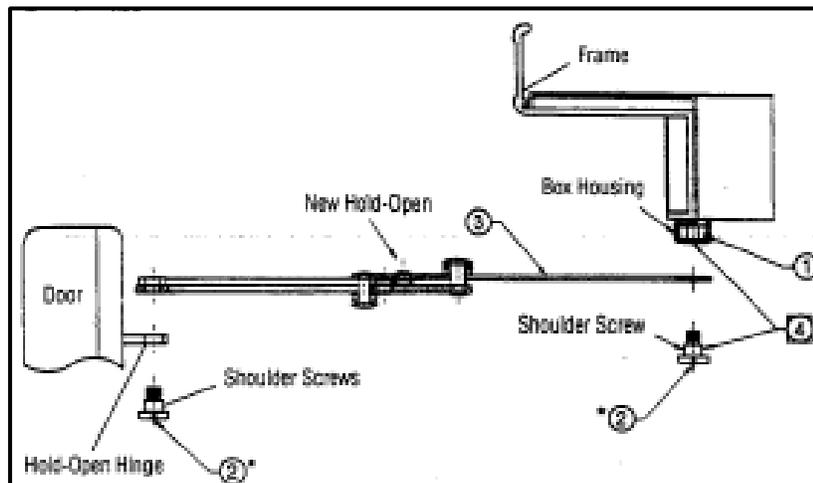
4. Hold-Open Instructions: (1987 to 1990)



- a. Hold door stop and hold-open device into camel back side of door.
Note: Change is for hook to be installed coming up from the underside of the camel back hinge.
- b. Slide hold-open bar with spring clip through box on frame until clip snaps into place.

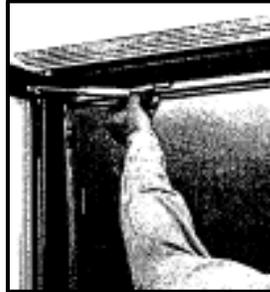


5. Hold-Open Instructions: (1990 to Present)

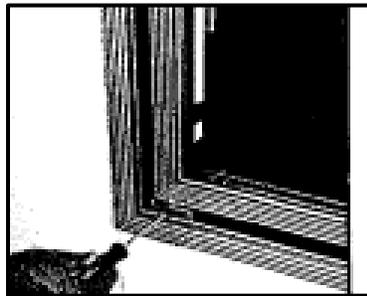


Model 1000/1000R/1200R Door Service & Installation

- a. Insert rectangular nut provided into hold-open hinge on frame as shown below.
Note: On hold-opens starting March, 1990, the nut is affixed to hold-open arm.
- b. With shoulder screws provided, mount new hold-open as shown. Tighten screws.
- c. Install thin metal slide toward top of frame.



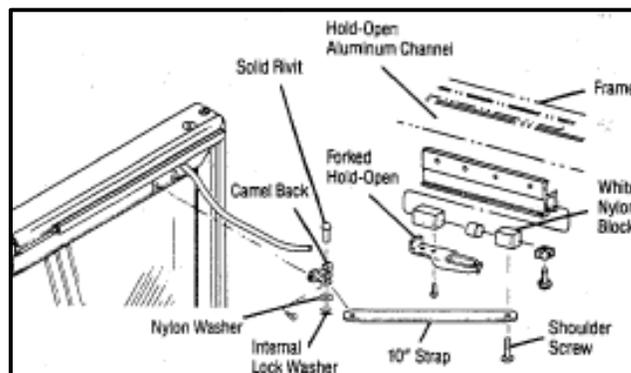
- d. **Do not use power tools for installation or removal.**
6. Adjust closing force by turning the screw on the front of the Torquemaster with a flat-head screwdriver. Turn counterclockwise to tighten, clockwise to loosen. **Do not over-adjust as this will cause door to slam.**



7. If necessary to square door in frame opening, turn end screw on Torquemaster (marked SAG ADJ) with flat-head screwdriver.

13. Hold-Open Replacement (Prior to 1987)

1. To remove, insert flat-head screwdriver into shoulder screw on frame white slide block and remove. Go to back of door and remove locking washer and solid rivet. This will remove 10" door stop arm.

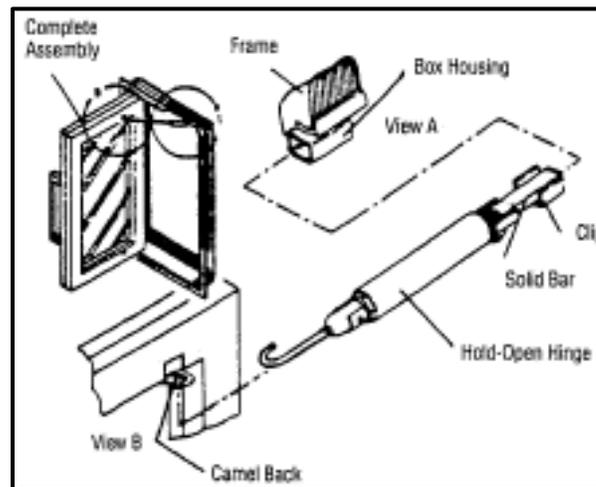


Model 1000/1000R/1200R Door Service & Installation

2. To remove white block inside slide channel, remove end Phillips-head screw and slide block outside of channel.
3. To remove fork, remove two (2) Phillips-head screws. To remove complete hold-open assembly, remove back of frame raceway for access to screws that hold hold-open channel to frame. Remove screws.
4. Reverse instructions to replace.

14. Hold-Open Replacement (1987 to 1990)

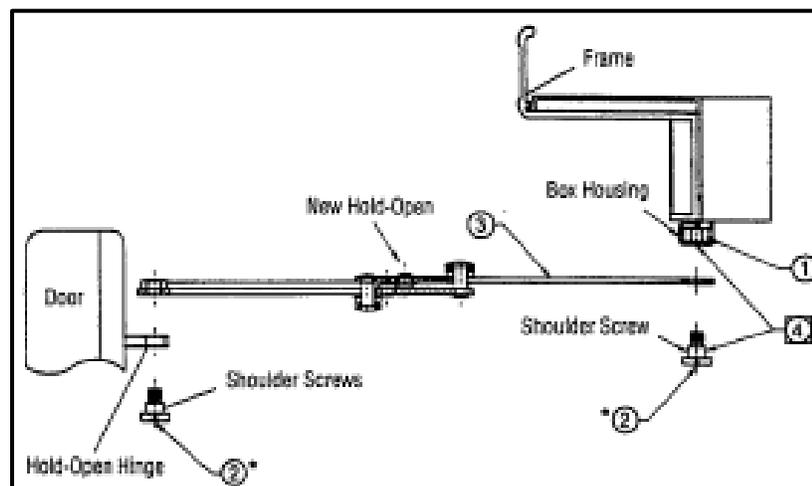
1. Open the door and lock into hold-open position. Using a flat-head screwdriver, release the door stop and hold-open frame attachment from slide channel as shown below.



2. Remove door stop and hold-open device from door as shown.
3. Reverse instructions to replace.

15. Hold-Open Replacement (1987 to 1990)

1. Remove shoulder screws from both ends of slide stop arm.



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2. With a flat-head screwdriver, turn screws counter-clockwise.
3. Reverse instructions to replace.

16. Hold-Open Replacement (1987 to 1990)

1. Remove existing hold-open (see 15. & 16.).
2. Using a 1/4" drill, enlarge hole for hold-open on hinge side of door.
3. Insert rectangular nut provided into hold-open hinge on frame.
4. Mount new hold-open with shoulder screws provided.
5. Thin metal slide goes toward top of frame.
6. **Do not over-tighten screws.** (Hand tighten with hand driver only.)

17. Models 2500, 2700 & 3000 Pass-Thru Door Installation

Note: If Roll-A-Way cart is included in order, it must be behind the door before installing frame.

1. When threshold is desired, drill and lag on pre-drilled mounting holes only.

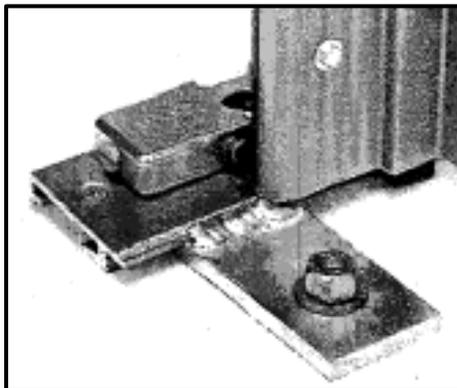


With Threshold

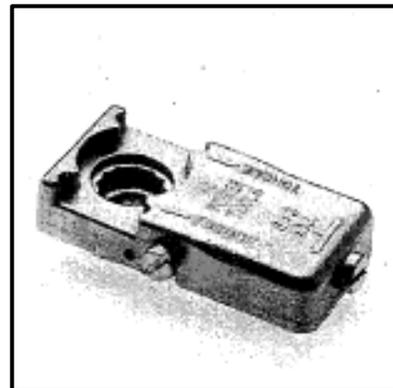


Without Threshold

2. For door and hold-open installation instructions, see previous pages.
3. When door is in closed position, adjust floor wiper seal to fit flush with door slab and screw into place.
4. For additional bottom support, Anthony Pass-Thru doors are equipped with a base plate and two special floor anchor bolts.



Base Plate



Torquemaster

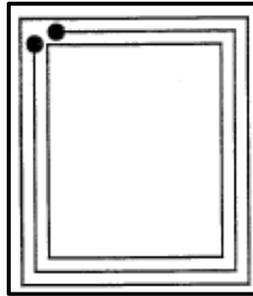
Model 1000/1000R/1200R Door Service & Installation

18. Pass-Thru Identification

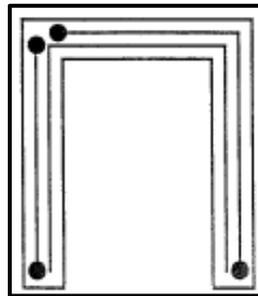
1. Model 2500: 1/3 glass, 2/3 solid panel.
2. Model 2700: All glass with Roll-A-Way cart behind door.
3. Model 3000: All glass or solid panel.

19. Pass-Thru Wiring Schematics

1. With Threshold.



2. Without Threshold.



20. Reversing Frame Hardware (1987 to Present)

1. Remove Torquemaster by turning center screw counter-clockwise.

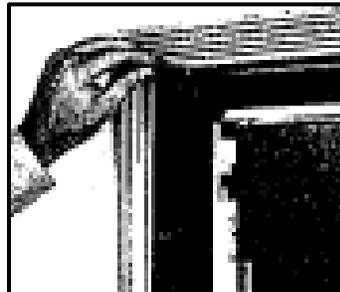


Model 1000/1000R/1200R Door Service & Installation

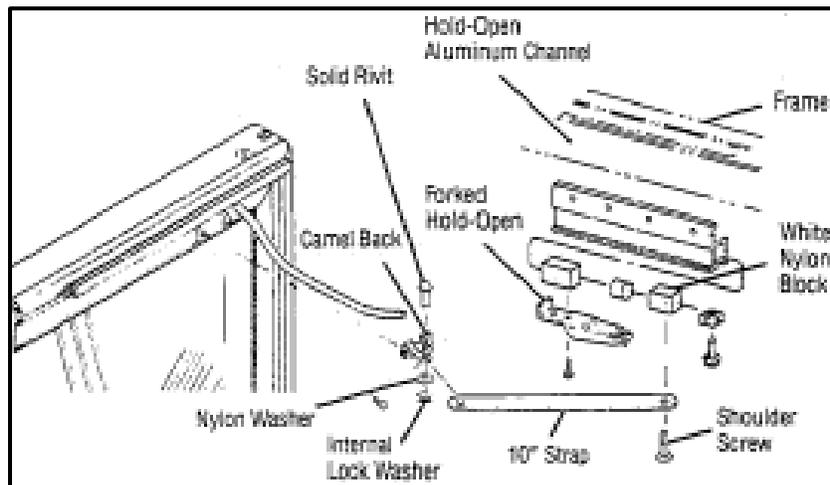
2. Remove back cover plate with a flat-head screwdriver and insert into old Torquemaster hole. Replace and re-install Torquemaster in new position.



3. Insert black safety cover plate into opposite side hinge pin hole.

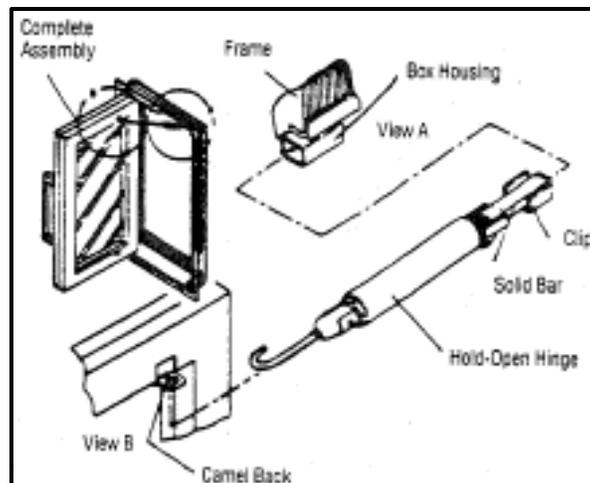


21. Door Reversing Instructions (1987 to 1990)



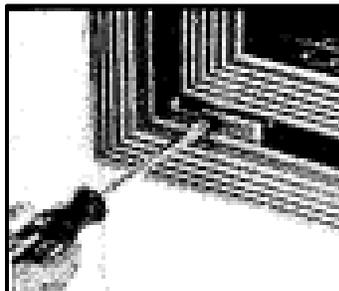
Hold Open (Prior to 1987)

Model 1000/1000R/1200R Door Service & Installation



Hold Open (1987 to 1990)

1. Release tension on Torquemaster by turning front screw on Torquemaster clockwise.



2. Open door and lock into hold-open position. Using a flat-head screwdriver, release the door stop and hold-open frame attachment from slide channel.

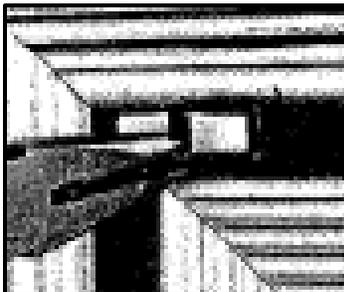


3. Remove door stop and hold-open device from door.

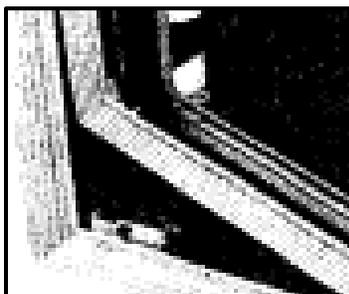


Model 1000/1000R/1200R Door Service & Installation

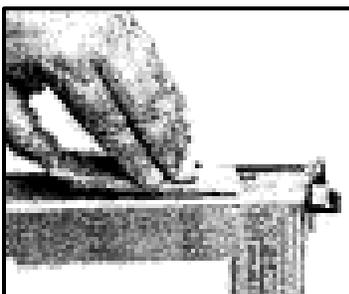
- Remove hinge pin plug from frame by inserting needle-nose pliers into hinge pin plug 1/8" hole. Compress and pull pin away from frame.



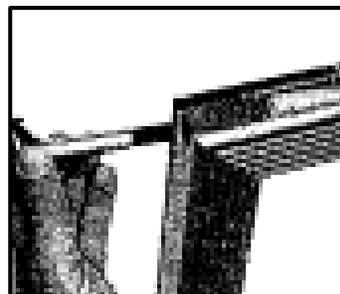
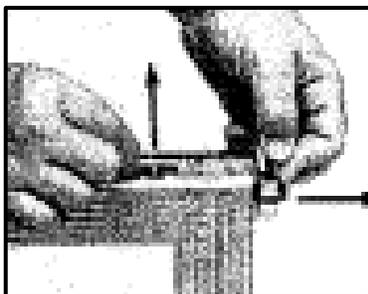
- Lift door out of Torquemaster. Lean door on its side, against a stable surface.



- Remove hinge pin plug access cover from hinge side of door.

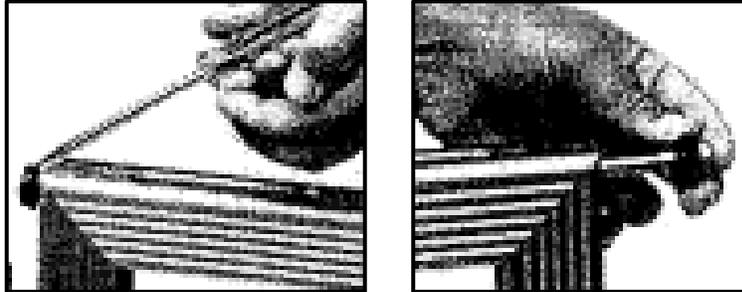


- Disengage safety snap from female plug, remove male plug from door and insert in opposite end of door.



Model 1000/1000R/1200R Door Service & Installation

- Remove torque rod by sliding it out bottom of door, and insert it in opposite end of door.

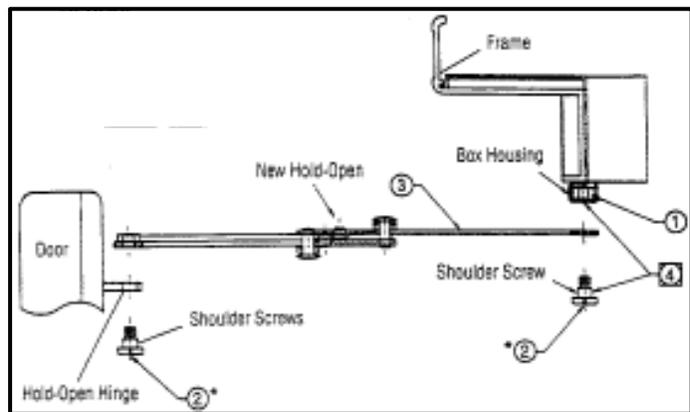
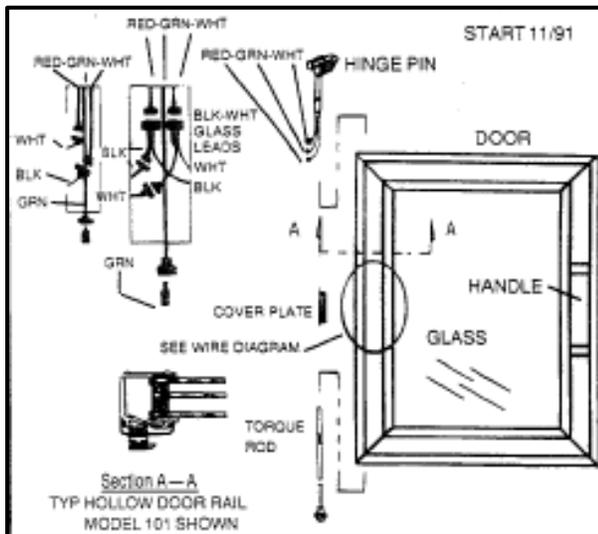


- Carefully replace hinge pin access covers.



- Do not use power tools for installation or removal.***

22. Door Reversing Instructions (1991 to Present)



Door Quick Disconnect and Reversing

- Release tension on Torquemaster by turning front screw on Torquemaster clockwise.
- Remove shoulder screw from camel back hinge on back of door.
- Remove door stop and hold-open device from door.

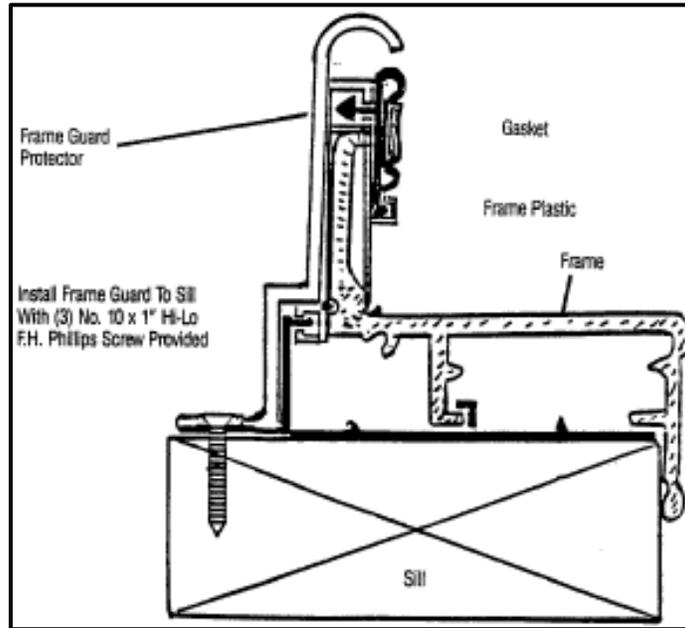
Model 1000/1000R/1200R Door Service & Installation

4. Remove hinge pin plug from frame by inserting needle-nose pliers into hinge pin plug 1/8" hole. Compress and pull pin away from frame.
5. Lift door out of Torquemaster. Lean door on its side, against a stable surface.
6. Remove hinge pin plug access cover from hinge side of door.
7. Disengage safety snap from female plug, remove male plug from door and insert in opposite end of door.
8. Remove torque rod by sliding it out bottom of door, and insert it in opposite end of door.
9. Carefully replace hinge pin access covers.
10. ***Do not use power tools for installation or removal.***

23. Wiring Instructions (1991 to Present)

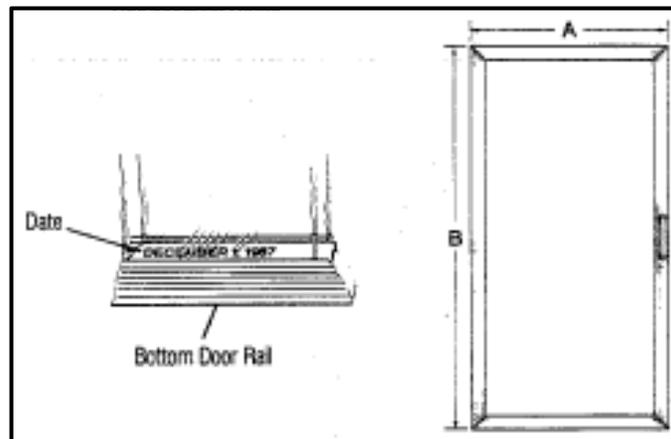
1. **Heated Glass:** see *Door Quick Disconnect and Reversing* illustration.
 - a. Connect Black or Red lead wire from hinge pin to Black lead wire from glass and Red or Black lead wire from door heater.
 - b. Connect White lead wire from hinge pin to glass and door White lead wire.
 - c. Connect Green/Yellow to ground.
 - d. ***Never splice door or frame heater wires.***
2. **Non Heated Glass:** see *Door Quick Disconnect and Reversing* illustration.
 - a. Connect Black or Red lead wire from hinge pin to Black or Red door heater lead.
 - b. Connect White lead wire from hinge pin to White door heater lead.
 - c. Connect Green/Yellow to ground.
 - d. Replace hinge side cover plate.
 - e. Re-install door.

24. Frame Sill Plastic Protector Installation



1. Set metal protector on sill inside of case, between clear opening of frame, with curved edge over bottom sill plastic.
2. Install protector on sill into pre-drilled holes, with the three (3) provided #10 x 1" Hi-Lo Flat Head Phillips screws.

25. Ordering Replacement Doors



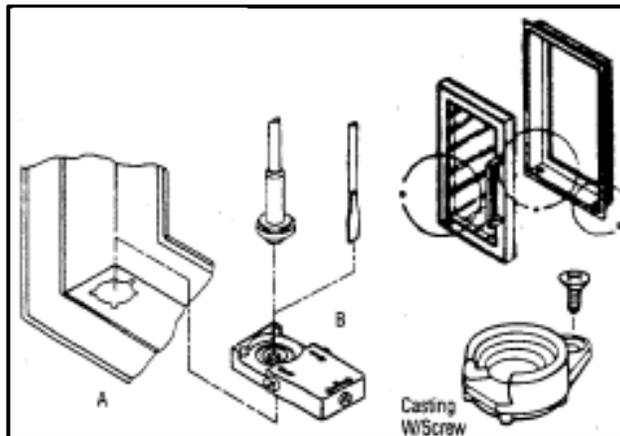
Replacement Doors (All Swing Door Models)

1. Specify outside dimensions of door (measure to nearest 1/16").
2. With or without heaters?
3. Specify hinge swing; left or right?
4. Specify Model: Cooler or Freezer?
5. Specify finish.

Model 1000/1000R/1200R Door Service & Installation

6. Specify any custom items on original order.
7. Specify date of original order and/or Anthony confirmation/invoice number. (Original manufacture date is stamped on metal spacer bar between panes of glass, as shown above.)
8. With or without locks?
9. Specify voltage.
10. **Pass-Thru Models 2500, 2700, 3000:** With or without threshold?

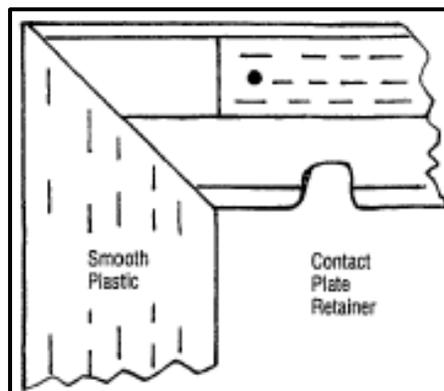
26. Torquemaster and/or Torque Casting Replacement



Torquemaster

1. After 1983, the Torquemaster is used on all standard production frames.
2. To remove, insert flat-head screwdriver into top center cutout in Torquemaster and turn screw 1/8". If necessary, insert small flat-head screwdriver between edge of Torquemaster and frame and gently pry up.
3. Reverse instructions to replace.

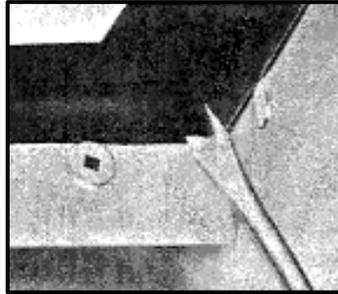
27. Door Plastic (Cover) Replacement



1. Before removing plastic, drill out 1/8" pop rivet.

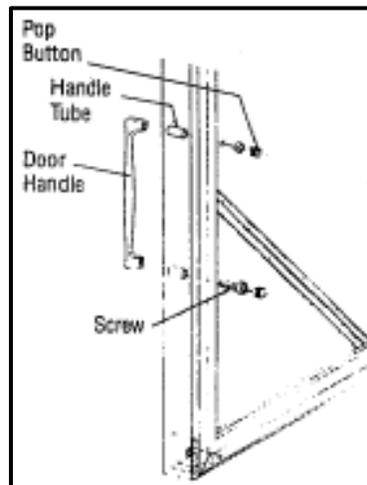
Model 1000/1000R/1200R Door Service & Installation

2. Insert flat-head screwdriver under outside edge of plastic and gently pry up. At either end of plastic, run screwdriver the complete length and width of door rail. With outside edge of plastic released, push plastic toward glass to remove.



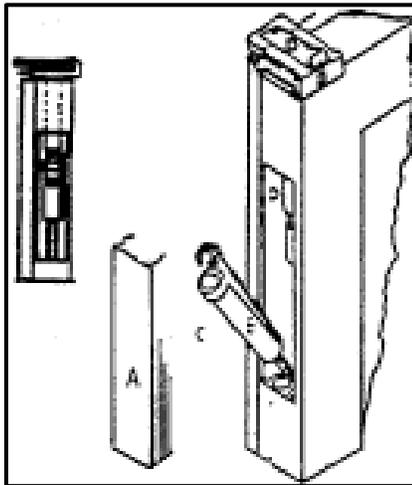
3. The top, bottom and handle side of door have metal contact plate; hinge side has smooth plastic.
4. To replace, insert inside edge of plastic into inside door rail groove. Snap outside edge of plastic over outside edge of door rail.
5. If necessary, after replacing door plastic, file all corners to remove sharp edges.

28. Door Handle Replacement

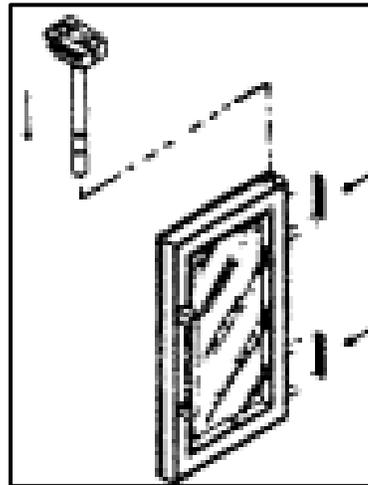


1. Remove handle side door plastic.
2. Insert 5/32" wrench into access holes and remove screws.
3. Handle screws are contained in door frame.
4. Reverse instructions to replace handle.

29. Side Access Plate Replacement



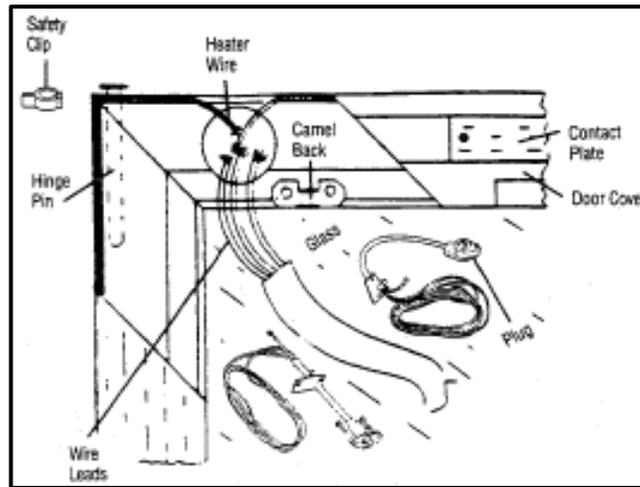
Hinge Pin and Cover Plate



Hinge Pin Removal

1. To remove, insert flat-head screwdriver under edge of cover and gently lift up.
2. To replace, snap plate into door extrusion.

30. Door Heater and/or Door Plug Replacement (Prior to 1987)

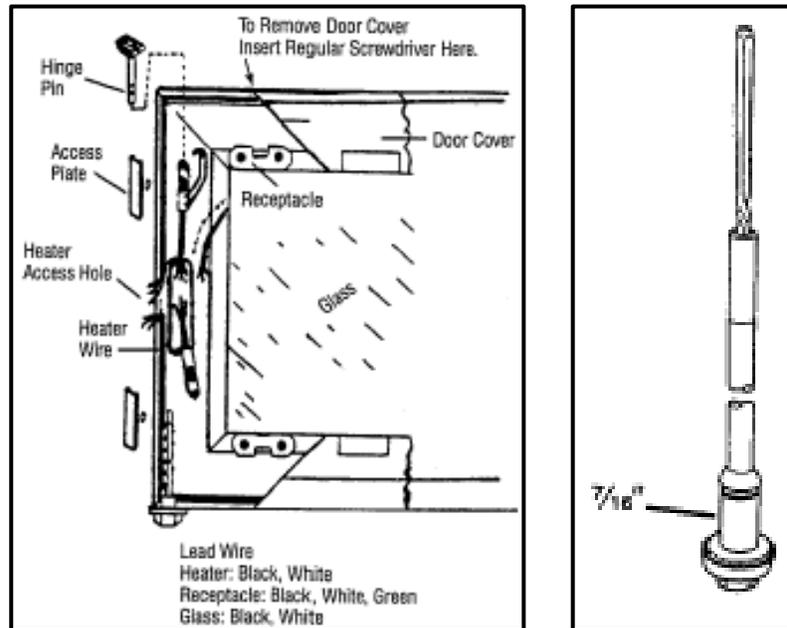


1. Unplug cord from raceway.
2. Remove door from the frame opening.
3. Insert flat-head screwdriver under corner top edge of plastic. Run screwdriver across width of door extrusion. Push plastic from top edge down toward glass to unhook from bottom groove in door extrusion.
4. Remove the plastic from all four (4) sides the same way.
5. Heater wire is now exposed. (Heater wire lies in outer groove in door.)
6. Go to door plug and remove screws from plate, then pull out heater cord.

Model 1000/1000R/1200R Door Service & Installation

7. To replace plug, cut Black, White and Green (ground) lead wires. Re-connect to replacement plug.
8. To replace heater wire, cut Black and White lead wires, then re-connect new heater wire.
9. Reverse instructions to replace plastic.
10. Re-install door.

31. Door Heater Replacement (1987 to 1991)



1. Remove door plastic.
2. Remove center side access plate.
3. Unsnap hinge pin from female receptacle.
4. Wiring for doors is done in the center back of hinge rail.
5. To remove heater, cut solid lead wires: Black, White and Green.
6. Heater wire lies in track on the back outside edge of door. Pull heater out.
7. If glass is heated, cut Black and White lead wires from glass.
8. Reverse instructions to replace heater wire. Wire Black to Black, White to White and Green to ground.

Note: If heated glass, reconnect glass Black and White lead wires to heater Black and White lead wires.

9. Reverse instructions to replace.

Model 1000/1000R/1200R Door Service & Installation

32. Door Heater Replacement (1987 to 1991)

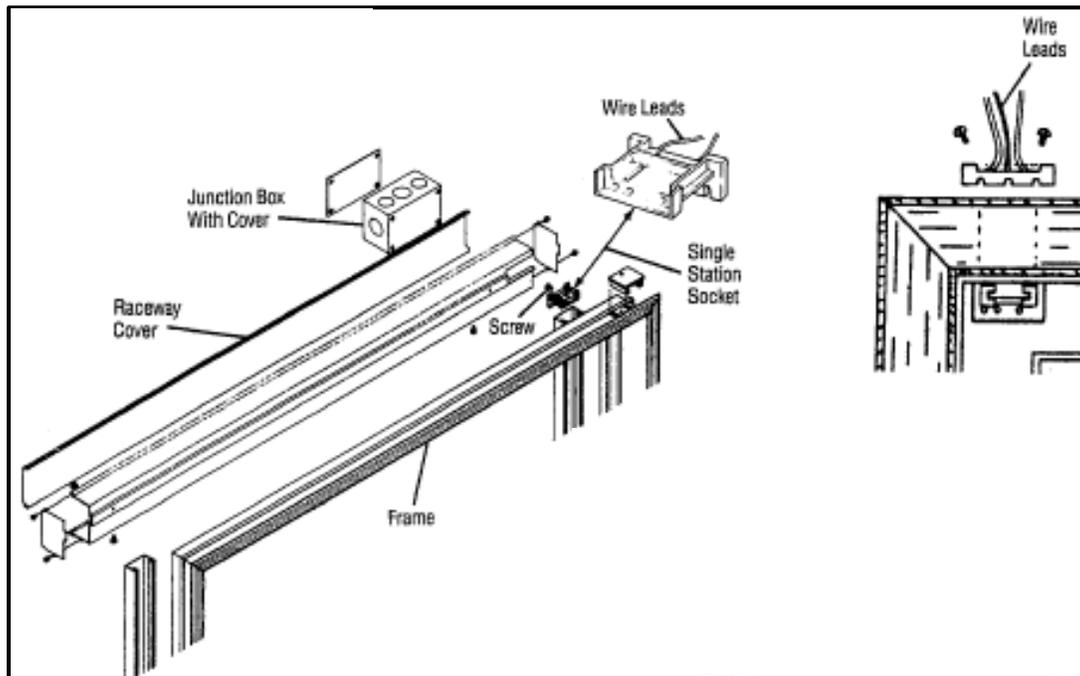
1. Remove door plastic (see *Door Quick Disconnect and Reversing* illustration).
2. Remove center side access plate.
3. To remove heater, unplug solid lead wires, Black or Red, White and Green/Yellow (ground).
4. If glass is heated, unplug Black and White solid wires from glass.
5. Heater wire lies in track on the back outside edge of door. Pull heater out.
6. To replace door heater, plug in Black or Red lead wires from hinge pin to Black or Red lead wire from heater. White lead wire from hinge pin to White heater lead and Green/Yellow lead from hinge pin to ground.

Note: If glass is heated, plug in Black and White lead wires coming off heater loom to Black and White leads wires from glass.

7. Replace side access plate.
8. Replace door plastic.

Note: *Model 1200R contains no door heater.*

33. Frame Single Station Socket Replacement

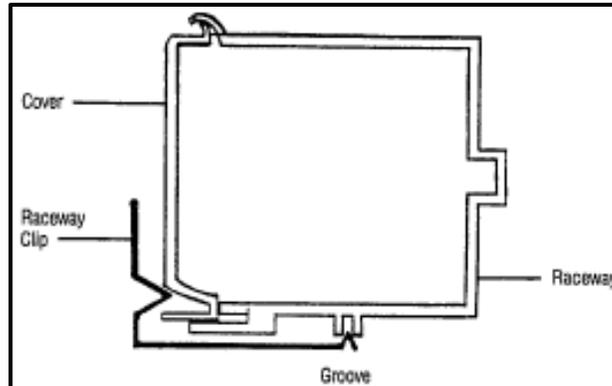


1. Start at top back of frame.
2. Remove raceway cover. Insert flat-head screwdriver under back edge of retainer to remove.

Model 1000/1000R/1200R Door Service & Installation

3. 1992 to Present:

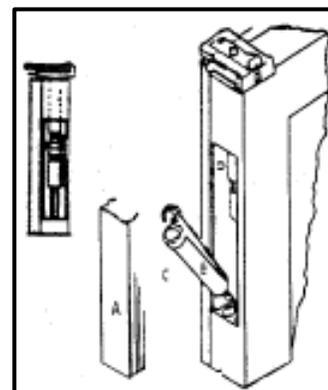
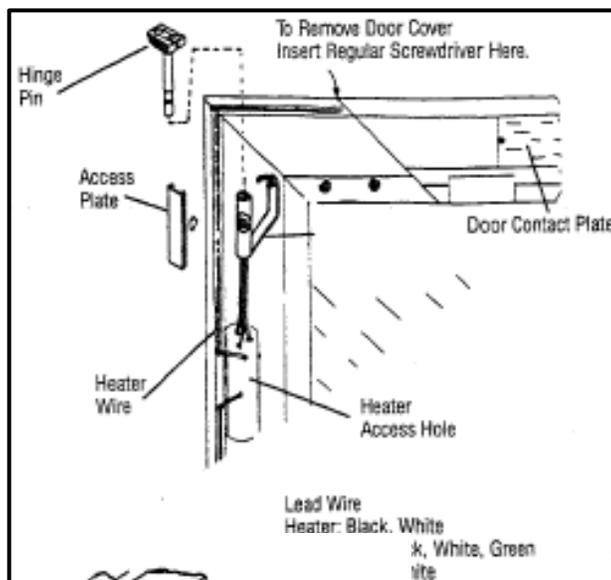
- a. To remove raceway clip, insert flat-headed screwdriver under top edge of clip.
- b. To re-install clip, insert curved end of clip into groove in bottom of raceway, then snap clip over raceway cover.



Raceway End View

4. Once raceway cover is removed, single station socket is exposed.
5. Insert flat-head screwdriver into screws and remove.
6. Pull frame female socket out through back of frame.
7. Cut lead wires to remove.
8. To replace, re-wire new plug according to color coded wires.
9. Reverse instructions to replace.

34. Hinge Pin Replacement (1987 to 1991)

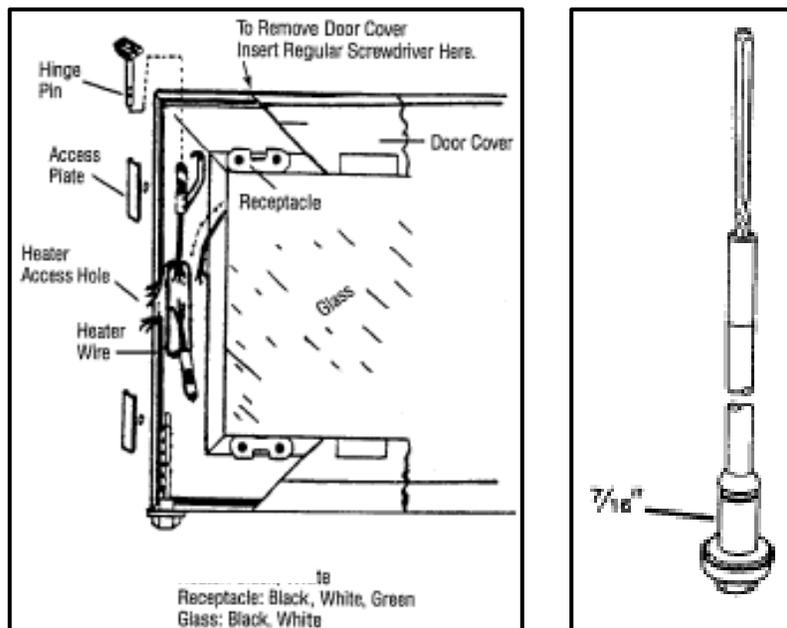


1. Remove center hinge side access plate.

Model 1000/1000R/1200R Door Service & Installation

2. Unplug Black or Red lead wire from hinge pin from Black solid heater wire lead.
3. Unplug White lead wire from hinge pin from White solid heater wire lead.
4. Unplug Green (ground) lead wire.
5. If glass is heated, unplug Black and White lead wire from heater loom from Black and White lead wire from glass.
6. Pull hinge pin out through top of door.
7. Reverse instructions to replace hinge pin.

35. Torque Rod Replacement (1987 to 1991)

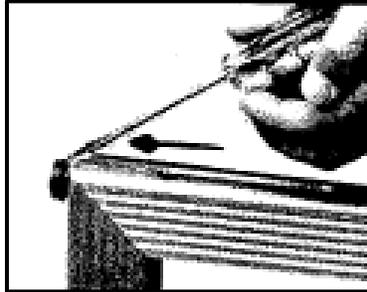


1. To remove torque rod, use flat-head screwdriver. Catch edge of torque rod shaft and tap rod down and out through bottom of door.
2. Torque rod tip will remain inside hinge rail.
3. Reverse instructions to replace.
4. After torque rod is installed, turn bottom of torque rod wheel with open-end wrench to ensure torque rod has engaged with tip. When engaged, resistance is felt.

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36. Torque Rod Replacement (1991 to Present)

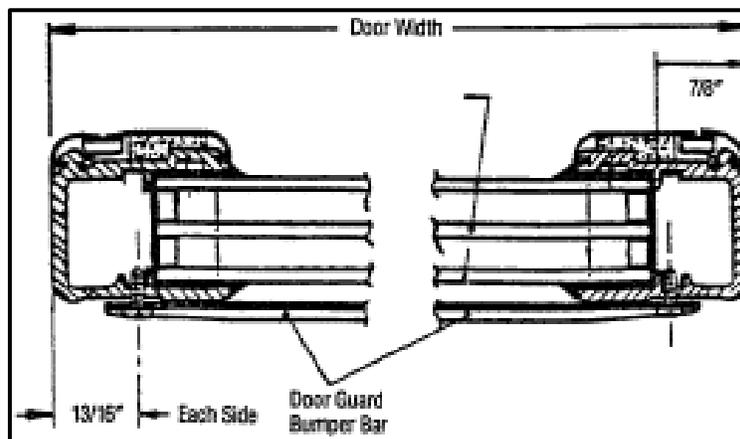
1. To remove torque rod, use flat-head screwdriver. Catch edge of torque rod shaft and tap rod down and out through bottom of door (see *Door Quick Disconnect and Reversing* illustration).



2. To replace, slide end of rod up hinge rail, then insert square shaft of torque rod into square hole in door rail. Tap into place.

Note: *This torque rod has no tip.*

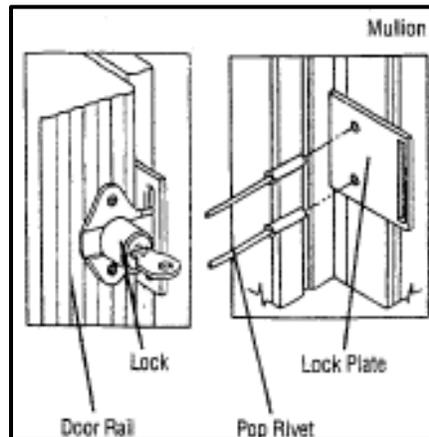
37. Front Bumper Bar Field Installation



Front Bumper Bar

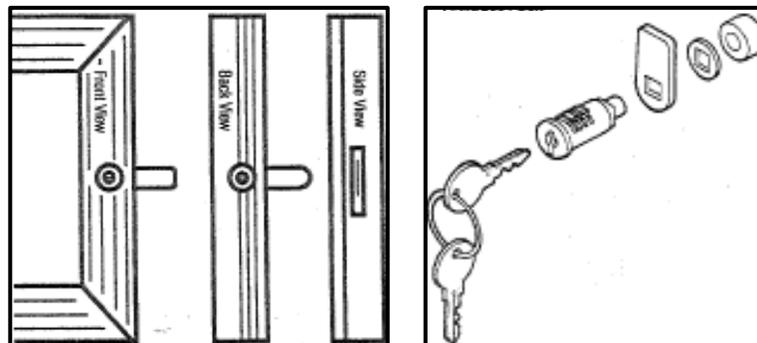
1. Order door guards 1" less than actual door width.
2. Specify finish (Gold/Silver).
3. Anthony provides pre-drilled screw holes in bar. Customer to drill a #30 or 1/8" hole in door rail 13/16" from each side of door rail.
4. Screws for mounting bar are self-tapping. **Screws are not to exceed 3/8" in length.**
5. Mount bar at desired vertical height to protect door glass.
6. Bumper bar instructions are for the front of door only. Rear bumper bars are available only for replacement of existing bars in field. **Rear bars are installed by factory only.**

38. Flush Mount Lock Field Installation



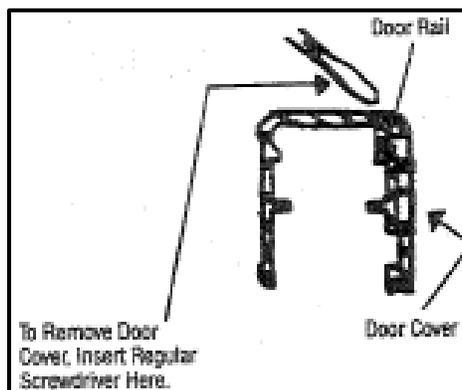
1. Place lock about 1-1/2" to 2" under the handle on the face of the door.
2. With the lock in the open position (latch is withdrawn) place edge of the latch exactly flush with the edge of the door.
3. Mark position of holes on door. Drill and mount with self-tapping screws.
4. Line up strike plate with latch and install on frame mullion with self-tapping screws.
There are no wires in this part of mullion.

39. Door Cylinder Lock Replacement or Repair



Cylinder Lock

1. If lock arm is bent or damaged, remove door plastic from back of door.

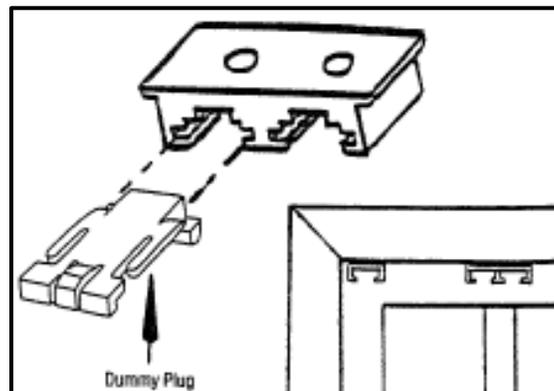


Model 1000/1000R/1200R Door Service & Installation

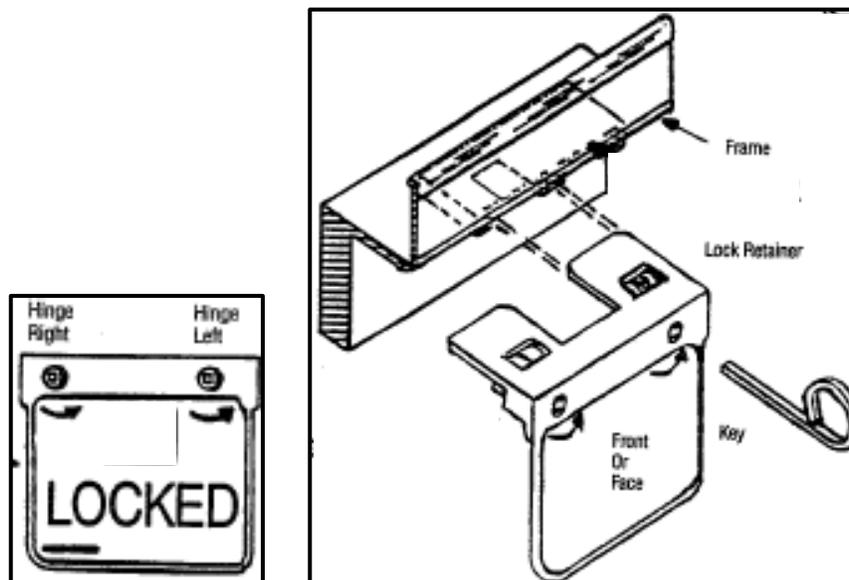
2. Insert Allen wrench in lock access hole and remove screw.
3. Pull washers out, then lock arm and replace.
4. Reverse instructions to replace.
5. If cylinder lock is defective, follow instruction #2 above. Insert key into lock and pull lock out through front of door.
6. Reverse instructions to replace.

40. P.O.M. Lock Installation

1. Remove dummy plug from hinge pin access plate on top of frame on handle side of door.



2. The P.O.M Lock inserts into a hinge pin access plate.



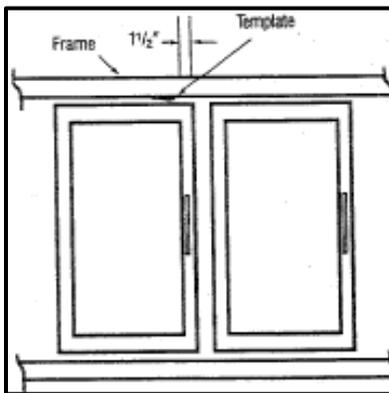
3. Insert key into P.O.M Lock square keyhole and turn key counterclockwise to lock.
4. Remove key.
5. To remove P.O.M. Lock, insert key into square hole and turn key clockwise.

Model 1000/1000R/1200R Door Service & Installation

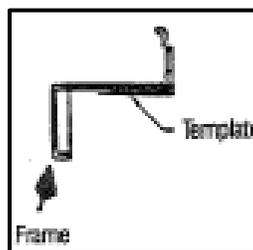
6. To remove lock, pull lock straight out.
7. Replace dummy plug.
8. Lock only side that inserts into hinge pin access plate.
9. Facing doors, the lock on the right side is for left-hinged doors and the lock on the left side is for right-hinged doors.
10. The P.O.M. Lock is manufactured to install in frame over the top of handle side of door.
11. For retrofitting the P.O.M. Lock on non-reversible doors in the field, contact Anthony Customer Service or the local Sales Representative for information and instructions.

41. P.O.M. Lock Retrofit Installation

1. To install the retrofit retainer, measure in 1-1/2" from the edge of door (handle side) and mark frame above the door.



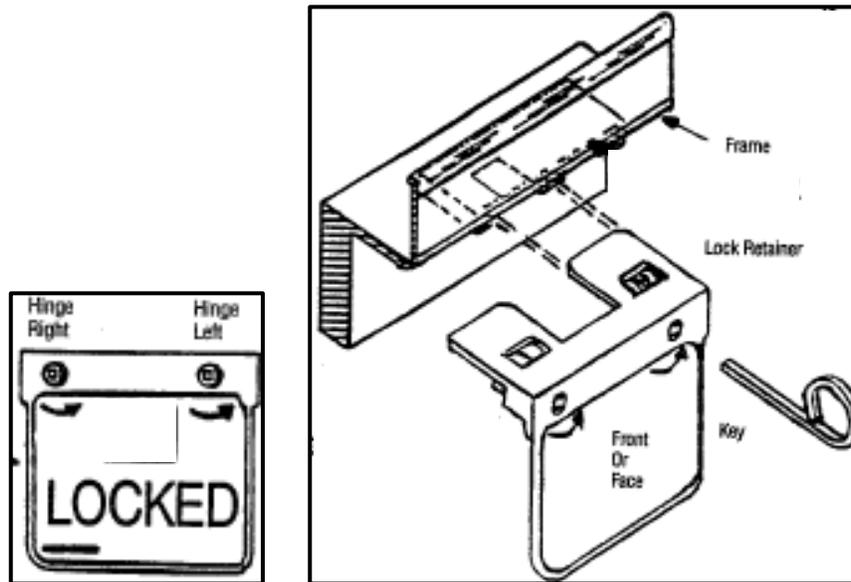
2. Place template provided on frame, with the right edge of the template on the mark previously made on the frame.



3. Mark the frame through the five (5) holes on the template with a pencil. Remove template and center punch the marks on the frame.
4. Drill the four (4) outboard holes with an 11/64" drill, the center hole with a 5/8" drill and deburr holes.
5. Place retrofit retainer bracket over the holes with the rectangular notch out. Use #10-32 x 5/16" screws provided and mount retainer bracket to frame.

Model 1000/1000R/1200R Door Service & Installation

6. Insert P.O.M. Lock into access plate and turn key to lock.

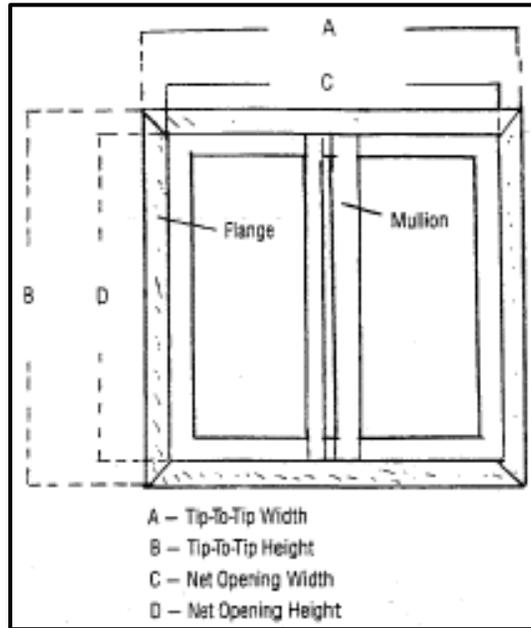


7. Remove key.
8. To remove P.O.M. Lock, insert key into square lock hole and turn the key clockwise.

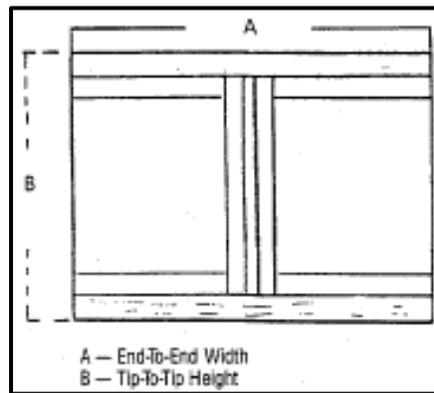
42. Ordering Replacement Frames

1. Specify outside tip-to-tip dimensions of frame. Measure to nearest 1/16".
2. Specify date of original manufacture and/or Anthony confirmation/invoice number. (Original manufacture date is stamped on metal spacer bar between panes of glass on doors.)
3. Specify finish.
4. Specify left or right hinge swing.
5. Specify reversible or non-reversible.
6. With or without heaters?
7. With or without lights?
8. With or without locks?
9. Specify any custom items on original order.
10. Specify voltage.

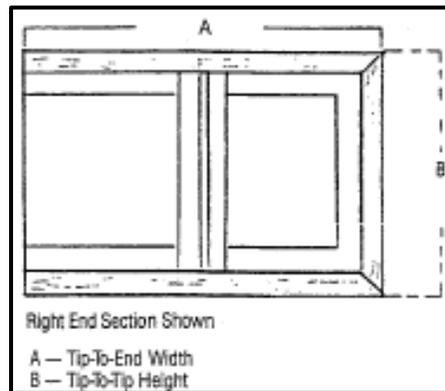
11. Full flange on frame?



12. Center Section?



13. End Section?

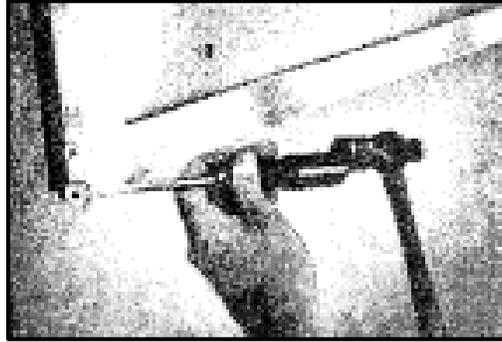


14. Pass-Thru Frames: With or without Threshold?

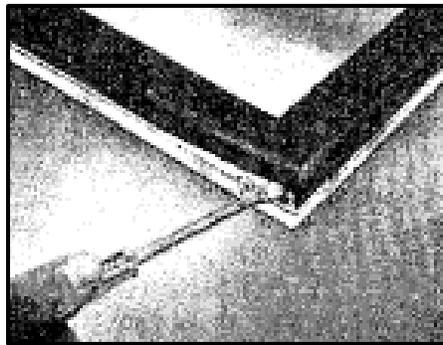
Model 1000/1000R/1200R Door Service & Installation

43. Glass Replacement (Reglazing)

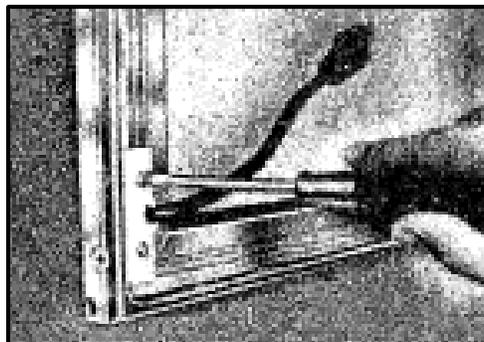
1. To remove torque rod from door, drive tapered shaft of torque closer from door.



2. Starting at corner of door, remove gasket and plastic from all four (4) sides of door.



3. For models prior to 1987, unscrew SJ cord retainer to expose heating element wires. For models after 1987, remove top or center access plate. Unsnap hinge pin from female socket and remove, or unplug hinge pin lead wires to remove hinge pin. If heated glass is used, cut Black and White lead wires to glass. Remove heating element from door.



Model 1000/1000R/1200R Door Service & Installation

- Using a square-head or clutch-head driver, remove screws on both side rails only. Remove top and bottom door rails first.



- Drive rails from glass, using mallet and block, always starting at corner of door.



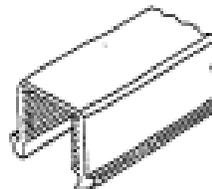
- Once rails have been removed from glass, re-insert new friction-fit glazing channel on new glass and drive rails onto glass.



- After both long rails have been affixed to glass, re-insert friction-fit glazing channel on top and bottom and tighten miters with square-head or clutch-head driver.



Glazing Channel



Square Head Screw

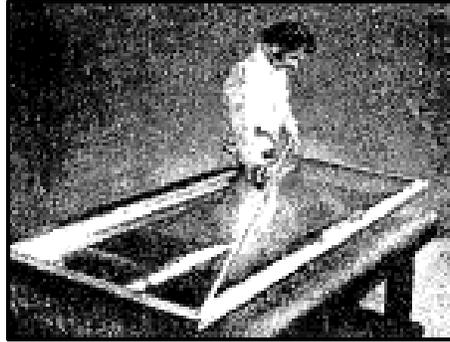


Clutch Head Screw



Model 1000/1000R/1200R Door Service & Installation

- Once all four (4) door rails have been affixed to glass, measure diagonally to make sure door is in square.

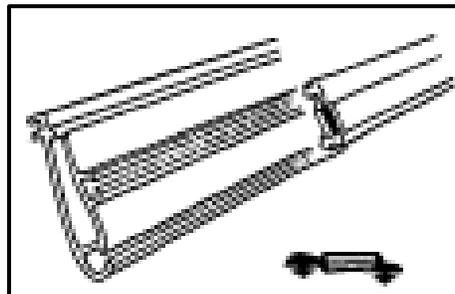


- After replacing the glass unit, and when door rails are in square, re-insert heater wires in door rail channels and repeat process. Replace gasket and retainer strips. For other door models, plastic replacement only may be necessary. To re-install torque rod, align torque shaft with key way in door and drive tapered shaft flush with bottom of door rail. On different door models, torque rods may vary. Some will have no tip, but the installation is the same. Insert rod through bottom of door rail.

Note: If heated glass is used, when disassembling door, cut Black and White lead wires to glass. When rebuilding door, pull glass heater leads out through heater access hole before assembling top or side door rails. Re-connect Black and White lead wires to heater wire Black and White lead wires. On newer models, re-connect hinge pin to heater receptacle or heater lead wires.

- When replacing heated glass, bus bars on glass (colored bars on top and bottom of glass or up and down the sides) must go to the front of door, or customer side. This is the heated side.
- For questions about glass replacement, call Anthony's Customer Service or local Sales Representative.

44. Frame Gasket Replacement – Models 1000, 2500, 3000 (Before 1981)

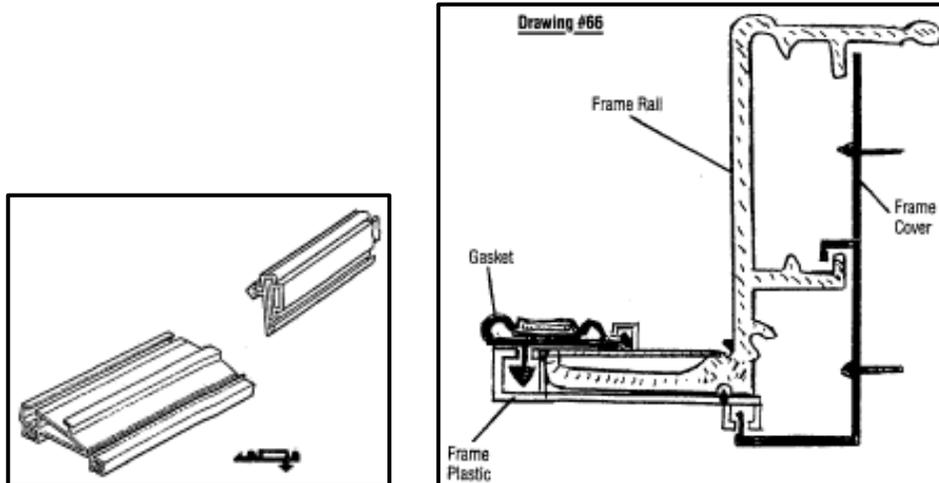


- To order replacement gaskets, specify door height & width and manufacture date. (Date is located between the panes of glass on the aluminum spacer bar.)
- Pull gasket straight out to remove.
- Gasket has two (2) "arrows" off back.

Model 1000/1000R/1200R Door Service & Installation

4. Start in corners.
5. Insert gasket "arrows" into frame plastic grooves.
6. Tuck in corners.

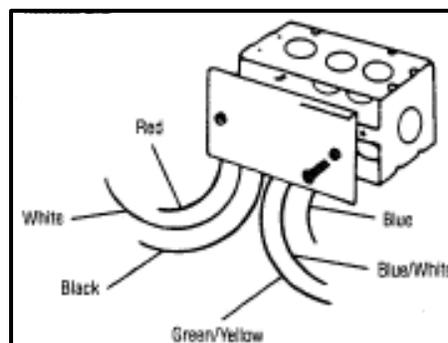
45. Frame Gasket Replacement – Models 1000R, 1200R, 2500, 2700 (1981 to Present)



1. To order replacement gaskets, specify door height & width and manufacture date. (Date is located between the panes of glass on the aluminum spacer bar.)
2. To remove, pull gasket straight out at top, then slide up and out to remove center "L" groove in frame plastic.
3. Start in corner.
4. Insert bottom half arrow on bottom of frame gasket into "L" groove in middle of frame gasket. Then push full arrow on back top of gasket into top groove in frame plastic.
5. If necessary, tuck all corners with a flat-head screwdriver.

46. Frame Junction Box Wiring (Standard Production)

1. Remove frame junction box cover.



Model 1000/1000R/1200R Door Service & Installation

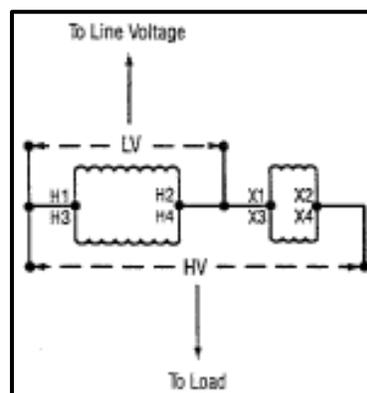
2. Wires are marked as to application.
 - a. 1 Black for frame heater.
 - b. 1 Red for door heater.
 - c. 1 White, common for Black and Red.
 - d. 1 Blue for lights.
 - e. 1 Blue/White stripe, common for lights.
 - f. 1 Green/Yellow stripe for ground.

47. Heater Wire Diagram: Models 1000, 1000R, 1200R, 2500, 2700, 3000



1. Heater wire location.
2. See amperage charts in back of manual.

48. “Boost & Buck” Transformer Wiring Diagram

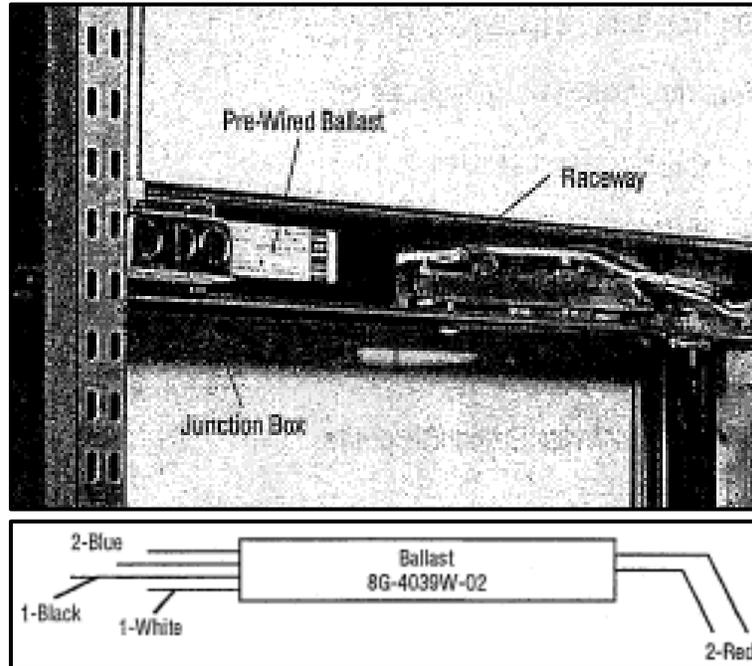


1. Recommended wiring for 110/120 volt.
2. Transformer, wired as follows, will increase the 115 volt line voltage by 10% and the applied heat by 20%.
3. Hot to H1-H3.

Model 1000/1000R/1200R Door Service & Installation

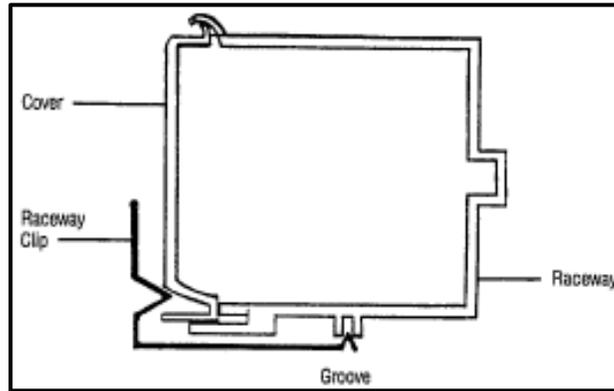
4. Neutral to H2-X1-X3.
5. Load for heaters X2-X4.
6. Transformer is rated for an 18-Amp load.

49. Pre-Wired Ballast Replacement (8G-4039W-02) (1984 to Present)



1. Remove raceway cover on top back side of frame.
2. To remove, insert flat-head screwdriver under back edge of ballast cover retainer plastic.
3. Ballasts are exposed.
4. To remove ballast, cut lead wires and remove.
5. Reverse instructions to replace. Follow color-coded wires: Blues to Blues, Reds to Reds, Blacks to Blacks and Whites to Whites.

50. Raceway Clip Installation or Replacement (Start 1/1/93)

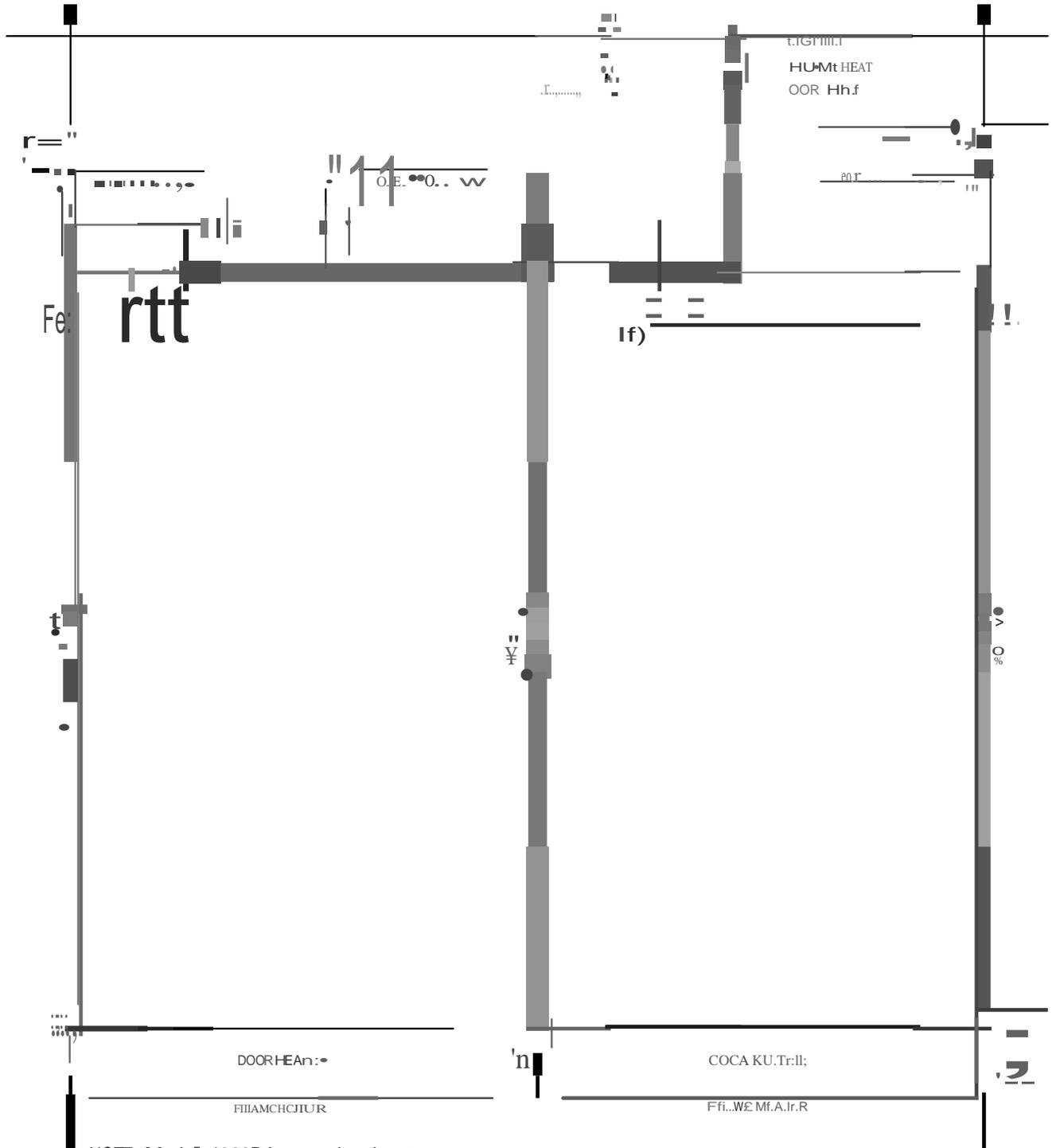


Raceway End View

1. Insert flat-head screwdriver under top edge of clip and lift to remove.
2. To re-install clip, insert curved end of clip into groove in bottom of raceway, then snap clip over raceway cover.
3. To replace raceway cover, lay cover on back of raceway, then snap retainer plastic on. Insert retainer on front edge of raceway cover, then snap over bottom edge of raceway.

Model1000/1000RI1200R Door Se'lllice & Installation

51. Ballast, Lamp & Heater Wiring Diagram Models 1000R, 1200R (120 Volt)
(1984 to Present)

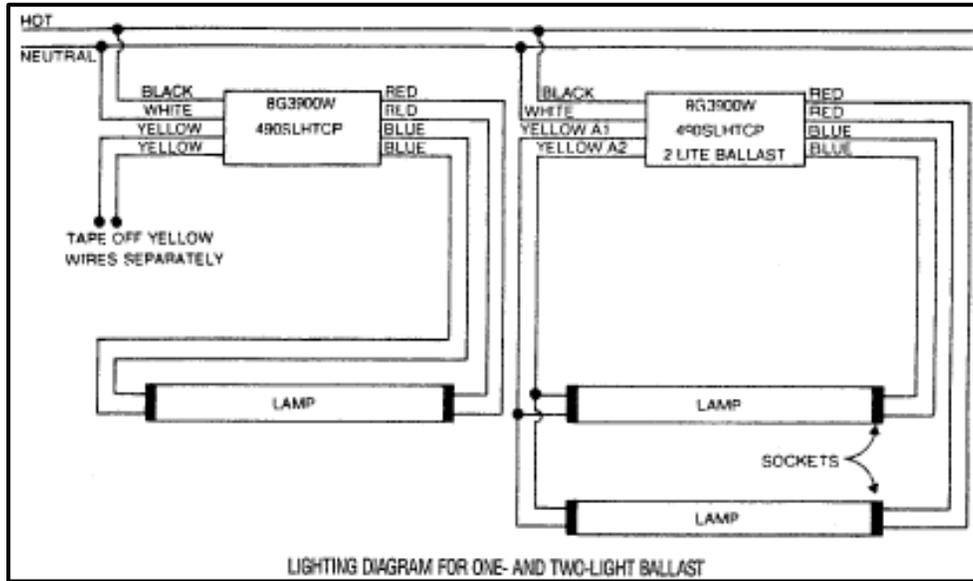


NOTE: Model 1200R has no door heat.

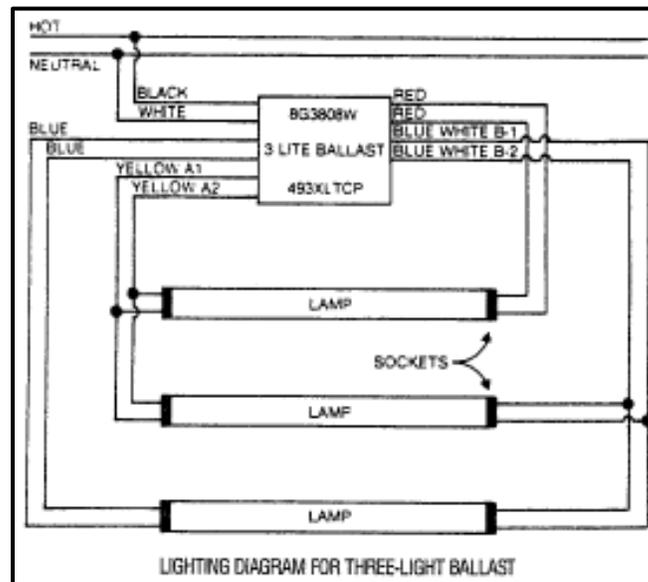
Model 1000/1000R/1200R Door Service & Installation

52. Ballast Wiring Diagram Models (Prior to 1984)

52.1. Model 1000 Coolmaster™ Normal Temperature (Also applies for Model 100 Normal Temperature)



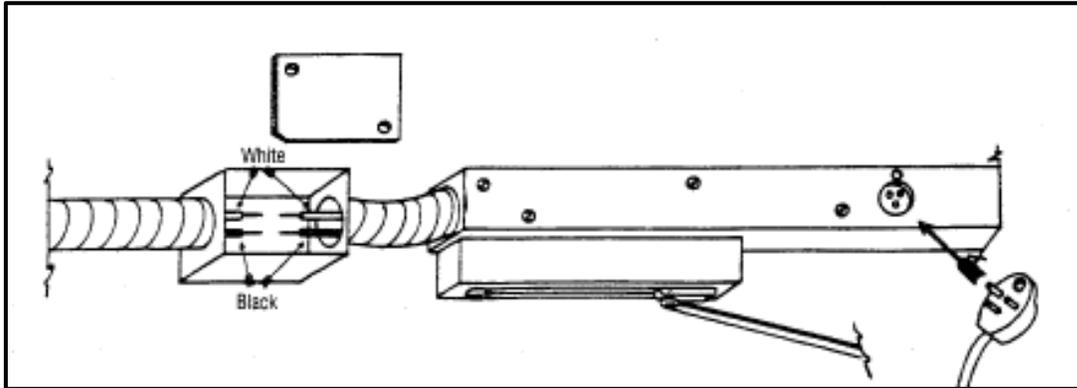
52.2. Model 1000 Coolmaster™ Normal Temperature (Also applies for Model 100 Normal Temperature)



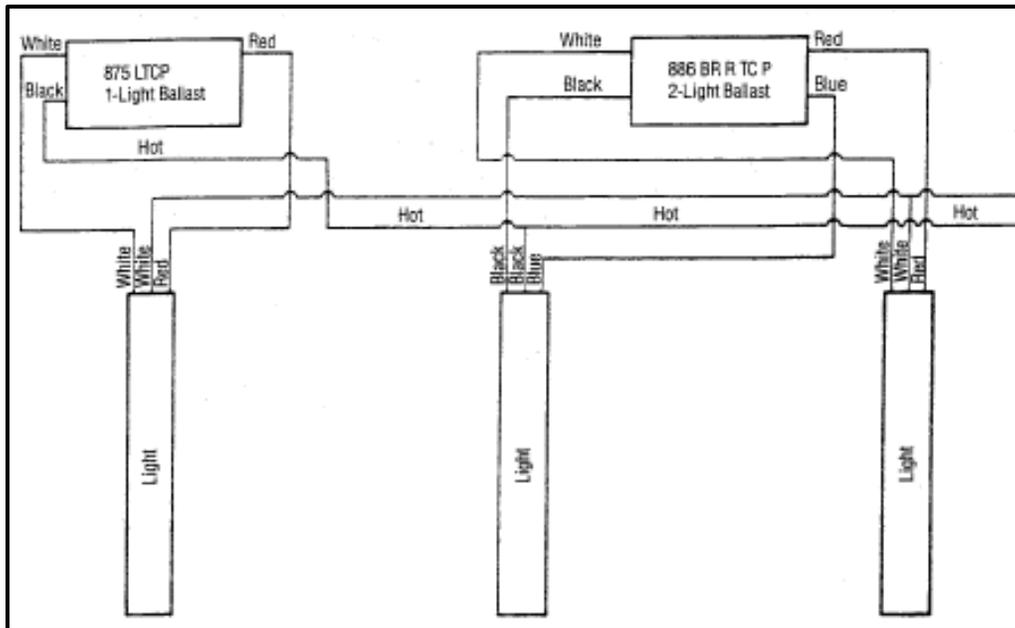
Model 1000/1000R/1200R Door Service & Installation

53. Ballast Wiring Diagram for One- and Two-Light Ballasts (Prior to 1984)

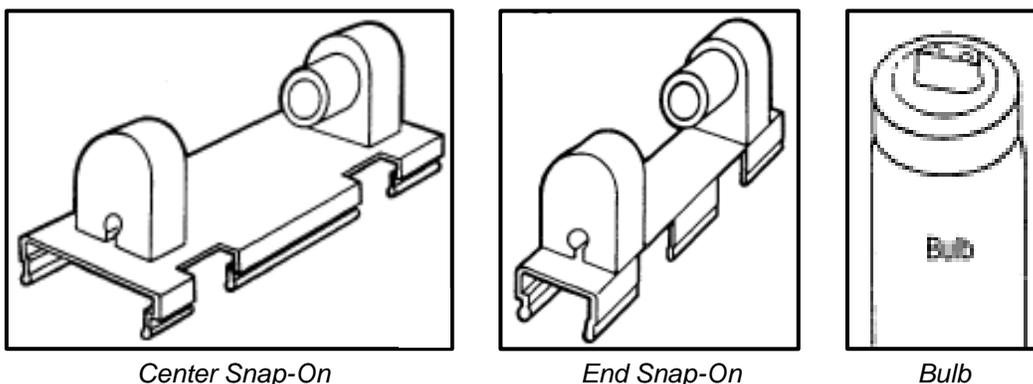
53.1. Model 1000 Frame and Door Wiring Diagram



53.2. Model 1000 Light Wiring Diagram for One- and Two-Light Ballast

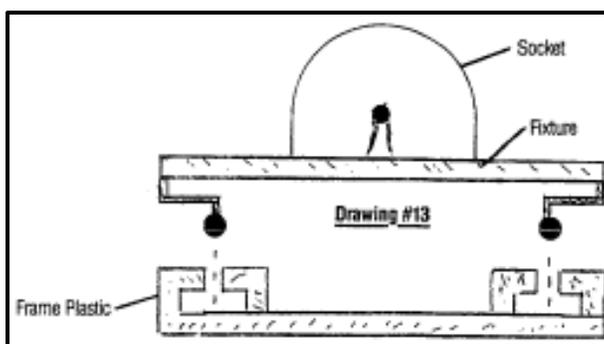


54. Light Bulb Replacement



1. To remove bulb, lift bulb up into top plunger socket, then pull light out and down at bottom.
2. To replace bulb, lift bulb up into top plunger socket and in at bottom.
3. For bi-pin light bulbs, twist bulb out of socket.
4. Reverse instructions to replace.

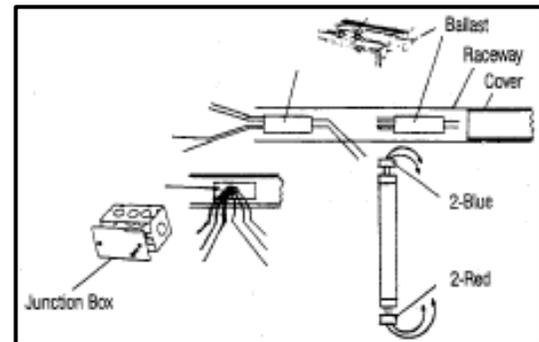
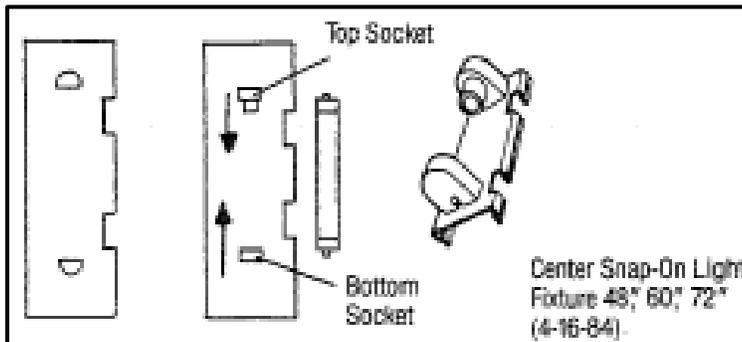
55. Light Channel Replacement



1. Light channel fixture snaps into a plastic extrusion on back of frame.
2. To remove, insert flat-head screwdriver under edge of light channel and gently pry up.
3. To replace, snap channel into plastic extrusion on frame.

Model 1000/1000R/1200R Door Service & Installation

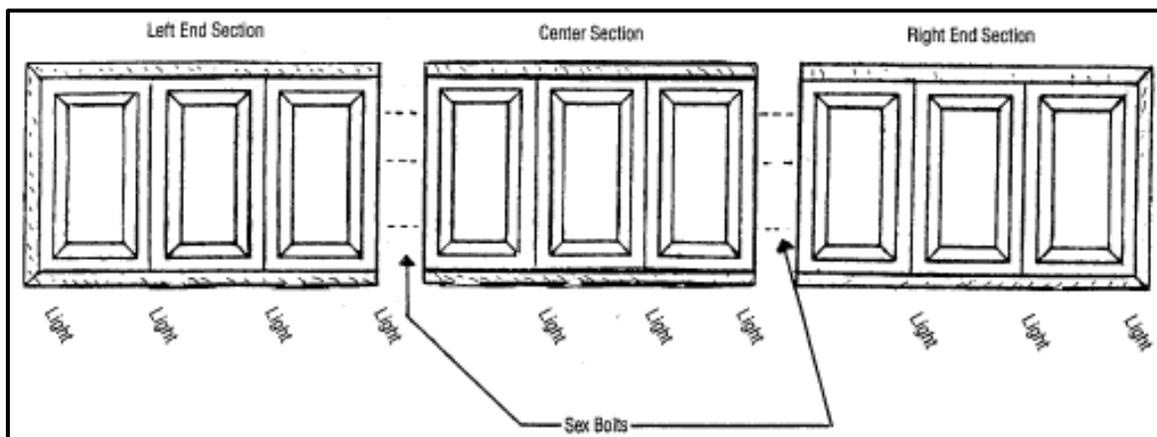
56. Light Socket Replacement



1. To replace top socket, pull socket down and out.
2. To replace bottom socket, pull up and out.
3. Junction Box wires:

Black -	Frame Heat
Red -	Door Heat
White -	Common to Red & Black
Blue -	Lights
Blue/White -	Lights Common
Green -	Ground
4. Top socket has two (2) Blue lead wires; bottom socket has two (2) Red lead wires. Cut lead wires to replace.
5. To replace sockets, re-wire new ballast to color-coded wires.
6. To replace sockets, insert bottom tab on socket "D" hole and lift up for top socket and push down for bottom socket. Plunger socket always goes to the top of fixture.

57. Lamp Location: Reversible Models 1000R, 1200R (Prior to 1986)



Light Location for Left-Hand Hinge

1. All standard frames have one extra lamp. (Ten door line-up has eleven lights.)

Model 1000/1000R/1200R Door Service & Installation

2. Extra light location is determined by hinge swing. Hinge left extra light is on the left end section. Hinge right extra light is on the right end section.
3. Left end section, right end section and center section are pre-punched to provide for sex bolts to attach frame sections together.

58. Lamp Locations: Cooler Door Lighting (1986 to Present) Models 1000R, 1200R

No. Doors	No. Frame Sections	No. Prewired Lights
1	1	2 ●●
2	1	3 ●●●
3	1	4 ●●●●
4	1	5 ●●●●●
5	1	6 ●●●●●●
6	2	7 ●●●●X●●●●
7	2	8 ●●●●●X●●●●●
8	2	9 ●●●●●X●●●●●●
9	2	10 ●●●●●●X●●●●●●
10	2	11 ●●●●●●●X●●●●●●●
11	3	12 ●●●●●X●●●●●X●●●●●
12	3	13 ●●●●●X●●●●●X●●●●●●
13	3	14 ●●●●●●X●●●●●●X●●●●●●
14	3	15 ●●●●●●X●●●●●●X●●●●●●●
15	3	16 ●●●●●●X●●●●●●X●●●●●●●●
16	4	17 ●●●●●X●●●●●X●●●●●X●●●●●●
17	4	18 ●●●●●X●●●●●X●●●●●X●●●●●●●
18	4	19 ●●●●●X●●●●●X●●●●●X●●●●●X●●●●●●
19	4	20 ●●●●●X●●●●●X●●●●●X●●●●●X●●●●●●●
20	4	21 ●●●●●X●●●●●X●●●●●X●●●●●X●●●●●X●●●●●●●

Right Hinge Door and Light Arrangement (23" Door Width)

All lights take 1-lamp ballasts. All frames are viewed from the front (customer side). (X = no light ● = Light).

Model 1000/1000R/1200R Door Service & Installation

59. Lamp Locations: Cooler Door Lighting (1986 to Present) Models 1000R, 1200R

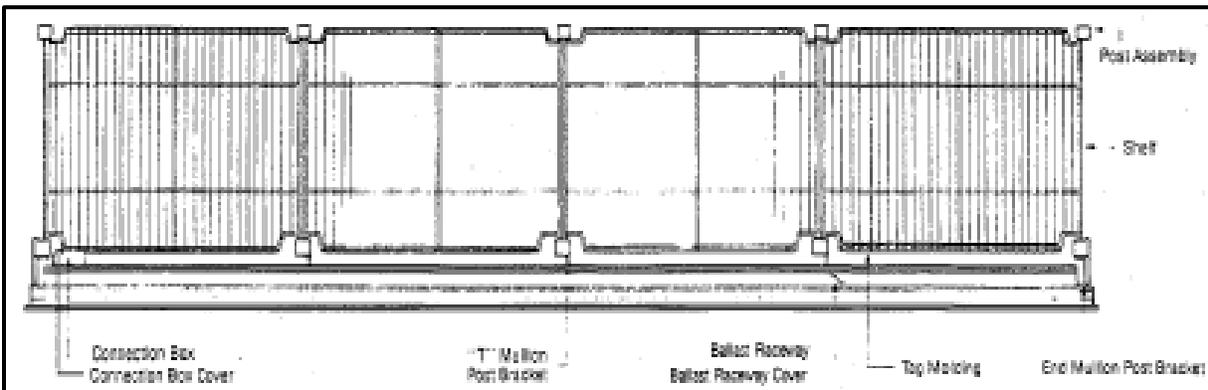
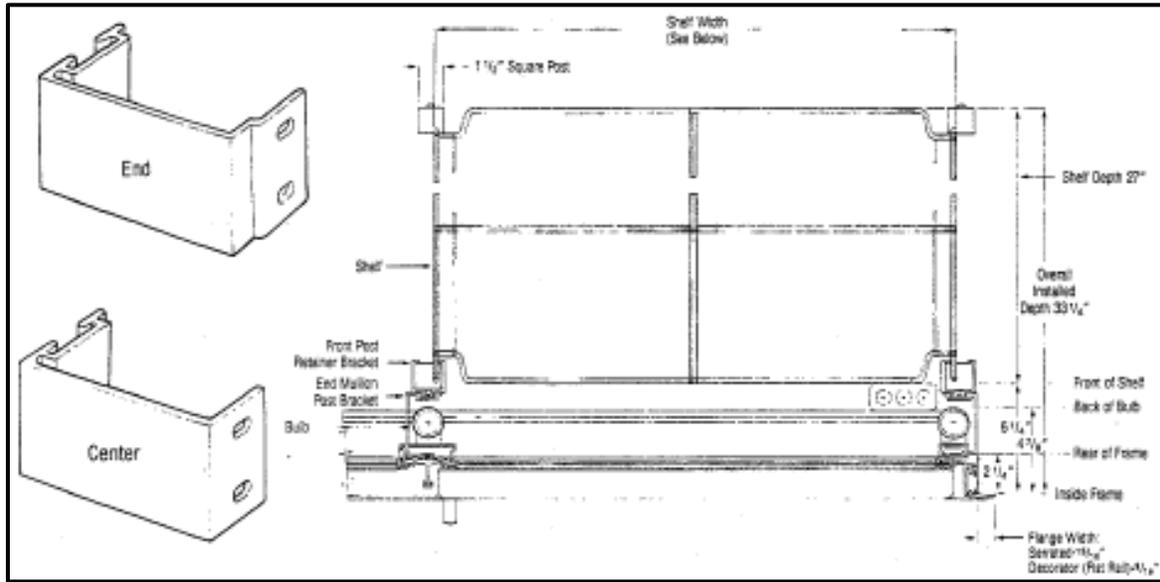
No. Doors	No. Frame Sections	No. Prewired Lights
1	1	2 ●●
2	1	3 ●●●
3	1	4 ●●●●
4	1	5 ●●●●●
5	2	6 ●●●●X●●●
6	2	7 ●●●●X●●●●●
7	2	8 ●●●●●X●●●●●
8	2	9 ●●●●●X●●●●●●●
9	3	10 ●●●●X●●●●●X●●●●●
10	3	11 ●●●●●X●●●●●X●●●●●
11	3	12 ●●●●●X●●●●●X●●●●●
12	3	13 ●●●●●X●●●●●X●●●●●●●
13	4	14 ●●●●●X●●●●●X●●●●●X●●●●●
14	4	15 ●●●●●X●●●●●X●●●●●X●●●●●
15	4	16 ●●●●●X●●●●●X●●●●●X●●●●●●●
16	4	17 ●●●●●X●●●●●X●●●●●X●●●●●●●
17	5	18 ●●●●●X●●●●●X●●●●●X●●●●●X●●●●●
18	5	19 ●●●●●X●●●●●X●●●●●X●●●●●X●●●●●
19	5	20 ●●●●●X●●●●●X●●●●●X●●●●●X●●●●●●●
20	5	21 ●●●●●X●●●●●X●●●●●X●●●●●X●●●●●●●

Right Hinge Door and Light Arrangement (26-3/4" and Wider Door Sizes)

All lights take 1-lamp ballasts. All frames are viewed from the front (customer side). (X = no light ● = Light).

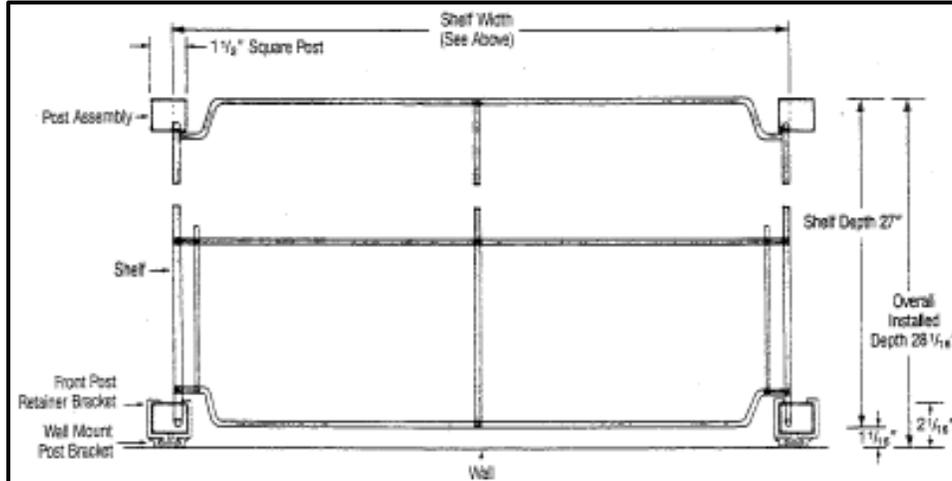
Model 1000/1000R/1200R Door Service & Installation

60. Model 1000R, 1200R Shelf Assembly



CATALOG DOOR SIZE	SHELF SIZE
23"	22-9/16"
26-2/3"	26-5/16"
28-3/4"	28-5/16"
30-1/4"	29-13/16"

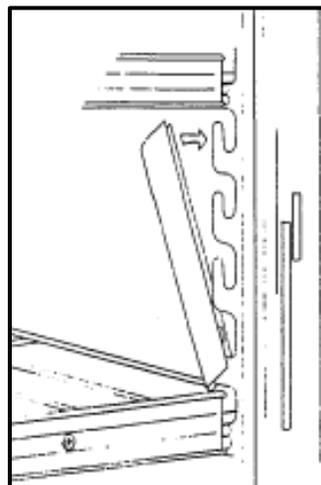
61. Model 4000 Shelf Assembly



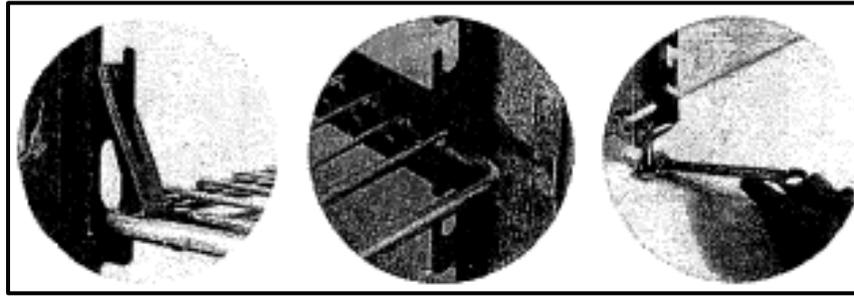
CATALOG DOOR SIZE	SHELF SIZE
23"	22-9/16"
26-2/3"	26-5/16"
28-3/4"	28-5/16"
30-1/4"	29-13/16"

62. Shelving Installation and/or Replacement (Prior to 1984)

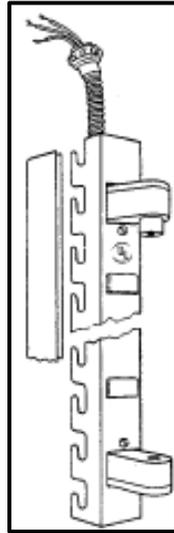
1. Insert shelf over saw-tooth edges on back of front post.
2. Insert clip on back of shelf over back of rear post grooves.
3. Level rear posts.
4. Protector channels must be cut to desired lengths after shelving has been positioned. Protector channels snap over vertical shelf standards.



5. See shelf installation.

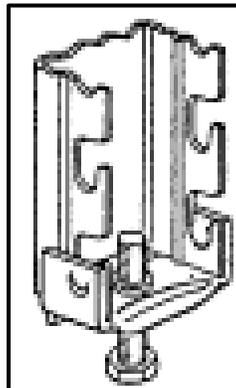


6. See Front Post



Front & Rear Post Safety Cover

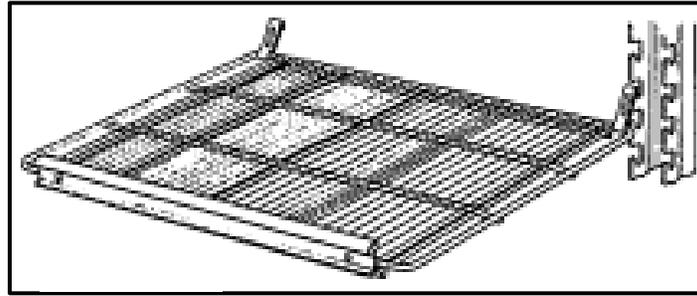
7. See Rear Post.



Rear Post w/Adjustment Bolt & Bracket

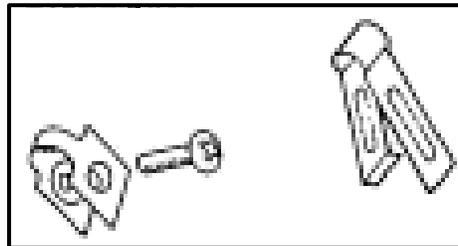
Model 1000/1000R/1200R Door Service & Installation

8. See Replacement Shelving

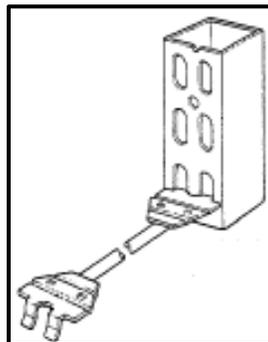


26" Deep Shelf	Part #
22-3/4" x 26	S-4031A
26-1/2" x 26	S-4031B
28-1/2" x 26	S-4031C
30" x 26	S-4031D
(Specify Tag: Gold-Silver)	

9. See metal tag molding clip and rear shelf clip.



63. Four-Post Stabilizer Bar Installation

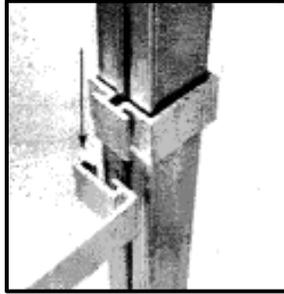


1. The four-post stabilizer bar is designed to help support the posts during installation and stabilize the system while in use.
2. Insert the forked end of stabilizer bar into the elongated holes in post.
3. Install the post stabilizers on top and bottom of all posts, front to rear, before installing shelves.

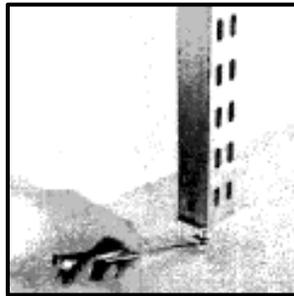
Model 1000/1000R/1200R Door Service & Installation

64. Four-Post Shelving System Installation (After 1984)

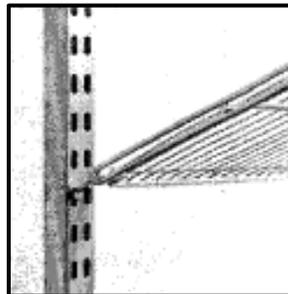
1. Attach post to inside frame by inserting post key into frame retaining bracket.



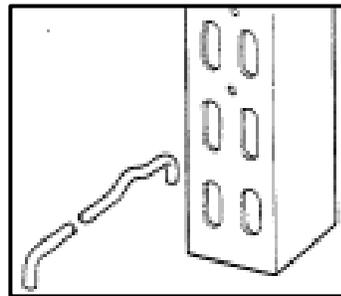
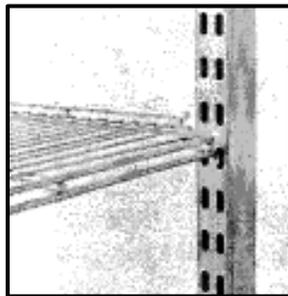
2. Before installing shelves, adjust all four posts to equal heights with leg leveling bolts at bottom of posts.



3. Insert front of shelf into front post at angle, then position rear shelf posts.



4. Drop rear of shelf down and pull back in slot on rear posts. Continue to add shelves behind each door, spacing for desired product merchandising.



Side Product Stop

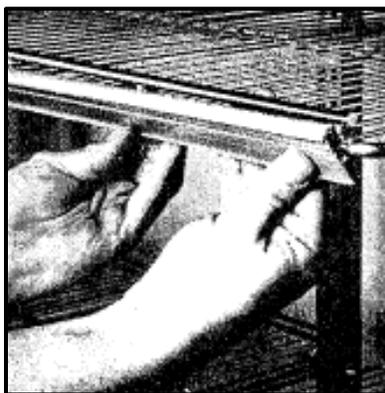
Model 1000/1000R/1200R Door Service & Installation

5. After installing shelves, adjust rear post leveling bolts to level. The Four-Post Shelving System is now ready for merchandising.

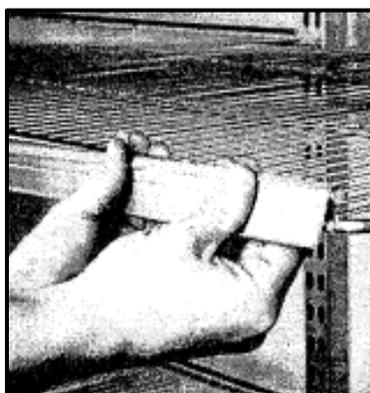


65. Plastic Tag Molding Installation

1. Tag molding is the exact length of the shelf's upper front bar. Center tag molding on front of shelf. Hook bottom of tag molding under shelf across entire width of shelf. Spread thumbs across tag molding and push up.

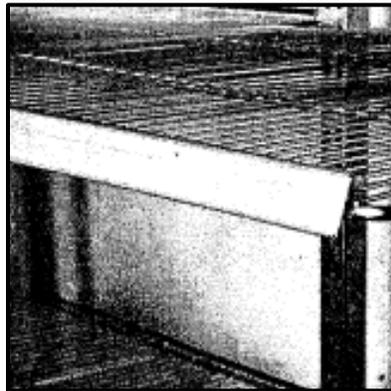


2. Snap top corner of tag molding strip onto shelf front. Apply even pressure across top of tag molding as it is fed onto top horizontal bar on shelf front.



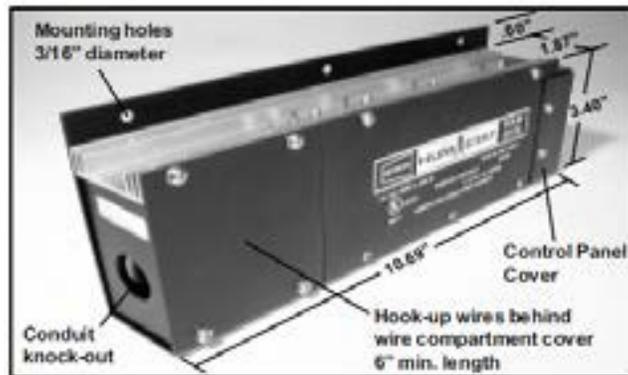
Model 1000/1000R/1200R Door Service & Installation

- For replacement tag molding, specify width of shelf when ordering.

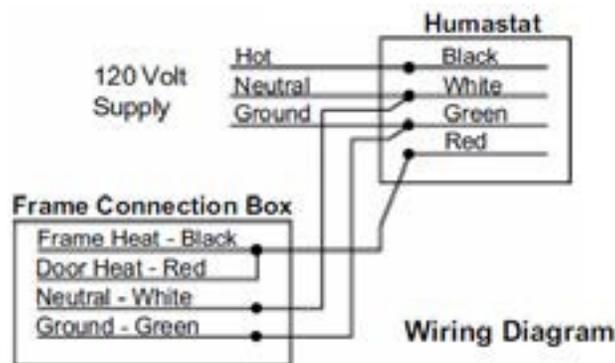


66. Humastat Installation Procedure

- Install Humastat Power Junction Box before refrigerator door power wiring, on the inside wall of refrigerator.



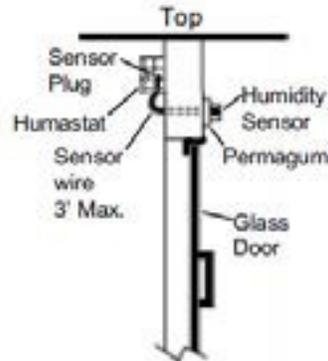
- Remove wiring compartment covers by removing four (4) sheet metal screws.
- Connect heater hot wire to Red wire from control unit.



- Connect input power hot wire to Black wire from control unit.
- Connect all White wires, including common side of power line, line load and control unit White wire.
- Connect Green Ground wire from control unit to Green Ground wire at frame and to incoming Ground wire (if furnished).

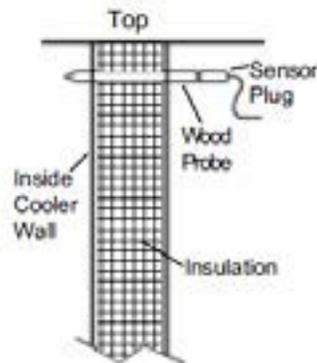
Model 1000/1000R/1200R Door Service & Installation

7. Reverse instructions to replace the Wiring Compartment Cover.
8. Install Humastat Sensor on the outside wall of refrigerator above the door frame, within three feet of power junction box.



120 VAC 50/60 Hz, 20 Amperes Maximum

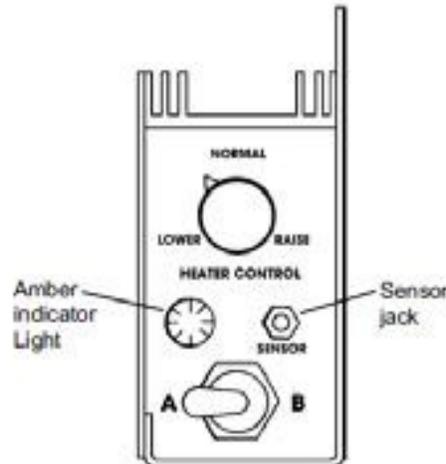
- a. Drill a 1/4" diameter hole through refrigerator wall directly above the door frame.
- b. Use the wood probe supplied with the sensor to feed the sensor wire through the refrigerator wall.



- c. Apply permagum to back of sensor around the wire. Pull the wire through the hole until the sensor makes close contact with the wall and secure it to the wall with the screws provided Seal the probe wire with the permagum on inside of wall.
9. Remove wood probe from sensor connector by holding the body of connector securely and pulling off the probe.
 10. Insert the sensor plug into the sensor jack on the outside end of the power junction box.
 11. Set the heater control knob for the lowest value which keeps the door free of undesirable moisture.

Model 1000/1000R/1200R Door Service & Installation

12. Red light indicates when heaters are functioning.



Control Panel End View
Switch shall remain in Position "A" for normal operation

67. Electrical Information for Model 1000R Normal Temp Doors, Frames & Light Fixtures (Heater Amperages @ 120 Volts)

NUMBER OF DOORS:	1	2	3	4	5	6	7	8	9	10
STYLE: Normal temp doors with heaters, 2-Pane Non-Heated Glass										
APPLICATION: Case Temperature 36°F, Relative Humidity 68%, In-Store @ 75°F ambient.										
23 x 36	0.33	0.66	0.98	1.31	1.64	1.96	2.29	2.62	2.94	3.28
23 x 54	0.38	0.76	1.13	1.51	1.89	2.26	2.64	3.02	3.39	3.78
23 x 67	0.48	0.97	1.45	1.94	2.42	2.90	3.39	3.88	4.35	4.84
23 x 73	0.54	1.09	1.63	2.18	2.72	3.26	3.81	4.36	4.89	5.44
23 x 75	0.55	1.10	1.65	2.20	2.75	3.30	3.85	4.40	4.95	5.50
26-3/4 x 67	0.52	1.04	1.57	2.09	2.61	3.14	3.66	4.18	4.71	5.22
26-3/4 x 73	0.54	1.08	1.62	2.16	2.70	3.24	3.78	4.32	4.86	5.40
26-3/4 x 75	0.55	1.10	1.64	2.19	2.74	3.28	3.83	4.38	4.92	5.47
28-3/4 x 73	0.55	1.10	1.64	2.19	2.74	3.28	3.83	4.38	4.92	5.47
28-3/4 x 75	0.58	1.16	1.73	2.31	2.89	3.46	4.04	4.62	5.19	5.77
28-3/4 x 79	0.64	1.28	1.91	2.55	3.19	3.82	4.46	5.10	5.73	6.37
30-1/4 x 36	0.36	0.72	1.08	1.43	1.80	2.16	2.51	2.86	3.24	3.59
30-1/4 x 67	0.55	1.11	1.66	2.22	2.77	3.32	3.88	4.44	4.98	5.54
30-1/4 x 73	0.58	1.16	1.74	2.32	2.90	3.48	4.06	4.64	5.22	5.80
30-1/4 x 75	0.57	1.14	1.71	2.28	2.85	3.42	3.99	4.56	5.13	5.70
30-1/4 x 79	0.65	1.31	1.96	2.62	3.27	3.92	4.58	5.24	5.88	6.54

Model 1000/1000R/1200R Door Service & Installation

NUMBER OF DOORS:	1	2	3	4	5	6	7	8	9	10
STYLE: Normal temp doors with heaters, 3-Pane Non-Heated Glass										
APPLICATION: Case Temperature 33°F, Relative Humidity 68%, In-Store @ 75°F ambient.										
23 x 36	0.49	0.97	1.46	1.95	2.43	2.92	3.41	3.90	4.38	4.86
23 x 54	0.56	1.12	1.68	2.24	2.80	3.36	3.92	4.48	5.04	5.60
23 x 67	0.72	1.45	2.17	2.89	3.62	4.34	5.06	5.78	6.51	7.24
23 x 73	0.77	1.53	2.30	3.06	3.83	4.60	5.36	6.12	6.90	7.66
23 x 75	0.81	1.63	2.44	3.26	4.07	4.88	5.70	6.52	7.33	8.14
26-3/4 x 67	0.76	1.51	2.27	3.02	3.78	4.54	5.29	6.04	6.81	7.56
26-3/4 x 73	0.83	1.67	2.50	3.34	4.17	5.00	5.84	6.68	7.90	8.34
26-3/4 x 75	0.82	1.64	2.45	3.27	4.09	4.90	5.72	6.54	7.35	8.17
28-3/4 x 73	0.82	1.64	2.45	3.27	4.09	4.90	5.72	6.54	7.35	8.17
28-3/4 x 75	0.88	1.76	2.64	3.52	4.40	5.28	6.16	7.04	7.92	8.80
28-3/4 x 79	0.94	1.88	2.82	3.76	4.70	5.64	6.58	7.52	8.46	9.40
30-1/4 x 36	0.55	1.10	1.65	2.20	2.75	3.30	3.85	4.40	4.95	5.50
30-1/4 x 67	0.82	1.64	2.46	3.28	4.10	4.92	5.74	6.56	7.38	8.20
30-1/4 x 73	0.88	1.77	2.65	3.54	4.42	5.30	6.19	7.08	7.95	8.84
30-1/4 x 75	0.87	1.73	2.60	3.47	4.33	5.20	6.07	6.94	7.80	8.67
30-1/4 x 79	0.96	1.92	2.88	3.84	4.80	5.76	6.72	7.68	8.64	9.60

NUMBER OF DOORS:	1	2	3	4	5	6	7	8	9	10
STYLE: Normal temp doors with heaters, 2-Pane Heated Glass (5.75W/SQ. FT.)										
APPLICATION: Case Temperature 31°F, Relative Humidity 80%, In-Store @ 75°F ambient.										
23 x 36	0.75	1.50	2.25	3.00	3.75	4.50	5.25	6.00	6.75	7.50
23 x 54	1.06	2.12	3.18	4.25	5.30	6.36	7.43	8.50	9.54	10.60
23 x 67	1.26	2.52	3.78	5.03	6.29	7.56	8.81	10.06	11.34	12.58
23 x 73	1.36	2.72	4.08	5.44	6.80	8.16	9.52	10.88	12.24	13.60
23 x 75	1.40	2.80	4.20	5.60	7.00	8.40	9.80	11.20	12.60	14.00
26-3/4 x 67	1.42	2.84	4.27	5.69	7.11	8.54	9.96	11.38	12.81	14.22
26-3/4 x 73	1.49	2.97	4.46	5.95	7.44	8.92	10.41	11.90	13.38	14.88
26-3/4 x 75	1.54	3.07	4.61	6.15	7.68	9.22	10.76	12.30	13.83	15.37
28-3/4 x 73	1.57	3.13	4.70	6.26	7.83	9.40	10.96	12.52	15.10	15.66
28-3/4 x 75	1.58	3.16	4.74	6.32	7.90	9.48	11.06	12.64	14.22	15.80
28-3/4 x 79	1.66	3.31	4.97	6.62	8.28	9.94	11.59	13.24	14.91	16.56
30-1/4 x 36	0.89	1.78	2.61	3.56	4.39	5.22	6.17	7.12	7.83	8.78
30-1/4 x 67	1.50	-	4.51	6.02	7.52	9.02	10.53	12.04	13.53	15.04
30-1/4 x 73	1.60	3.21	4.81	6.41	8.02	9.62	11.22	12.82	14.43	16.03
30-1/4 x 75	1.63	3.26	4.89	6.52	8.15	9.78	11.41	13.04	14.67	16.30
30-1/4 x 79	1.70	3.40	5.10	6.80	8.50	10.20	11.90	13.60	15.30	17.00

NOTES: 1. All amperages are design amperages subject to the following tolerances: units with rail heaters only +/- 5%, units with rail heaters and heated glass +/- 8%.

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2. Although the amperages are calculated at 120 volts, all doors are designed to operate without sweating when used within the application parameters with a voltage range of +/- 10%.

	11	12	13	14	15	16	17	18	19	20	AMPS PER LIGHT
23 x 36	3.60	3.93	4.26	4.59	4.92	5.24	5.58	5.88	6.22	6.56	0.46
23 x 54	4.15	4.53	4.91	5.29	5.67	6.04	6.43	6.78	7.17	7.56	0.55
23 x 67	5.33	5.82	6.30	6.79	7.26	7.76	8.23	8.70	9.21	9.68	0.55
23 x 73	5.99	6.54	7.08	7.63	8.16	8.72	9.25	9.78	10.35	10.88	0.55
23 x 75	6.05	6.60	7.15	7.70	8.25	8.80	9.35	9.90	10.45	11.00	0.55
26-3/4 x 67	5.75	6.27	6.79	7.31	7.83	8.36	8.87	9.42	9.93	10.44	0.55
26-3/4 x 73	5.94	6.48	7.02	7.56	8.10	8.64	9.18	9.72	10.26	10.80	0.55
26-3/4 x 75	6.02	6.57	7.11	7.66	8.22	8.76	9.30	9.85	10.40	10.96	0.55
28-3/4 x 73	6.02	6.56	7.11	7.67	8.21	8.76	9.31	9.84	10.40	10.95	0.55
28-3/4 x 75	6.53	6.93	7.50	8.08	8.66	9.24	9.82	10.39	10.97	11.55	0.55
28-3/4 x 79	7.01	7.65	8.28	8.93	9.56	10.20	10.84	11.46	12.11	12.75	0.55
30-1/4 x 36	3.94	4.29	4.67	5.01	5.37	5.72	6.09	6.48	6.80	7.15	0.55
30-1/4 x 67	6.10	6.66	7.20	7.77	8.32	8.88	9.43	9.96	10.54	11.10	0.55
30-1/4 x 73	6.38	6.96	7.54	8.12	8.70	9.28	9.86	10.44	11.02	11.60	0.55
30-1/4 x 75	6.27	6.84	7.41	7.98	8.55	9.12	9.69	10.26	10.83	11.40	0.55
30-1/4 x 79	7.20	7.86	8.50	9.17	9.82	10.48	11.13	11.76	12.44	13.10	0.55

	11	12	13	14	15	16	17	18	19	20	AMPS PER LIGHT
23 x 36	5.36	5.85	6.33	6.82	7.29	7.80	8.26	8.76	9.26	9.72	0.46
23 x 54	6.16	6.72	7.28	7.84	8.40	8.96	9.52	10.08	10.64	11.20	0.55
23 x 67	7.95	8.67	9.40	10.12	10.86	11.56	12.31	13.02	13.73	14.48	0.55
23 x 73	8.42	9.18	9.95	10.71	11.49	12.24	13.02	13.80	14.54	15.32	0.55
23 x 75	8.96	9.78	10.58	11.40	12.21	13.04	13.84	14.66	15.47	16.28	0.55
26-3/4 x 67	8.31	9.06	9.82	10.57	11.34	12.08	12.85	13.62	14.35	15.12	0.55
26-3/4 x 73	9.18	10.02	10.85	11.69	12.51	13.36	14.18	15.00	15.86	16.68	0.55
26-3/4 x 75	8.99	9.81	10.62	11.44	12.26	13.08	13.89	14.71	15.53	16.35	0.55
28-3/4 x 73	8.99	9.81	10.62	11.45	12.26	13.08	13.90	14.70	15.53	16.35	0.55
28-3/4 x 75	9.68	10.56	11.44	12.32	13.20	14.08	14.96	15.84	16.72	17.60	0.55
28-3/4 x 79	10.34	11.28	12.22	13.16	14.10	15.04	15.98	16.92	17.86	18.80	0.55
30-1/4 x 36	6.05	6.60	7.15	7.70	8.25	8.80	9.35	9.90	10.45	11.00	0.46
30-1/4 x 67	9.02	9.84	10.66	11.48	12.30	13.12	13.94	14.76	15.58	16.40	0.55
30-1/4 x 73	9.73	10.62	11.49	12.39	13.27	14.16	15.04	15.90	16.81	17.70	0.55
30-1/4 x 75	9.54	10.41	11.27	12.14	13.01	13.88	14.74	15.61	16.48	17.35	0.55
30-1/4 x 79	10.56	11.52	12.48	13.44	14.40	15.36	16.32	17.28	18.24	19.20	0.55

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	11	12	13	14	15	16	17	18	19	20	AMPS PER LIGHT
23 x 36	8.25	9.00	9.75	10.50	11.25	12.00	12.75	13.50	14.25	15.00	0.46
23 x 54	11.68	12.75	13.80	14.87	15.90	17.00	18.02	19.08	20.18	21.20	0.55
23 x 67	13.84	15.09	16.35	17.61	18.87	20.12	21.39	22.68	23.90	25.16	0.55
23 x 73	14.96	16.32	17.68	19.04	20.40	21.76	23.12	24.48	25.84	27.20	0.55
23 x 75	15.40	16.80	18.20	19.60	21.00	22.40	23.80	25.20	26.60	28.00	0.55
26-3/4 x 67	15.65	17.07	18.49	19.91	21.33	22.76	24.17	25.62	27.03	28.44	0.55
26-3/4 x 73	16.36	17.85	19.34	20.82	22.32	23.80	25.29	26.76	28.26	29.76	0.55
26-3/4 x 75	16.91	18.45	19.98	21.52	23.06	24.60	26.13	27.67	29.21	30.75	0.55
28-3/4 x 73	17.22	18.78	20.36	21.91	23.48	25.04	26.61	28.20	29.74	31.30	0.55
28-3/4 x 75	17.38	18.96	20.54	22.12	23.70	25.28	26.86	28.44	30.02	31.06	0.55
28-3/4 x 79	18.21	19.86	21.53	23.17	24.83	26.48	28.14	29.82	31.45	33.10	0.55
30-1/4 x 36	9.73	10.68	11.39	12.46	13.29	14.24	15.07	15.66	16.85	17.80	0.46
30-1/4 x 67	16.55	18.06	19.55	21.07	22.57	24.08	25.58	27.06	28.59	30.10	0.55
30-1/4 x 73	17.63	19.23	20.84	22.44	24.04	25.64	27.25	28.86	30.45	32.05	0.55
30-1/4 x 75	17.93	19.56	21.19	22.82	24.45	26.08	27.71	29.34	30.97	32.60	0.55
30-1/4 x 79	18.70	20.40	22.10	23.80	25.50	27.20	28.90	30.60	32.30	34.00	0.55

- NOTES:**
- When calculating **lamp amperage**, add 1 lamp to the number of doors in the line-up and multiply that number by the appropriate amps per light value.
 - Design parameters do not make allowances for factors such as air leaks or unusual air flow patterns within cases; therefore, some sweating may occur when upper limits of temperature or humidity are encountered.

68. Heat Load in BTU/Hr for Glass, Door Rail, Frame Heaters and Lights (Per Door, with Doors Closed @ 75°F Store Ambient)

MODEL 1000R NORMAL TEMPERATURE (2-PANE NON-HEATED GLASS – CASE TEMP 36°F)					
DOOR SIZE	1 DOOR	2 DOOR	3 DOOR	4 DOOR	5 DOOR
23 x 36	630	1035	1440	1845	2250
23 x 54	705	1186	1666	2146	2627
23 x 67	760	1294	1829	2364	2898
23 x 75	793	1306	1929	2497	3065
26-3/4 x 67	796	1367	1938	2509	N/A
26-3/4 x 75	833	1442	2050	2658	N/A
28-3/4 x 75	855	1484	2114	2744	N/A
28-3/4 x 79	874	1524	2173	2822	N/A
30-1/4 x 36	672	1119	1567	2014	N/A
30-1/4 x 67	830	1435	2040	2645	N/A
30-1/4 x 75	871	1517	2162	2808	N/A
30-1/4 x 79	891	1557	2223	2889	N/A

NOTE: Add 10-20% to above values depending on door opening frequency.

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MODEL 1000R NORMAL TEMPERATURE					
(3-PANE NON-HEATED GLASS – CASE TEMP 33°F)					
DOOR SIZE	1 DOOR	2 DOOR	3 DOOR	4 DOOR	5 DOOR
23 x 36	647	1070	1492	1914	2337
23 x 54	725	1225	1724	2224	2724
23 x 67	781	1337	1892	2448	3004
23 x 75	815	1406	1996	2586	3176
26-3/4 x 67	815	1404	1994	2584	N/A
26-3/4 x 75	852	1480	2107	2734	N/A
28-3/4 x 75	872	1519	2166	2813	N/A
28-3/4 x 79	892	1559	2225	2892	N/A
30-1/4 x 36	689	1152	1616	2080	N/A
30-1/4 x 67	846	1468	2089	2710	N/A
30-1/4 x 75	887	1549	2211	2873	N/A
30-1/4 x 79	907	1590	2272	2854	N/A

NOTE: Add 10-20% to above values depending on door opening frequency.

MODEL 1000R NORMAL TEMPERATURE					
(2-PANE HEATED NORMAL TEMP GLASS – CASE TEMP 31°F)					
DOOR SIZE	1 DOOR	2 DOOR	3 DOOR	4 DOOR	5 DOOR
23 x 36	730	1235	1741	2246	2751
23 x 54	844	1464	2083	2702	3321
23 x 67	927	1628	2330	3032	3733
23 x 75	977	1730	2482	3234	3987
26-3/4 x 67	980	1734	2489	3244	N/A
26-3/4 x 75	1036	1846	2657	3468	N/A
28-3/4 x 75	1067	1909	2750	3592	N/A
28-3/4 x 79	1096	1967	2839	3710	N/A
30-1/4 x 36	793	1361	1929	2496	N/A
30-1/4 x 67	1029	1933	2637	3442	N/A
30-1/4 x 75	1090	1955	2820	3685	N/A
30-1/4 x 79	1121	2061	2912	3807	N/A

NOTE: Add 10-20% to above values depending on door opening frequency.

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MODEL 1000R NORMAL TEMPERATURE					
(2-PANE NON-HEATED DUAL REFLECTIVE GLASS – CASE TEMP 33°F)					
DOOR SIZE	1 DOOR	2 DOOR	3 DOOR	4 DOOR	5 DOOR
23 x 36	558	892	1225	1559	1892
23 x 54	717	1209	1701	2194	2686
23 x 67	771	1318	1864	2410	2956
23 x 75	805	1384	1964	2543	3123
26-3/4 x 67	804	1382	1961	2539	N/A
26-3/4 x 75	840	1455	2070	2685	N/A
28-3/4 x 75	859	1493	2126	2760	N/A
28-3/4 x 79	878	1530	2183	2836	N/A
30-1/4 x 36	682	1139	1596	2053	N/A
30-1/4 x 67	834	1442	2051	2660	N/A
30-1/4 x 75	873	1521	2169	2817	N/A
30-1/4 x 79	892	1560	2227	2895	N/A

NOTE: Add 10-20% to above values depending on door opening frequency.

69. Electrical Information for Model 1200 Normal Temp Doors, Frames & Light Fixtures (Amperages @ 120 Volts)

NUMBER OF DOORS:	1	2	3	4	5	6	7	8	9	10
STYLE: Normal temp doors, no heaters, 2-Pane Dual Non-Heated Glass										
APPLICATION: Case Temperature 38°F, Relative Humidity 70%, In-Store @ 75°F ambient.										
23 x 36	0.16	0.32	0.48	0.64	0.79	0.96	1.12	1.28	1.44	1.58
23 x 54	0.21	0.43	0.64	0.86	1.07	1.28	1.50	1.72	1.92	2.14
23 x 67	0.26	0.51	0.77	1.03	1.28	1.54	1.80	2.06	2.31	2.56
23 x 73	0.27	0.55	0.82	1.10	1.37	1.64	1.92	2.20	2.46	2.74
23 x 75	0.27	0.54	0.81	1.08	1.34	1.62	1.89	2.16	2.42	2.68
26-3/4 x 67	0.26	0.53	0.79	1.05	1.31	1.58	1.84	2.10	2.37	2.62
26-3/4 x 73	0.30	0.60	0.89	1.18	1.48	1.78	2.07	2.36	2.67	2.96
26-3/4 x 75	0.29	0.58	0.87	1.16	1.45	1.74	2.03	2.32	2.61	2.90
28-3/4 x 73	0.29	0.58	0.87	1.16	1.45	1.74	2.03	2.32	2.61	2.90
28-3/4 x 75	0.32	0.64	0.96	1.14	1.60	1.92	2.10	2.28	2.88	3.06
28-3/4 x 79	0.31	0.62	0.93	1.24	1.55	1.86	2.17	2.48	2.79	3.10
30-1/4 x 36	0.19	0.38	0.56	0.75	0.94	1.12	1.31	1.50	1.68	1.87
30-1/4 x 67	0.27	0.54	0.81	1.08	1.35	1.62	1.89	2.16	2.43	2.70
30-1/4 x 73	0.29	0.57	0.86	1.14	1.43	1.72	2.00	2.28	2.58	2.86
30-1/4 x 75	0.32	0.64	0.95	1.27	1.59	1.90	2.22	2.54	2.85	3.17
30-1/4 x 79	0.31	0.61	0.92	1.22	1.53	1.84	2.14	2.44	2.76	3.06

- NOTES:**
- All amperages are design amperages subject to the following tolerances: non-heated glass +/- 5%, heated glass +/- 8%.
 - Although the amperages are calculated at 120 volts, all doors are designed to operate without sweating when used within the application parameters with a voltage range of +/- 10%.

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	11	12	13	14	15	16	17	18	19	20	AMPS PER LIGHT
23 x 36	1.76	1.92	2.07	2.24	2.37	2.56	2.69	2.88	3.04	3.16	0.46
23 x 54	2.36	2.58	2.79	3.01	3.21	3.44	3.64	3.84	4.08	4.28	0.55
23 x 67	2.83	3.09	3.34	3.60	3.84	4.12	4.35	4.62	4.89	5.12	0.55
23 x 73	3.02	3.30	3.57	3.84	4.11	4.40	4.66	4.92	5.22	5.48	0.55
23 x 75	2.97	3.24	3.49	3.76	4.02	4.32	4.57	4.83	5.10	5.36	0.55
26-3/4 x 67	2.89	3.15	3.41	3.68	3.93	4.20	4.46	4.74	4.99	5.24	0.55
26-3/4 x 73	3.25	3.54	3.84	4.14	4.44	4.72	5.04	5.34	5.61	5.92	0.55
26-3/4 x 75	3.19	3.48	3.77	4.06	4.35	4.64	4.93	5.22	5.51	5.80	0.55
28-3/4 x 73	3.19	3.48	3.77	4.06	4.35	4.64	4.93	5.22	5.51	5.80	0.55
28-3/4 x 75	3.24	3.42	4.02	4.20	4.38	4.56	5.16	5.34	5.52	5.70	0.55
28-3/4 x 79	3.41	3.72	4.03	4.34	4.65	4.96	5.27	5.58	5.89	6.20	0.55
30-1/4 x 36	2.06	2.25	2.43	2.63	2.81	3.00	3.19	3.36	3.56	3.75	0.46
30-1/4 x 67	2.97	3.24	3.51	3.78	4.05	4.32	4.59	4.86	5.13	5.40	0.55
30-1/4 x 73	3.14	3.42	3.72	3.99	4.28	4.56	4.85	5.16	5.42	5.70	0.55
30-1/4 x 75	3.49	3.81	4.12	4.44	4.76	5.08	5.39	5.71	6.03	6.35	0.55
30-1/4 x 79	3.36	3.66	-	4.27	4.58	4.88	5.19	5.52	-	6.10	0.55

- NOTES:**
- When calculating lamp amperage, add 1 lamp to the number of doors in the line-up and multiply that number by the appropriate amps per light value.
 - Design parameters do not make allowances for factors such as air leaks or unusual air flow patterns within cases; therefore, some sweating may occur when upper limits of temperature or humidity are encountered.

70. Heat Load in BTU/Hr for Glass, Door Rail, Frame Heaters and Lights (Per Door, with Doors Closed @ 75°F Store Ambient)

MODEL 1200R NORMAL TEMPERATURE (2-PANE DUAL REFLECTIVE NON-HEATED GLASS – CASE TEMP 38°F)					
DOOR SIZE	1 DOOR	2 DOOR	3 DOOR	4 DOOR	5 DOOR
23 x 36	541	857	1173	1489	1805
23 x 54	583	940	1298	1655	2013
23 x 67	613	1000	1388	1775	2163
23 x 75	631	1037	1443	1849	2255
26-3/4 x 67	635	1046	1456	1866	N/A
26-3/4 x 75	656	1088	1519	1951	N/A
28-3/4 x 75	670	1115	1560	2005	N/A
28-3/4 x 79	681	1137	1593	2049	N/A
30-1/4 x 36	566	907	1247	1588	N/A
30-1/4 x 67	657	1088	1520	1951	N/A
30-1/4 x 75	680	1135	1590	2045	N/A
30-1/4 x 79	692	1159	1625	2095	N/A

NOTE: Add 10-20% to above values depending on door opening frequency.

71. Troubleshooting

1. **Electrical:** Low voltage supply (less than 108V on 120V systems) results in significantly lower wattage. Lower wattage will decrease the efficiency of heaters and lamps.
 - A. Glass Condensation:
 1. No Power? Check:
 - a. Power supply
 - b. Relative humidity in room area
 - c. Hinge pin wiring
 - d. Case temperature
 - e. Hinge pin plugged into door female plug
 - f. Incorrect wiring
 - g. Faulty Energy Management System (Sensor)
 2. Low Voltage? Check voltage at main power source.
 - a. Voltage at main – low voltage
 - b. Energy Management System (Sensor)
 - B. Door and Frame Rail Condensation:
 1. No Power? Check:
 - a. Power supply
 - b. Relative humidity in room area
 - c. Hinge pin wiring
 - d. Case temperature
 - e. Hinge pin installed in female plug in door
 - f. High velocity fans on back of frame
 - g. Energy Management System (Sensor)
 2. Low Voltage? Check voltage at main power source.
 - a. Supply Voltage – Low Voltage
 - b. Energy Management System (Sensor)
2. **Mechanical:**
 - A. Door Not Sealing? Check:
 1. Magnetic gasket (Replace if necessary)
 2. Torquemaster adjustment
 3. Hold-Open
 4. Defective frame plastic
 5. Frame or door out of square
 - B. Door Will Not Close?
 1. See instructions 2a, 1 through 5
 - C. Door Saw Toothed?
 1. Door or frame out of square? (Square to the nearest 1/16" of net opening)
 2. Torquemaster adjustment
 3. Worn hinge pin hole
 4. Case not level
 5. Frame not shimmed properly

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3. Ballast/Lamps:

- A. Lamps will not start?
 - 1. Ballast failure
 - 2. Incorrect ballast
 - 3. Incorrect wiring
 - 4. Incorrect bulb
 - 5. Poor contact between bulb and socket
 - 6. Case too cold. (Lamps will usually light, but they will be very dim)
 - 7. Incorrect socket wiring
 - 8. No ground
- B. Lamp Flickering?
 - 1. Incorrect ballast
 - 2. Defective bulb
 - 3. Incorrect voltage
 - 4. Bulbs without shields
- C. Slow-Starting Bulbs?
 - 1. Improper wiring
 - 2. Poor lamp and socket connections
 - 3. Voltage too low
 - 4. Defective bulbs
 - 5. Incorrect ballast
 - 6. Case too cold
- D. Short Lamp Life?
 - 1. Incorrect wiring of lamp or ballast
 - 2. Incorrect socket connection
 - 3. Incorrect bulbs or ballast
- E. Blinking Lamps?
 - 1. Voltage too high
 - 2. Wrong bulbs or ballast
 - 3. Incorrect socket wiring
 - 4. Incorrect number of lamps for ballast
- F. Ballast (Humm-Noise)?
 - 1. Defective ballast
 - 2. Loose can or cover

72. Safety Precautions

- 1. Always turn off power to case, doors and frames before starting work.
- 2. Always use a qualified electrician for electrical work.
- 3. Always wear safety glasses when working on equipment.

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73. Tips

1. **Never splice door or frame heater wires.** Complete replacement recommended.
2. When installing gasket and plastics, use a liquid soap.
3. Keep doors and frames clean.
4. For binding gasket or plastic parts, use a food grade silicone.
5. Always replace lamp shields when lamps are replaced.
6. Preventive maintenance is the key to door and frame longevity.

74. Dew Point Chart

NORMAL TEMPERATURE APPLICATIONS

GLASS TYPE	ROOM TEMP (F)	CASE TEMPERATURE (F)				
		40	35	30	25	20
TWO PANE NHG*	70	70	66	61	58	53
	75	67	62	59	55	52
	80	63	60	57	53	50
	85	60	58	53	50	49
	90	58	55	52	49	47
THREE PANE NHG*	70	74	71	68	65	62
	75	72	68	66	63	60
	80	68	66	63	60	58
	85	66	64	61	58	56
	90	65	62	59	57	54
TWO PANE REFLECTIVE NHG*	70	76	75	70	67	63
	75	75	70	69	66	62
	80	70	68	66	62	59
	85	68	66	63	60	58
	90	67	64	60	58	56
CP2NT HEATED GLASS	70	98	92	90	84	80
	75	95	90	86	84	77
	80	90	85	81	76	73
	85	86	80	78	72	69
	90	82	78	74	70	66
*NHG = Non Heated Glass	% REL HUMIDITY @ WHICH CONDENSATION FORMS ON GLASS					

Calculations make no allowance for air leaks or unusual air flow patterns within cases and are intended to be used as guidelines only.



COMPANY POLICIES, TERMS OF SALE, AND WARRANTY

The following terms and conditions shall apply to all transactions and agreements between Anthony, Inc. ("Anthony") and the other party 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. the place of shipment as designated by Anthony, packaged for 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 a representative of Anthony authorized to make such changes. 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 amounts.

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 provided however, Anthony shall not be liable for any claims or consequential damages arising from the failure to meet any scheduled shipping dates. If Buyer refuses shipment of any standard catalog products under an 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 prepaid by Buyer; and (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 reserves the right to cure the defect at the ship-to location. Costs for special packaging and/or handling requested by Buyer will be billed to Buyer. Shipping terms are specified on the face of Anthony's quotation and/or price list, as applicable. Unless otherwise specified by Buyer in writing, Anthony shall select the method of shipment and direct shipment of materials to the specified delivery address of Buyer. In the event of any general freight increase or any governmental ruling or regulation that results in increased freight costs, Anthony may, without any advance notice, invoice Buyer for such additional costs. Acceptance and rejections of glass sheets, assembled sealed glass units, and finished doors shall be in accordance with the defect criteria set forth in Industry Specification ASTM C1036-06 Standards, level Q3.

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. The products which Anthony manufacture and offer for sale are warranted to: (i) be free from defects in materials and workmanship; and (ii) perform in accordance with applicable refrigeration standards as of the date of manufacture for a period of 12 months from the date and place of shipment, provided that the installation and maintenance of such products have been performed strictly in accordance with Anthony's designated specifications (the "Warranty"). Anthony shall provide all necessary parts and labor at its cost to fulfill said Warranty. All parts will be shipped standard ground freight. 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, at Anthony's Sylmar manufacturing plant. Additionally, for a period of 10 years from the shipment date, Anthony will replace sealed glass units that are part of an original Anthony-manufactured door if the seal breaks and internal condensation results. Anthony-manufactured LED lighting have a five (5) year component warranty and twelve (12) month labor warranty. The anti-fog coating is only warranted for a period of twelve (12) months from date of shipment. Anthony reserves the right to change its warranty provisions at its sole discretion at any time with or without prior notification of such change.

No Warranty for Non-Standard Products.

A "Non-Standard Product" is any product that is different in any manner from any Anthony product that has been previously designed and manufactured by Anthony in accordance with its standard specifications. A Non-Standard Product also includes any standard Anthony product that has been specially designed or modified to meet a particular Buyer specification, or that contains any additional or substituted product, part, accessory, equipment, fixture, component or material, or that has been assembled, manufactured, produced, or installed by any method or process, which is different from Anthony's standard specifications for such product. Anthony expressly disclaims and make no warranties, express or implied, as to the condition, design, utility, quality, adequacy, or capacity with respect to any standard or Non-Standard Product, including, without limitation, any warranty of merchantability or fitness of such product for a particular purpose or intended use, whether or not such product has been designated by Anthony as a Non-Standard Product.

All Non-Standard Products, whether sold separately, or incorporated and/or attached to standard Anthony products, and all services relating to such products, are sold to and accepted by Buyer "as is" and "with all faults". Without limiting any other provision of this purchase order, Anthony shall have no liability to Buyer for any claim, loss, damage, consequential damages or expense associated with any Non-Standard Product and/or its use or operation, or any other equipment or property of Buyer caused by or alleged to be caused by any such product or its use or operation, whether directly, indirectly, incidentally or consequentially, or by any inadequacy thereof or deficiency or defect therein.

The foregoing exclusion of warranty cannot be modified or waived except as expressly set forth in a writing signed by an officer of Anthony authorized to make such modification or waiver.

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 INCLUDING BUT NOT LIMITED TO INJURY TO PERSONS OR PROPERTY.

6. ACCEPTANCE OF PRODUCTS BY BUYER/CLAIMS: Upon delivery, shipments must be inspected for damage, loss or shortage prior to acceptance from the carrier. If damage or shortage exists with respect to any shipment and it is not concealed, Buyer shall secure a notation of such damage or shortage from the delivering agent on the freight bill or delivery receipt. If damage is concealed, Buyer must notify Anthony within five (5) days of its delivery and hold the merchandise for its inspection. Any claims for visible loss or damage should be filed by Buyer with Anthony in writing immediately upon receipt of the materials. All claims of Buyer that materials delivered do not conform to the accepted order shall be handled as claims for breach of warranty and Buyer shall be limited to those remedies available for breach of warranty.

7. CLAIMS BY BUYER. 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 six (6) months of receipt of the goods. No claims for visible, external damage or shortage will be allowed unless they are accompanied by an inspection report or signed delivery receipt noting such loss or damage signed by a representative of the carrier and forwarded to the Anthony Vice President, Marketing & Sales within 30 days of the invoice date.

8. CANCELLATION. Orders may not be canceled after receipt by Anthony unless Anthony consents in writing to such cancellation. Cancellation will be granted only on terms indemnifying Anthony against any loss resulting from such action. At minimum, Buyer will be liable for all cost incurred on the order through the cancellation date.

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

10. DEFAULT. If Buyer defaults or fails to pay 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 attorneys' fees, costs and expenses incurred as a result of Buyer's default or failure to pay, including but not limited to any collection or repossession expenses.

11. 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 sales invoice or by a written agreement duly executed by an officer of Anthony and the Buyer. The terms specified herein shall control in the event of any variance between these terms and any terms contained in Buyer's purchase orders.

12. GOVERNING LAW. This purchase order, any agreements between Anthony and Buyer and all other claims that arise between the parties, whether sounding in contract or tort, shall be governed by, construed and enforced in accordance with the laws of the State of California. By entering into this purchase order and any other agreement with Anthony, Buyer consents to the jurisdiction of the courts of the State of California to determine all claims between the parties, regardless of whether said claims are contract claims, tort claims, patent claims, trademark claims or copyright claims. Venue of any lawsuit (State or Federal) against Anthony must be filed in Los Angeles County, California. Service of process on Buyer may be made by registered mail addressed to the Buyer.

13. SEVERABILITY. 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.

14. HEADINGS. The section headings contained herein have been inserted for convenient reference and shall not be considered in any questions of interpretation or construction of any agreements between Anthony and Buyer.

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99-18396-W001_E (01/02/2014)