SERVICE MANUAL



PW/RPW Proofers and RPW Retarder Proofers (ML-132604 – ML-132643) Installation Instructions

For a complete listing of Models and MLs, see MODELS AND ML NUMBERS section.

PW1
PW2
PW3
RPW1
RPW2

- NOTICE -

This Manual is prepared for the use of trained Hobart Service Technicians and should not be used by those not properly qualified.

This manual is not intended to be all encompassing. If you have not attended a Hobart Service School for this product, you should read, in its entirety, the repair procedure you wish to perform to determine if you have the necessary tools, instruments and skills required to perform the procedure. Procedures for which you do not have the necessary tools, instruments and skills should be performed by a trained Hobart Service Technician.

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1. GENERAL

IMPORTANT FOR YOUR SAFETY

THIS MANUAL HAS BEEN PREPARED FOR PERSONNEL QUALIFIED TO INSTALL ELECTRICAL EQUIPMENT, WHO SHOULD PERFORM THE INITIAL FIELD START-UP AND ADJUSTMENTS OF THE EQUIPMENT COVERED BY THIS MANUAL

FOR YOUR SAFETY
DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS OR LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE

WARNING
IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN CAUSE PROPERTY DAMAGE, INJURY OR DEATH. READ THE INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS THOROUGHLY BEFORE INSTALLING OR SERVICING THIS EQUIPMENT.

IN THE EVENT OF A POWER FAILURE, DO NOT ATTEMPT TO OPERATE THIS DEVICE.

KEEP AREA AROUND OVEN CLEAR OF COMBUSTIBLES.

MODELS AND ML NUMBERS

MODEL	ML NUMBER		MODEL	ML NUMBER
PROOFER				
PW1E - 34.5 DEEP	ML-132604		PW3S - 60.5 DEEP	ML-132625
PW1E - 60.5 DEEP	ML-132605		PW3S - 80.5 DEEP	ML-132626
PW1E - 80.5 DEEP	ML-132606		PW3S - 100.5 DEEP	ML-132627
PW1E - 100.5 DEEP	ML-132607		PW3S - 120.5 DEEP	ML-132628
PW1E - 120.5 DEEP	ML-132608			
PW1S - 40.5 DEEP	ML-132609		**RETARDER**	
PW1S - 60.5 DEEP	ML-132610		RPW1S - 40.5 DEEP	ML-132629
PW1S - 80.5 DEEP	ML-132611		RPW1S - 60.5 DEEP	ML-132630
PW1S - 100.5 DEEP	ML-132612		RPW1S - 80.5 DEEP	ML-132631

MODEL	ML NUMBER	MODEL	ML NUMBER
PW1S - 120.5 DEEP	ML-132613	RPW1S - 100.5 DEEP	ML-132632
PW2E - 40.5 DEEP	ML-132614	RPW1S - 120.5 DEEP	ML-132633
PW2E - 60.5 DEEP	ML-132615	RPW2E - 40.5 DEEP	ML-132634
PW2E - 80.5 DEEP	ML-132616	RPW2E - 60.5 DEEP	ML-132639
PW2E - 100.5 DEEP	ML-132617	RPW2E - 80.5 DEEP	ML-132635
PW2E - 120.5 DEEP	ML-132618	RPW2E - 100.5 DEEP	ML-132640
PW2S - 40.5 DEEP	ML-132619	RPW2E - 120.5 DEEP	ML-132636
PW2S - 60.5 DEEP	ML-132620	RPW2S - 40.5 DEEP	ML-132637
PW2S - 80.5 DEEP	ML-132621	RPW2S - 60.5 DEEP	ML-132638
PW2S - 100.5 DEEP	ML-132622	RPW2S - 80.5 DEEP	ML-132641
PW2S - 120.5 DEEP	ML-132623	RPW2S - 100.5 DEEP	ML-132642
PW3S - 40.5 DEEP	ML-132624	RPW2S - 120.5 DEEP	ML-132643

INTRODUCTION

These instructions are for Baxter PW and RPW Series cabinets. Certain steps may only apply to PW Series or RPW Series and will be indicated as such. The PW1E/RPW1S single deep and PW2E/RPW2S single deep cabinets can be shipped assembled requiring minimal field assembly. All cabinets can be shipped unassembled requiring field assembly. Both shipping methods will require leveling and connection to utilities. All utility connections are the responsibility of the customer.

All information, illustrations and specifications contained in this manual are based on the latest product information available at the time indicated on the cover of the manual.

Retain these instructions for future reference.

UNPACKING

Upon receipt or arrival at location, inspect crating for outside damage. If damage exists, take pictures and note damage. Advise freight company, customer, or contractor of damage before uncrating.

Remove cabinet components from crating and check for possible shipping damage. If cabinet is found to be damaged after un-crating, save packaging material and contact the carrier within 5 days of delivery.

If location has multiple cabinets, keep serial numbered crates together.

Check contents against packing list with shipment.

Refer to HARDWARE REFERENCE GUIDES for identifying hardware usage and location.

LOCATION

- Flooring:
  - Level floor within 1/8" per foot up to 3/4" in all directions.

NOTE: For units supplied without a cabinet floor, the equipment is to be installed on flooring materials that are corrosion resistant and cleanable. Flooring materials meeting these requirements may include masonry materials. If a floor drain is located inside the proofer, any exposed hardware securing floor drain should be constructed of non-ferrous material.

- Drain connection:

- 1/2" FNPT (Female National Pipe Thread) rear or front drain connection at 5" above finished floor, route to air gap drain.

- Water connection:
  - Water and waste piping and connections shall comply with the International Plumbing Code 2003, International Code Council (ICC), or to the Uniform Plumbing Code 2003, International Association of Plumbing and Mechanical Officials (IAPMO).

NOTE: Plumbing connections must comply with applicable sanitary, safety and plumbing codes and provide adequate backflow protection to comply with applicable federal, state and local codes.

  - Water line connection is 95" above finished floor. Water connection is 3/4" FGHT (Female Garden Hose Thread) or 1/2" FNPT (Female National Pipe Thread). 3/4" FGHT to 1/2" FNPT adapter is provided.
  - 30-80 psi flow.
  - Cold water.
- Water Quality:
  - Hardness 2-4GPG.
  - pH 7.0 to 8.0.
  - Chloride concentration 0-30ppm.
  - Sediment <.5 micron.
  - Turbidity <.5 NTU.
  - Total dissolved solids <400ppm.
- The electrical diagram is located on the cover of the component box. Units require a single phase or three phase 208-240 volt electrical connection. Neutral wire circuitry needed to provide 110-120 volt for miscellaneous control components. A separate 110-120 volt line may be run or a transformer option will be required if 110-120 volt is not available. Consult Bakery Product Support for 110-120 volt line or transformer option requirements.

NOTICE

Prior to power being applied to unit, ground and neutral wire connections must be present to prevent damage to components. If damage to components happens due to absence of ground or neutral, repair costs are **NOT** covered under warranty.

- Single Phase (L1, L2, Neutral, Ground).
- Three Phase (L1, L2, L3, Neutral, Ground).

CLEARANCE DIMENSIONS

Cabinets UL/CSA Listed for 0" clearance for back and side walls.

If unit is installed next to an oven, a minimum 1" gap must exist between proofer and oven.

A 2" to 4" back clearance is recommended when plumbing rear drain connection.

Top of cabinet requires a minimum of 24" clearance for servicing accessibility.

TOOLS

Standard Tools

- Standard set of hand tools.
- Metric set of hand tools.
- VOM with measuring micro amp current tester. Any VOM with minimum of CAT III 600V, UL/CSA/TUV/ETL certified. Sensitivity of at least 20,000 ohms per volt can be used. Ability to measure uF microfarads. In addition, meter leads must also be a minimum of CAT III 600V.
- Clamp-on type amp meter with minimum of NFPA-70E CAT III 600V, UL/CSA/TUV/ETL certified.
- Temperature tester (thermocouple type).
- Hygro-Thermostat (Extech SDL500).
- ESD (Electrostatic discharge) Protection Kit.

Special Tools

- CPVC pipe cutter.
- Glue, CPVC primer 01-100V17-0871P or equivalent.
- Glue, Orange medium CPVC cement 01-100V17-0871C or equivalent.
- Hammer drill 1/2" Grainger No. 3TB72 to drill holes in floor for anchor bolts.
- 3/8" masonry drill bit to drill holes in floor for anchor bolts.
- Setting tool Part No. 01-1000V4-73A to set drop-in anchors in facility floor.
- Tile Trowel (square notch) Grainger No. 5LG06.
- 7/32" hex socket 3/8" drive Grainger No. 3LB97.
- 5/16" hex key 6" long Grainger No. 4RE58 to lock cam locks.
- Loctite® Threadlocker Blue 242®.

- 1-1/2" hole saw and arbor to drill access holes in ceiling (if necessary - see AIR DUCT ASSEMBLY).
- Torque wrench to tighten hinge bolts.

WALL, DUCT, & EVAPORATOR CONFIGURATIONS

PW1E, PW1S, & RPW1S

PW1E: Cabinet Width 35.5" (13.5" Rear Wall); Door Jamb Opening 25.0"

PW1S/RPW1S: Cabinet Width 42.0" (20.0" Rear Wall; Door Jamb Opening 31.5"

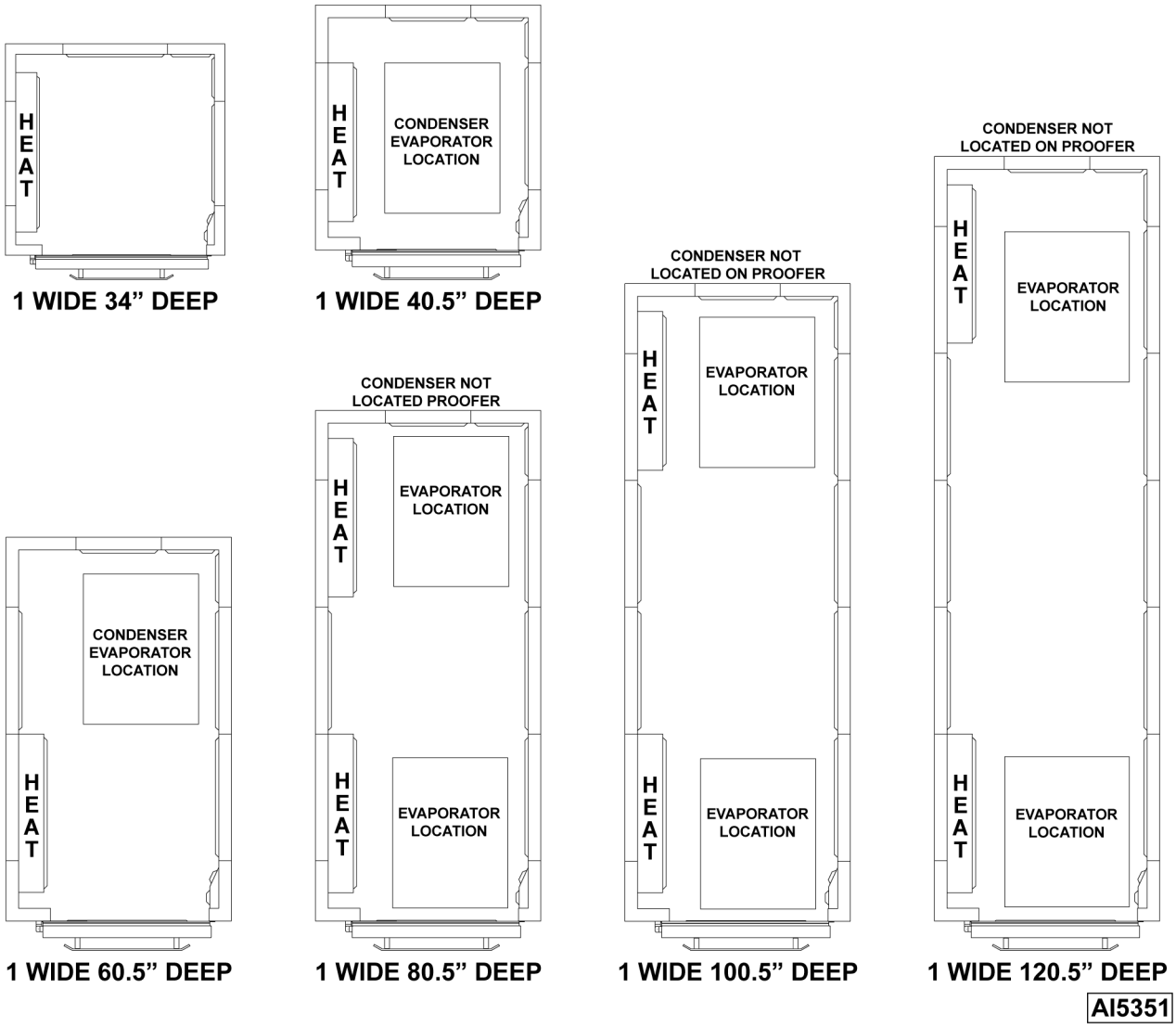


Fig. 1

PW2E & RPW2E

PW2E/RPW2E: Cabinet Width 62.0"; Door Jamb Opening 51.5"

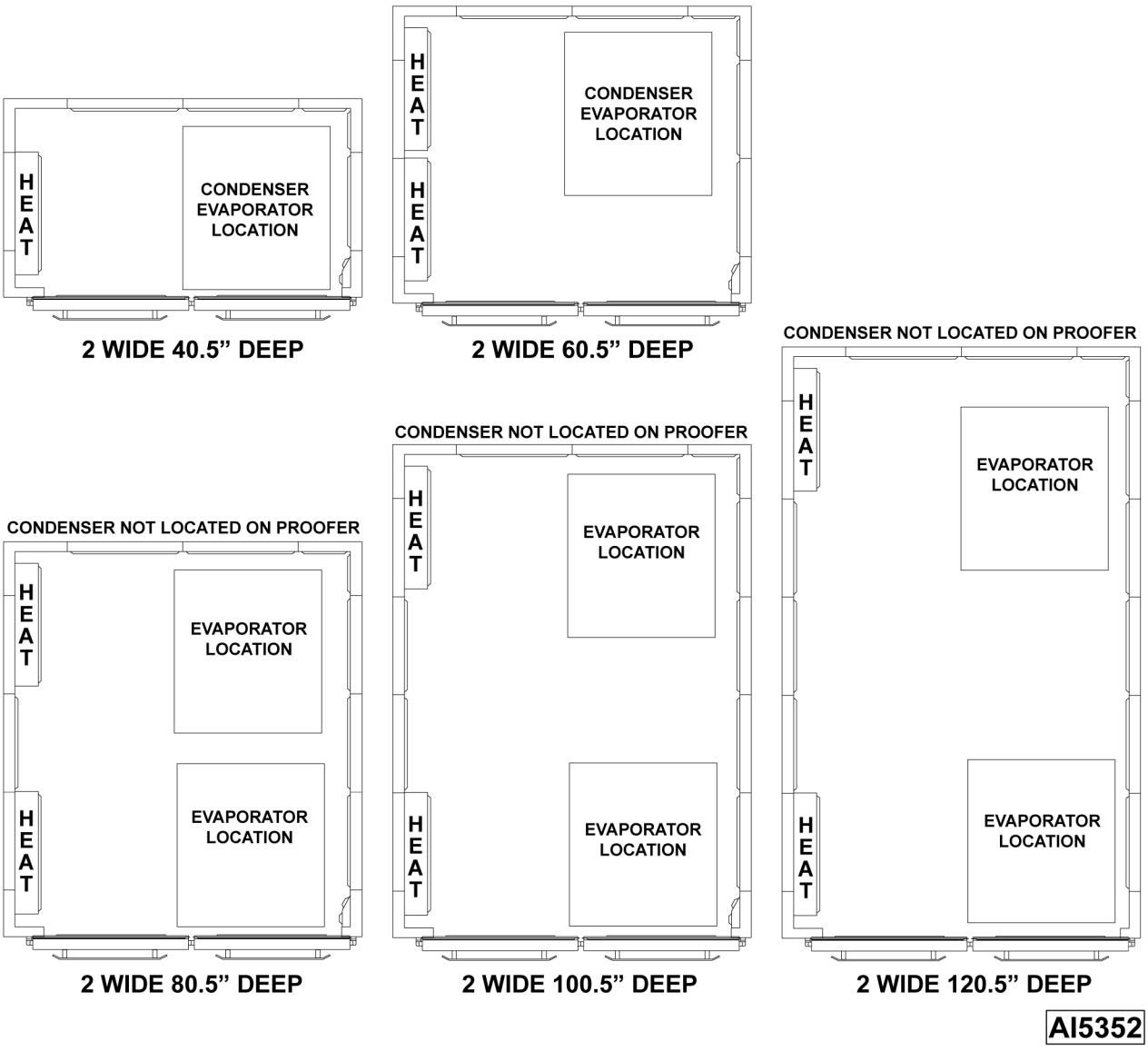


Fig. 2

PW2S & RPW2S

PW2S/RPW2S: Cabinet Width 75.5"; Door Jamb Opening 65.0"; 1/2 Panel Width 13.5"

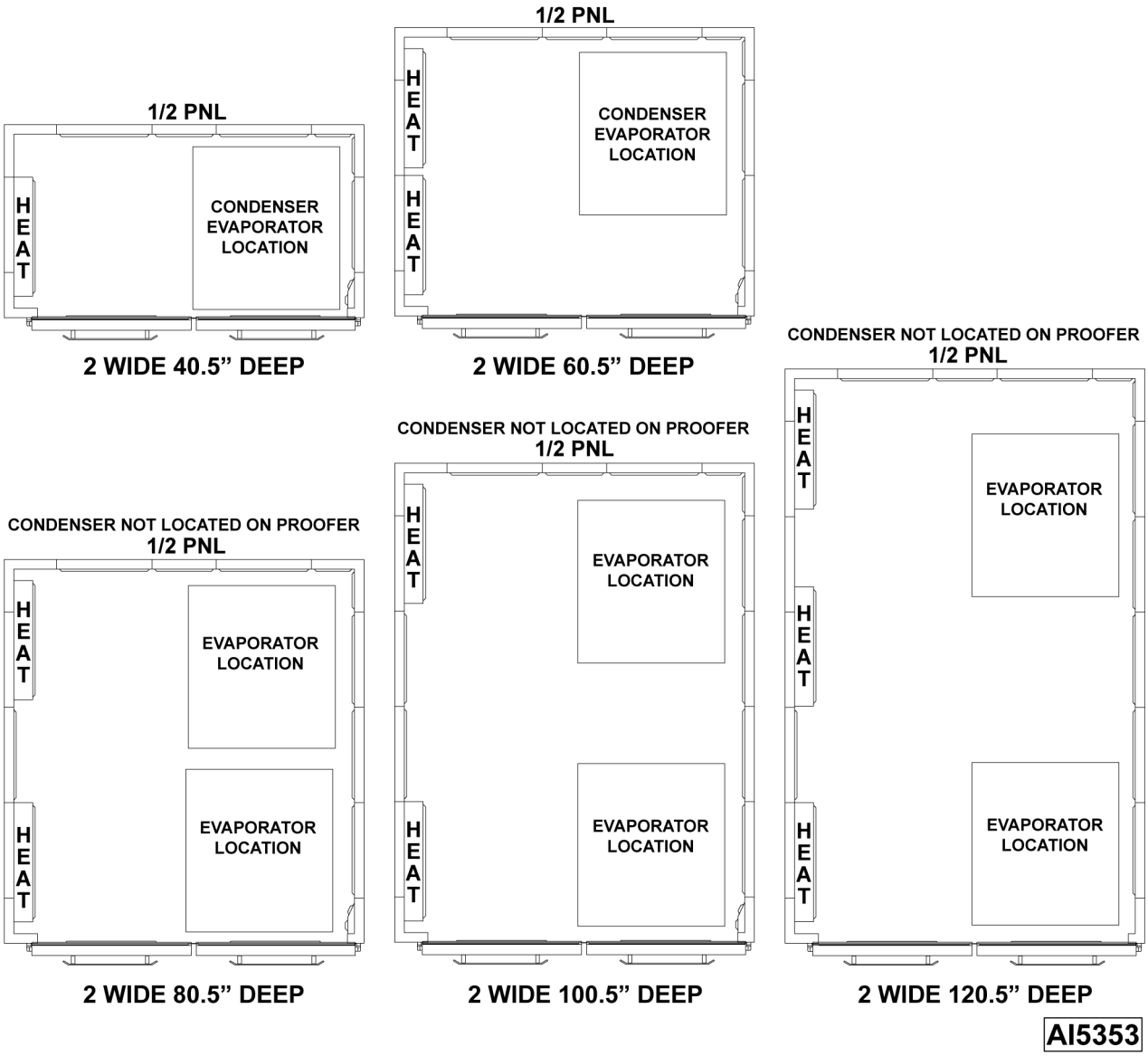


Fig. 3

PW3S

Cabinet Width 109.0"; Door Jamb Opening 95.0"; 1/2 Panel Width 13.5"

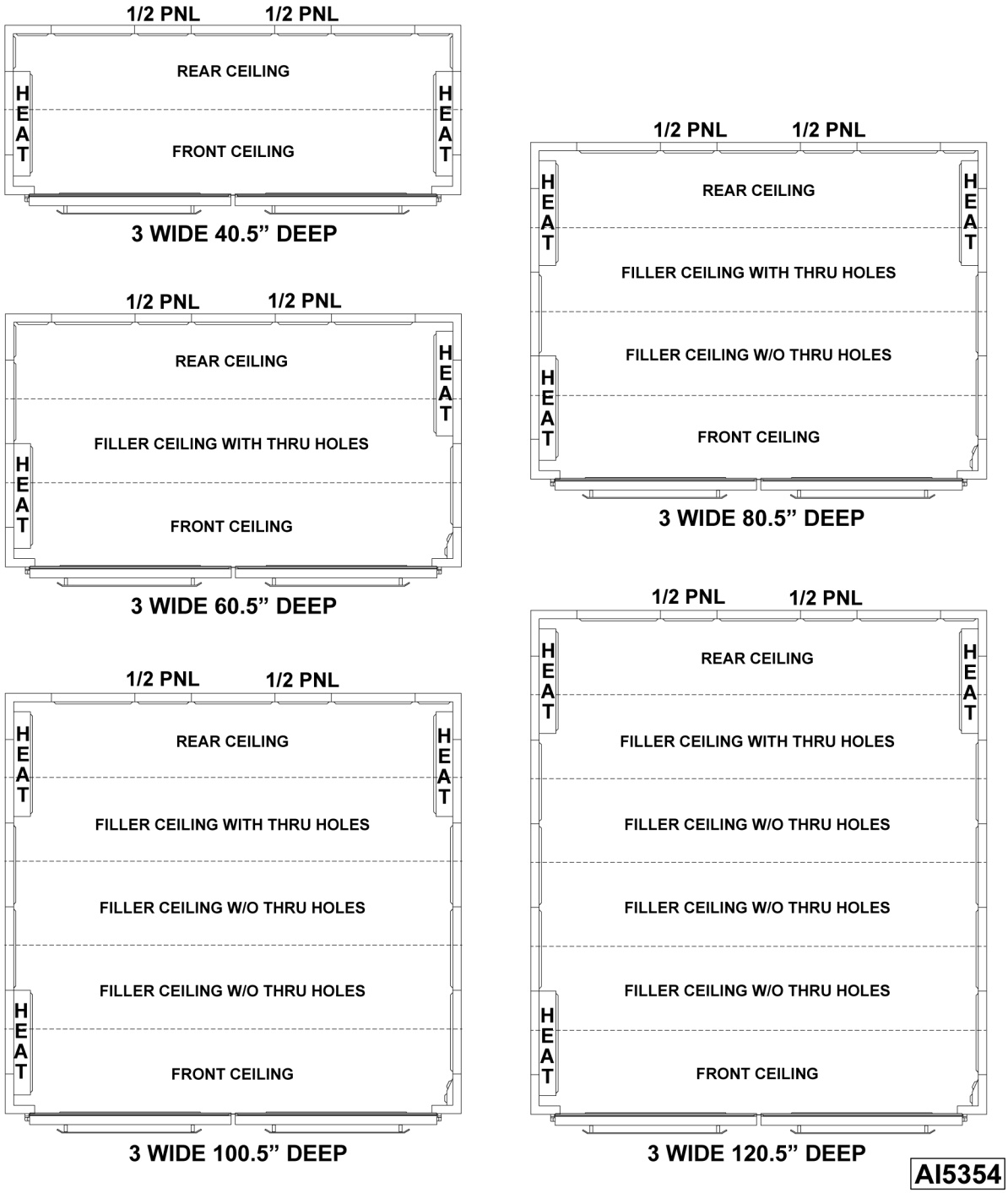


Fig. 4

2. INSTALLING PREASSEMBLED CABINETS

POSITION CABINET

Only single width/single depth and double width/ single depth cabinet can be shipped assembled. You may want to remove door(s) prior to maneuvering cabinet into place. Each cabinet is shipped with the individual parts needed for on-site assembly, along with a packing list. Before installing cabinet, compare parts to packing list to ensure all parts were received. Wait as long as possible before removing plastic protective covering from panels. Apply silicone between floor and wall angle or floor and base channel seams. Leave no voids.

NOTE: Laser level is recommended for proper installation.

1. Position cabinet near the final location.
2. Determine if the drain must be routed out the back or front of the unit.

NOTE: If the drain is not accessible with the unit in the final location, install drain prior to moving unit into final location.

3. Position cabinet in final location and level.

NOTE: If necessary, place shims under walls to level cabinet.

ANCHOR POINT KIT INSTALLATION



⚠ WARNING

Disconnect the electrical power to the machine and follow lockout / tagout procedures. There may be multiple circuits. Be sure all circuits are disconnected.

1. Locate the position for the anchor point on the top of the unit, using the locating instructions in PW PROOFER ANCHOR POINT LOCATIONS, and mark it.
2. Position one of the flat backer plates supplied with the kit so that its long side is parallel to the face of the unit, and the locating mark shows through the right-hand square hole in the plate. Mark the roof through the remaining square hole in the plate.

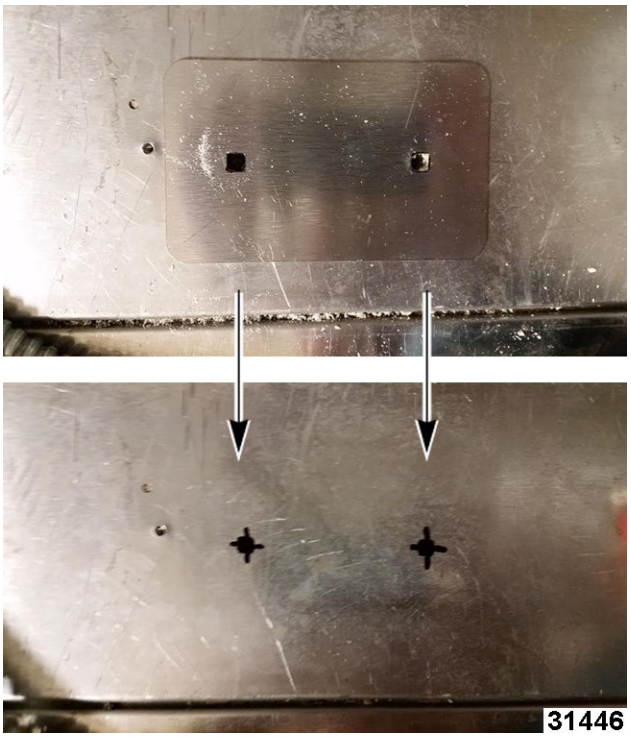


Fig. 5

NOTICE

Before drilling holes, verify that the marked locations do not overlap camlocks, ceiling ducts, refrigeration grills, drain lines, or flexible conduits. If there are interferences, move the shortest distance possible to locate a clear mounting area.

3. Using the 9/32" drill bit supplied with the kit, drill completely through the roof and ceiling at both of the marked locations.

NOTE: When drilling holes, the drill must be kept plumb all the way through the ceiling, or installation of the retaining bolts will be difficult.

4. From inside the unit, locate the two holes drilled in the previous step, and remove enough protective plastic from around the holes so that one of the backer plates can be installed without covering any plastic.

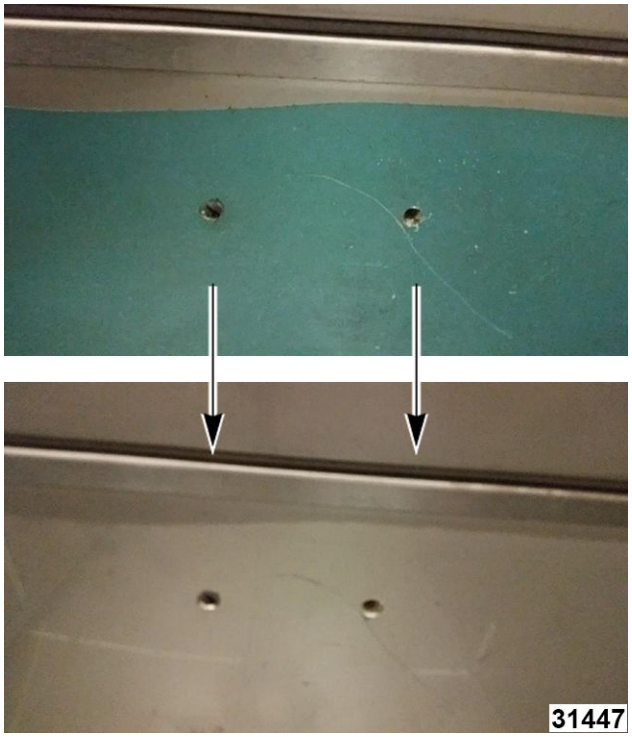


Fig. 6

5. Use provided 27/64" drill bit to expand inner ceiling holes.

NOTE: Use previously drilled hole as a reference to guide drill bit.

NOTICE

Do not drill deeper than 3/8" into the ceiling panel when boring out holes.

6. Deburr any sharp edges left from the boring of the two 27/64" holes.

7. Apply a bead of clear silicone caulk around each of the 27/64" holes.

NOTE: Keep silicone within 1/4" of the edges of the holes.

8. Apply a bead of clear silicone caulk around the perimeter of one of the backer plates, as well as to the underside of both carriage bolt heads.

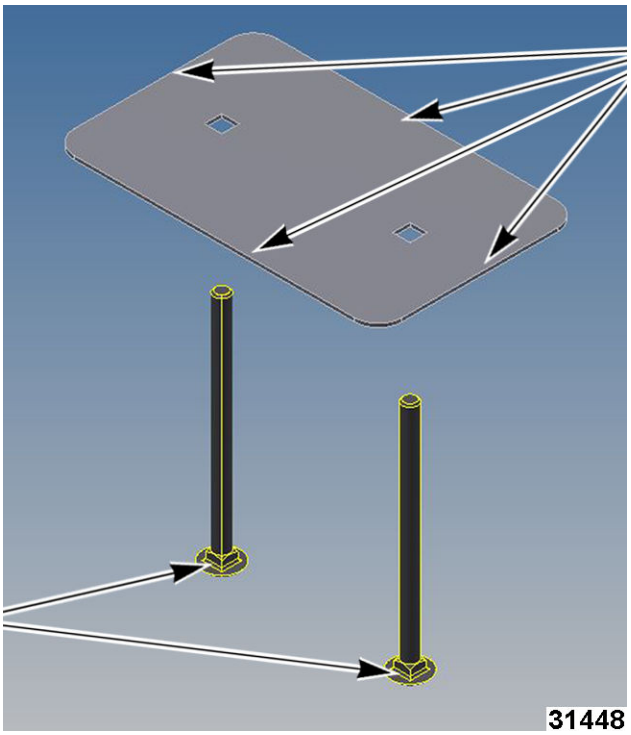


Fig. 7

9. Position backer plate with silicone applied to the inner ceiling over the holes, then insert the two carriage bolts through the backer plate and completely through the ceiling.

NOTE: Use 4" bolts for 3" thick ceilings, and use 5" bolts for 4" thick ceilings.

NOTE: Backer plate must seal to inner sealing skin all the way around its perimeter.

10. Temporarily secure both carriage bolts and backer plate to ceiling with tape.



Fig. 8

11. From the top of the unit, clean away all the metal and insulation debris. Position second backer plate, and then the anchor bracket over the carriage bolts. Place one flat washer onto each bolt, and secure with locknuts supplied with the kit.

NOTICE

Do not overtighten the locknuts. One to two turns after the locknuts contact the washers will be sufficient. Overtightening the locknuts can bow the ceiling panel.

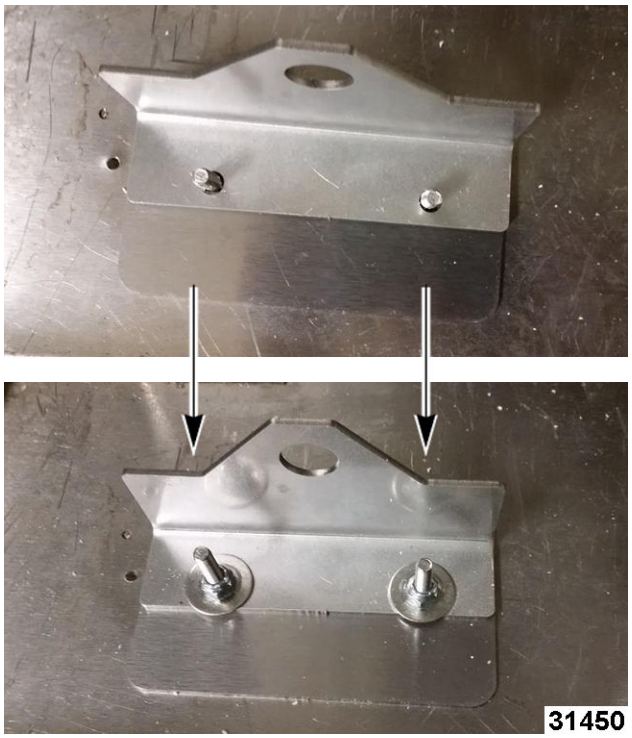


Fig. 9

12. Remove the tape from the inner backer plate and carriage bolts. Clean any tape residue from the plate and bolt heads.
13. Visually inspect the inner backer plate and carriage bolt heads, making sure there are no gaps between the plate and ceiling, or between the carriage bolts and plate. Exposed threads or any sharp edges are not permitted in the interior of the unit.



Fig. 10

14. Reconnect power, and check for proper operation.
15. Turn off unit's control, and allow the clear silicone to cure before using.

PW PROOFER ANCHOR POINT LOCATIONS

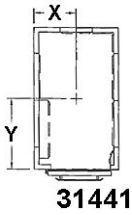


Fig. 11

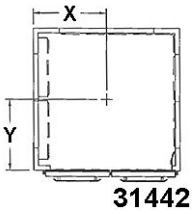


Fig. 12

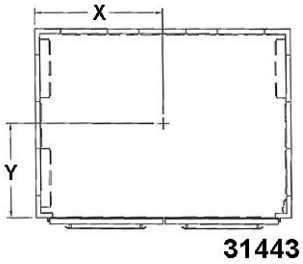


Fig. 13

PW1E	X	Y	PW2E	X	Y	PW3S	X	Y
34.0" D	22.0"	20.0"	40.5" D	37.0"	26.0"	40.5" D	56.0"	26.0"
60.5" D	22.0"	30.0"	60.5" D	37.0"	30.0"	60.5" D	56.0"	30.0"
80.5" D	22.0"	50.0"	80.5" D	37.0"	50.0"	80.5" D	56.0"	50.0"
100.5" D	22.0"	50.0"	100.5" D	37.0"	50.0"	100.5" D	56.0"	50.0"
120.5" D	22.0"	70.0"	120.5" D	37.0"	70.0"	120.5" D	56.0"	70.0"
PW1S/ DPC1S	**X**	**Y**	**PW2S**	**X**	**Y**			
40.5" D	23.5"	26.0"	40.5" D	39.0"	26.0"			
60.5" D	23.5"	30.0"	60.5" D	39.0"	30.0"			
80.5" D	23.5"	50.0"	80.5" D	39.0"	50.0"			
100.5" D	23.5"	50.0"	100.5" D	39.0"	50.0"			
120.5" D	23.5"	70.0"	120.5" D	39.0"	70.0"			

INSTALLATION

NOTE: SEE HARDWARE REFERENCE GUIDES TO PROPERLY IDENTIFY AND LOCATE HARDWARE FOR EACH STEP.

For final assembly, see the following subsections in the INSTALLING UNASSEMBLED CABINETS section:

FLOOR / FLOOR ANGLE

FLOOR RETAINERS

DRAIN CONNECTION

WATER SUPPLY LINE CONNECTION

ELECTRICAL SUPPLY CONNECTION

FINAL CHECKS

3. INSTALLING UNASSEMBLED CABINETS

WALL PANELS

If shims are required for leveling, place shims under all wall seams as required. All wall panels, corner panels, and ceiling panels are secured together with cam locks. Only NSF approved silicone should be used on this unit.

Refer to WALL, DUCT, & EVAPORATOR CONFIGURATIONS and WALL PANEL AND CORNER CONFIGURATION below for sequence of wall panel assembly. As walls and corners are connected, ensure panel seals are not placed together (seal to seal).

NOTE: Laser level is recommended for proper installation.

1. Start with left rear corner (1, Fig. 14) at final position on facilities floor.

NOTE: All panels should be positioned with the cam locks at the top.

2. Attach first rear and side wall panels to rear left corner per WALL PANEL AND CORNER CONFIGURATION.

NOTE: For cam locks on vertical edges of panels, turn upper cams clockwise (CW) to lock, and turn lower cams counterclockwise (CCW) to lock. While locking panels together, verify panels do not shift. All mating panel surfaces should be flush on the insides, at the tops, and at the bottoms.

3. Follow WALL, DUCT, & EVAPORATOR CONFIGURATIONS and WALL PANEL AND CORNER CONFIGURATION to assemble remaining panels.

NOTE: If drain would not be accessible with the unit in its final location, install drain through rear wall prior to moving unit into final position.

WALL PANEL AND CORNER CONFIGURATION

1. REAR LEFT CORNER	3. HALF-SIZE WALL PANELS
2. FRONT LEFT CORNER	4. FULL-SIZE WALL PANELS

WALL PANEL AND CORNER CONFIGURATION (Continued)

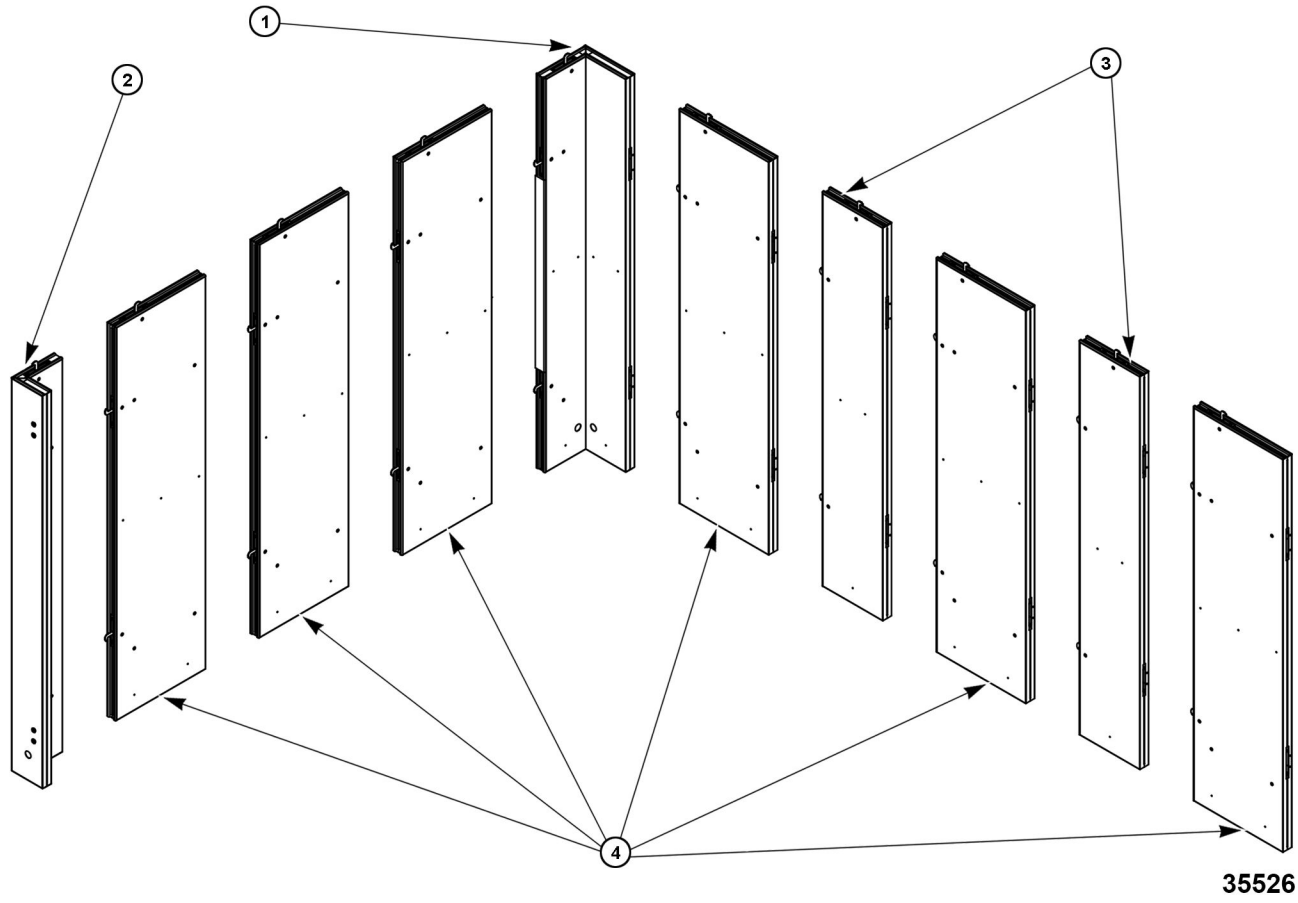


Fig. 14

CEILING PANELS

Refer to WALL, DUCT, & EVAPORATOR CONFIGURATIONS for proper positioning of condenser/evaporator ceiling panels, as well as all three-wide (PW3/RPW3) ceiling panels. As ceiling panels are added, ensure panel seals are not placed together (seal to seal).

1. Verify all walls are level and square.
2. Install the rear ceiling panel.
   A. Align edge of rear ceiling panel with rear wall panels and both rear corners.
   B. Tighten cam locks in rear wall panels and both corners by turning them CW.
3. Install remaining ceiling panels.
   A. As remaining ceiling panels are added, first lock ceiling panels together, then lock them to sides and corners.

NOTE: RPW ceilings do NOT have cams for locking them together.

NOTE: All wall and corner cam locks that secure to ceiling panels turn CW - except for the front left corner cam lock, which turns CCW.

ANCHOR POINT KIT INSTALLATION



⚠ WARNING

Disconnect the electrical power to the machine and follow lockout / tagout procedures. There may be multiple circuits. Be sure all circuits are disconnected.

1. Locate the position for the anchor point on the top of the unit, using the locating instructions in PW PROOFER ANCHOR POINT LOCATIONS, and mark it.
2. Position one of the flat backer plates supplied with the kit so that its long side is parallel to the face of the unit, and the locating mark shows through the right-hand square hole in the plate. Mark the roof through the remaining square hole in the plate.

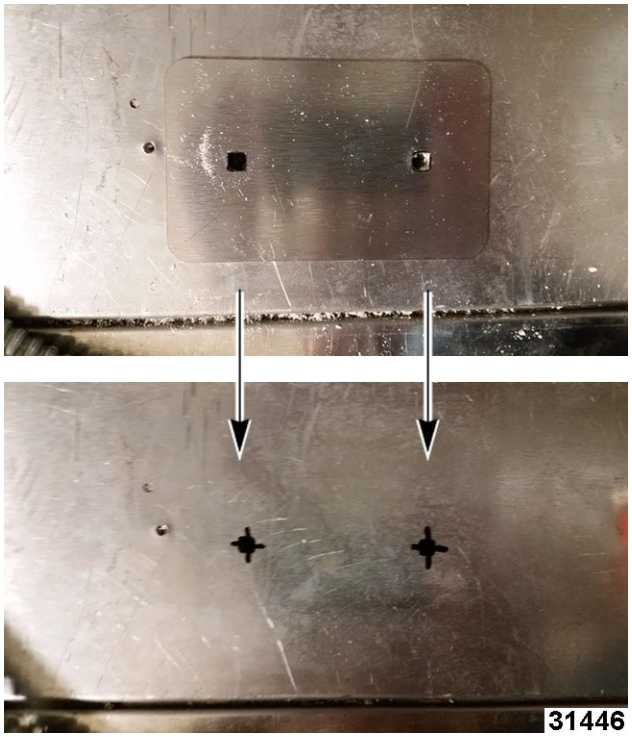


Fig. 15

NOTICE

Before drilling holes, verify that the marked locations do not overlap camlocks, ceiling ducts, refrigeration grills, drain lines, or flexible conduits. If there are interferences, move the shortest distance possible to locate a clear mounting area.

3. Using the 9/32" drill bit supplied with the kit, drill completely through the roof and ceiling at both of the marked locations.

NOTE: When drilling holes, the drill must be kept plumb all the way through the ceiling, or installation of the retaining bolts will be difficult.

4. From inside the unit, locate the two holes drilled in the previous step, and remove enough protective plastic from around the holes so that one of the backer plates can be installed without covering any plastic.

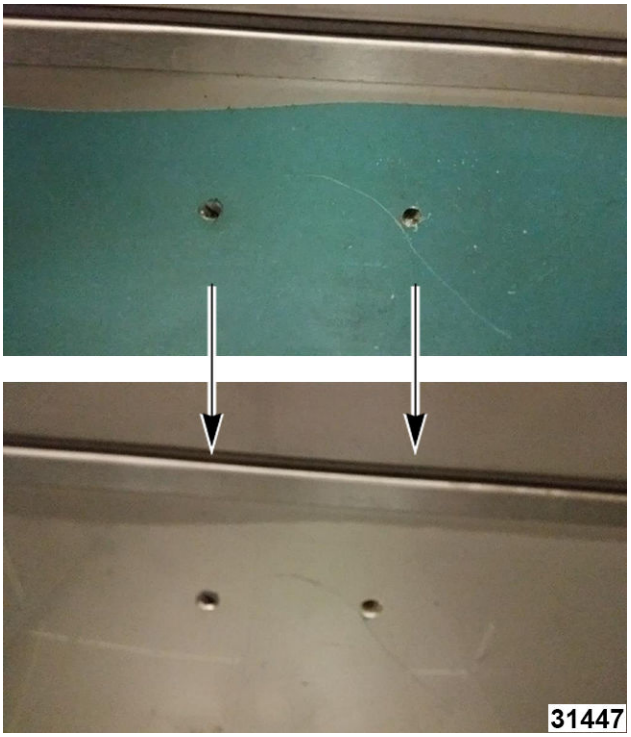


Fig. 16

5. Use provided 27/64" drill bit to expand inner ceiling holes.

NOTE: Use previously drilled hole as a reference to guide drill bit.

NOTICE

Do not drill deeper than 3/8" into the ceiling panel when boring out holes.

6. Deburr any sharp edges left from the boring of the two 27/64" holes.
7. Apply a bead of clear silicone caulk around each of the 27/64" holes.

NOTE: Keep silicone within 1/4" of the edges of the holes.

8. Apply a bead of clear silicone caulk around the perimeter of one of the backer plates, as well as to the underside of both carriage bolt heads.

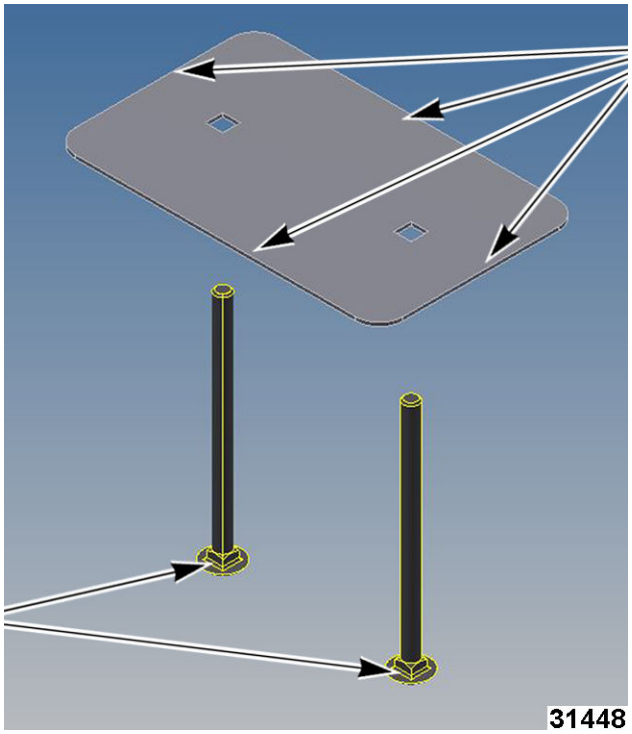


Fig. 17

9. Position backer plate with silicone applied to the inner ceiling over the holes, then insert the two carriage bolts through the backer plate and completely through the ceiling.

NOTE: Use 4" bolts for 3" thick ceilings, and use 5" bolts for 4" thick ceilings.

NOTE: Backer plate must seal to inner sealing skin all the way around its perimeter.

10. Temporarily secure both carriage bolts and backer plate to ceiling with tape.



Fig. 18

11. From the top of the unit, clean away all the metal and insulation debris. Position second backer plate, and then the anchor bracket over the carriage bolts. Place one flat washer onto each bolt, and secure with locknuts supplied with the kit.

NOTICE

Do not overtighten the locknuts. One to two turns after the locknuts contact the washers will be sufficient. Overtightening the locknuts can bow the ceiling panel.

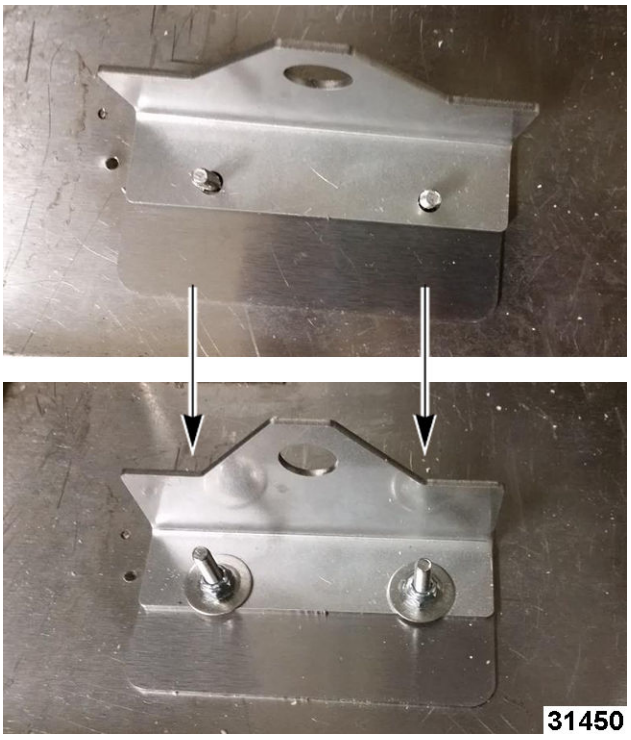


Fig. 19

12. Remove the tape from the inner backer plate and carriage bolts. Clean any tape residue from the plate and bolt heads.
13. Visually inspect the inner backer plate and carriage bolt heads, making sure there are no gaps between the plate and ceiling, or between the carriage bolts and plate. Exposed threads or any sharp edges are not permitted in the interior of the unit.



Fig. 20

14. Reconnect power, and check for proper operation.
15. Turn off unit's control, and allow the clear silicone to cure before using.

PW PROOFER ANCHOR POINT LOCATIONS

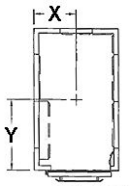


Fig. 21

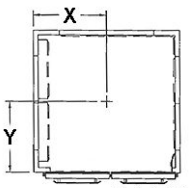


Fig. 22

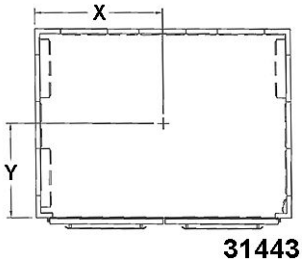


Fig. 23

PW1E	X	Y	PW2E	X	Y	PW3S	X	Y
34.0" D	22.0"	20.0"	40.5" D	37.0"	26.0"	40.5" D	56.0"	26.0"
60.5" D	22.0"	30.0"	60.5" D	37.0"	30.0"	60.5" D	56.0"	30.0"
80.5" D	22.0"	50.0"	80.5" D	37.0"	50.0"	80.5" D	56.0"	50.0"
100.5" D	22.0"	50.0"	100.5" D	37.0"	50.0"	100.5" D	56.0"	50.0"
120.5" D	22.0"	70.0"	120.5" D	37.0"	70.0"	120.5" D	56.0"	70.0"
PW1S/ DPC1S	**X**	**Y**	**PW2S**	**X**	**Y**			
40.5" D	23.5"	26.0"	40.5" D	39.0"	26.0"			
60.5" D	23.5"	30.0"	60.5" D	39.0"	30.0"			
80.5" D	23.5"	50.0"	80.5" D	39.0"	50.0"			
100.5" D	23.5"	50.0"	100.5" D	39.0"	50.0"			
120.5" D	23.5"	70.0"	120.5" D	39.0"	70.0"			

EVAPORATOR (RPW ONLY)

1. Install evaporator drain tube (1, Fig. 24 & Fig. 25) to evaporator drain (2, Fig. 24 & Fig. 25) and ceiling drain (3, Fig. 24 & Fig. 25), making sure tubing runs downhill to allow proper drainage from the evaporator drain.

NOTE: Drain image may vary, depending on evaporator.

RPW1E & RPW1S

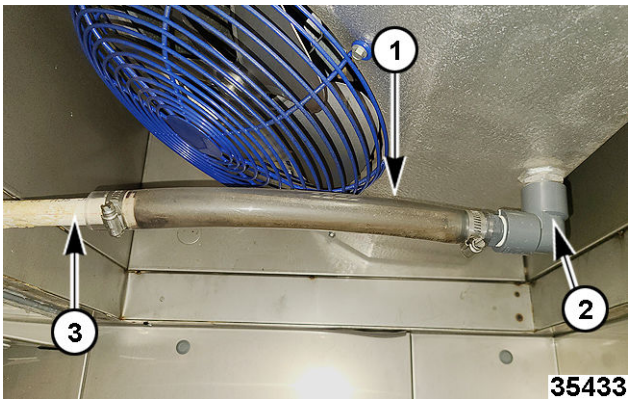


Fig. 24

RPW2E & RPW2S

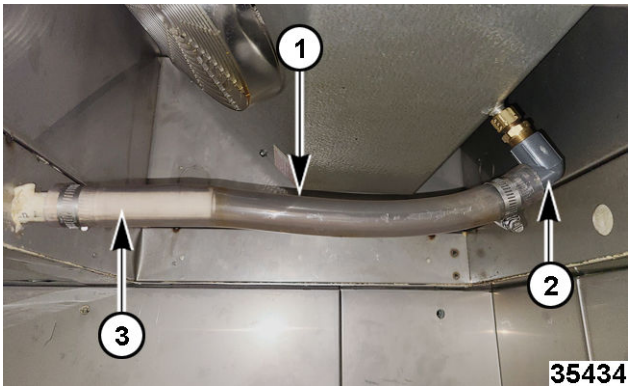


Fig. 25

2. Install shroud baffle (Fig. 26) into ceiling, under the evaporator, using 10-32 x 0.5" hex screws in 2 places.



Fig. 26

3. Install exhaust grill (Fig. 27) onto ceiling (under the evaporator assembly) and to shroud baffle, using 10-32 x 0.5" hex screws in 9 places.

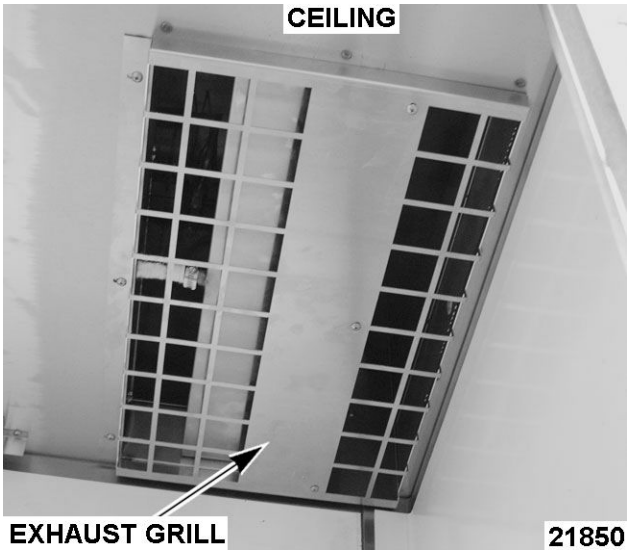


Fig. 27

FLOOR / FLOOR ANGLE

1. Install rear corner trim (1, Fig. 28) at both rear corners of cabinet by applying NSF approved silicone to back of trim and placing it snuggly against side wall and back wall (2, Fig. 28). The silicone will hold trim in place.

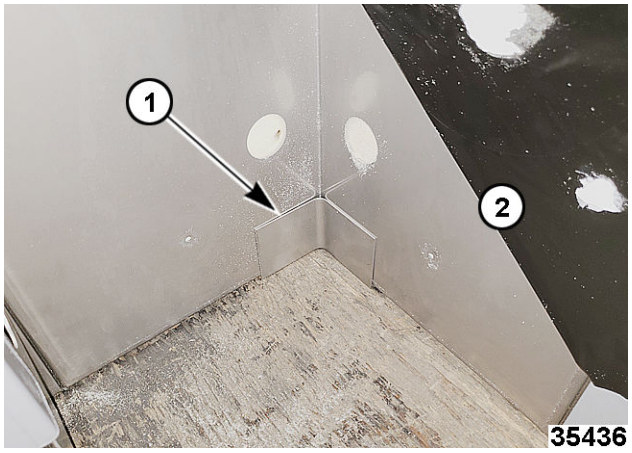


Fig. 28

2. Secure jamb trim (1, Fig. 29) to door jambs (2, Fig. 29) by applying silicone to back of jamb trim pieces, and placing one at the bottom of each side of door opening.

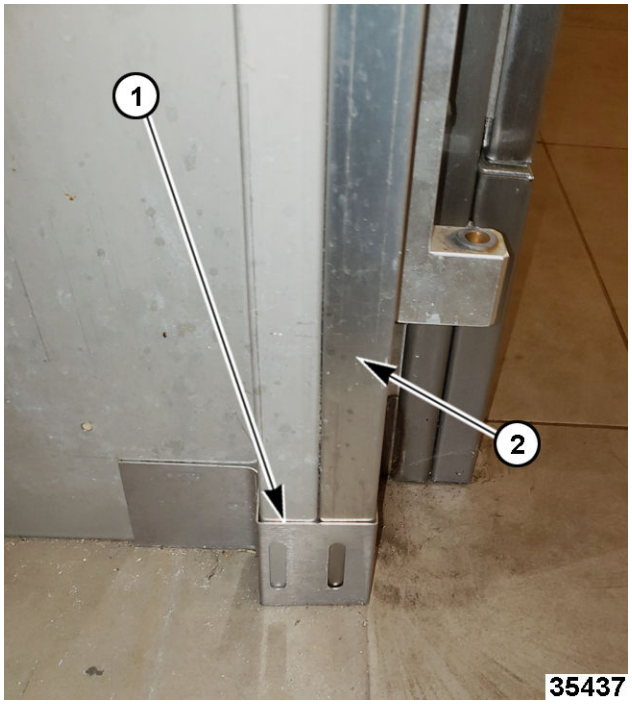


Fig. 29

WITHOUT FLOOR

NOTE: Before proceeding, make sure cabinet is square and level. Check door opening measurement is correct, and is the same from top to bottom.

1. Set floor angles (Fig. 30), so that flanges with holes are against bakery floor.

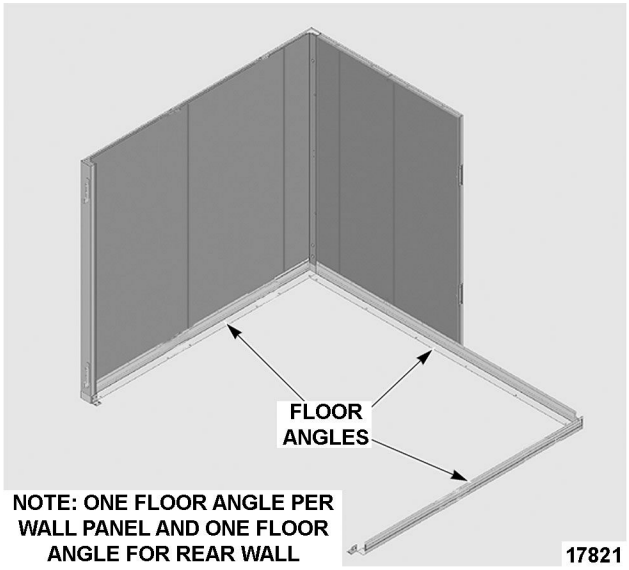


Fig. 30

2. Mark holes on the floor, then remove angles.
3. Mark 3/8" masonry drill bit 1.25" from tip end with tape.

NOTE: 1.25" is the maximum depth for holes to be drilled.

4. Drill each marked location to the 1.25" depth.
5. Vacuum all debris from the drilled holes.
6. Place an anchor from the floor anchor package(s) into each hole, with the slotted end inserted first.

NOTE: All anchors should sit 1/4" below the bakery floor surface.

7. To set each anchor, drive the anchor setting tool (see SPECIAL TOOLS) into the anchor until the shoulder of the tool comes into contact with top of anchor.
8. Clean all debris from the bakery floor where the floor angles will be placed.
9. Apply NSF approved silicone to both flanges of each floor angle in a zigzag pattern, and spread out evenly with trowel.
10. Place floor angles in position and secure to bakery floor with hardware in the floor anchor hardware package(s).

NOTE: There are three different lengths of screws in the floor anchor hardware package(s). Select the correct length screws that will allow angle to be secured tightly against the floor.

11. Make sure all edges and holes are sealed with NSF approved silicone. Clean up any excess silicone.
12. Proceed to DOOR JAMB RETAINERS for next steps.

WITH FLOOR

NOTE: Before proceeding, make sure cabinet is square and level. Check door opening measurement is correct, and is the same from top to bottom. See WALL, DUCT, & EVAPORATOR CONFIGURATIONS for measurements.

1. Place floor section(s) in cabinet, starting with the left side.

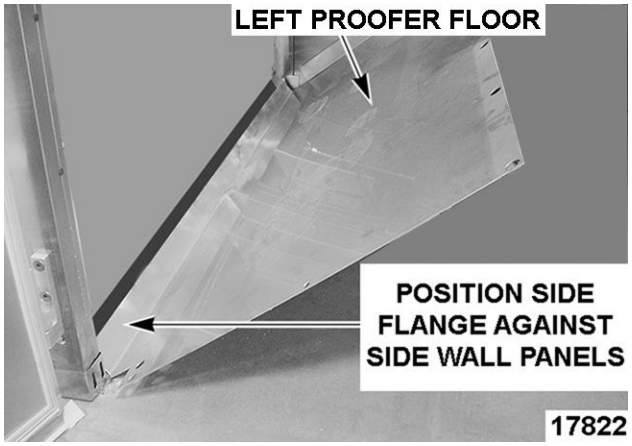


Fig. 31

PW3 PROOFER FLOOR

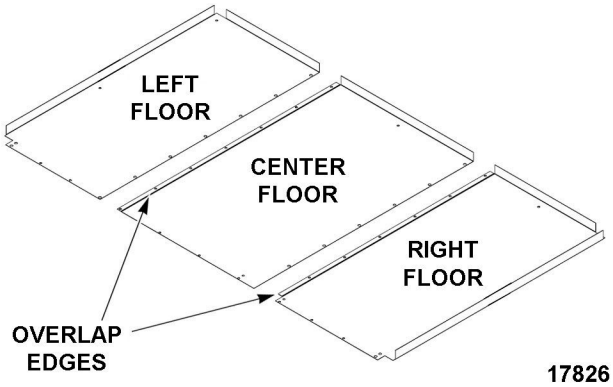


Fig. 32

NOTE: Single-wide cabinets will have only a single (one-piece) floor.

2. After placing section(s), mark all hole locations on the bakery floor for each floor section.
3. Remove all floor section(s).
4. Mark 3/8" masonry drill bit 1.25" from tip end will tape.

NOTE: 1.25" is the maximum depth for holes to be drilled.

5. Drill each marked location to the 1.25" depth.
6. Vacuum all debris from the drilled holes.
7. Place an anchor from the floor anchor package(s) into each hole, with the slotted end inserted first.

NOTE: All anchors should sit 1/4" below the bakery floor surface.

8. To set each anchor, drive the anchor setting tool (see SPECIAL TOOLS) into the anchor until the shoulder of the tool comes into contact with top of anchor.
9. Clean all debris from the bakery floor where the floor section(s) will be placed.
10. Apply NSF approved silicone in a zigzag pattern to vertical flanges and bottom of left floor section, and spread out evenly with trowel across the entire surface.
11. Starting with the left floor section, place floor section against left wall and lower into place.



Fig. 33

NOTE: Use care to not disturb previously installed floor sections while placing additional sections.

12. **Center floor section only:** Apply NSF approved silicone in a zigzag pattern to vertical flanges and bottom of center floor section, and spread out evenly with trowel across the entire surface.

NOTE: make sure silicone overlaps each floor section.

13. **Center floor section only:** Lower center floor section into place, and verify all holes along overlapping floor section align properly.
14. **Right floor section only:** Apply NSF approved silicone in a zigzag pattern to vertical flanges and bottom of right floor section, and spread out evenly with trowel across the entire surface.

NOTE: make sure silicone overlaps each floor section.

15. **Right floor section only:** Lower right floor section into place, and verify all holes along overlapping floor section align properly.
16. In all hole locations except the two holes next to each door jamb, secure floor section(s) in place with screws from the floor anchor hardware package(s).

NOTE: There are three different lengths of screws in the floor anchor hardware package(s). Select the correct length screws that will allow angle to be secured tightly against the floor.

17. Make sure all edges and holes are sealed with NSF approved silicone. Clean up any excess silicone.
18. Proceed to DOOR JAMB RETAINERS for next steps.

DOOR JAMB RETAINERS

NOTE: Door jamb retainers are used in cabinets with floors and without floors. IMAGES show door jamb retainer installation without floors.

1. Place one door jamb retainer (1, Fig. 34) against the jamb trim in the center of the jamb.

NOTE: For cabinets with floors, align the countersunk holes in retainer with holes in floor.

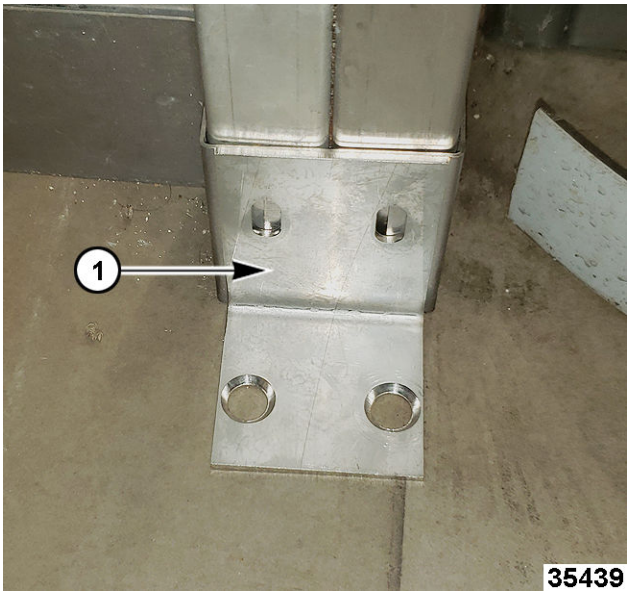


Fig. 34

2. Mark the jamb trim through center of each slot on the jamb retainer, then remove retainer.

NOTE: When drilling through stainless steel, use constant pressure and slow speed. The outer skin of the jamb will be easier to drill than the inner skin.

3. Using a 1/8" drill bit, drill two holes marked in Step 2 through jamb trim and jamb skin.
4. Repeat steps 1 through 3 for other door jamb.

NOTE: For cabinets with floors, proceed to Step 10..

5. Loosely fasten retainers in place using #10-16 x 3/4" drill tip screws (1, Fig. 35).

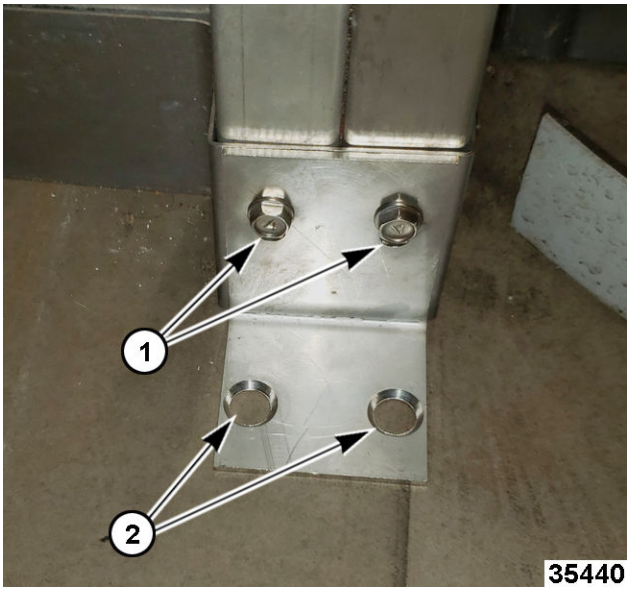


Fig. 35

NOTE: Before marking holes in bakery floor, ensure that the cabinet walls are square, and the door(s) will close properly.

6. Mark holes in bakery floor (2, Fig. 35), then remove retainers.
7. Mark 3/8" masonry drill bit 1.25" from tip end with tape.

NOTE: 1.25" is the maximum depth for holes to be drilled.

8. Drill each marked location to the 1.25" depth.
9. Vacuum all debris from the drilled holes.
10. Place an anchor from the floor anchor package(s) into each hole, with the slotted end inserted first.

NOTE: All anchors should sit 1/4" below the bakery floor surface.

11. To set each anchor, drive the setting tool (see SPECIAL TOOLS) into the anchor until the shoulder of the tool comes into contact with top of anchor.
12. Clean all debris from the bakery floor where retainers will be placed.
13. Apply NSF approved silicone to back of both flanges on each jamb retainer.
14. Fasten jamb retainers in place on jamb using #10-16 x 3/4" drill tip screws (previously used in Step 5).
15. Use screws from floor anchor hardware package(s) to secure retainers to bakery floor (Fig. 36).

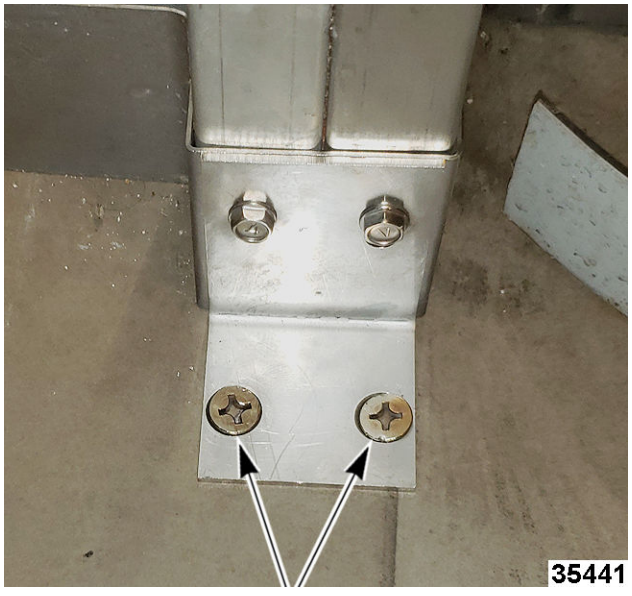


Fig. 36

NOTE: There are three different lengths of screws in the floor anchor hardware package(s). Select the correct length screws that will allow jamb retainers to be secured tightly to the bakery floor.

16. Make sure all edges and holes are sealed with NSF approved silicone. clean up any excess silicone.
17. Proceed to FLOOR RETAINERS.

FLOOR RETAINERS

NOTE: Floor retainers are used in cabinets with floors or without floors.

1. If not already done, peel back protective plastic from walls, corners, and jambs. Remove protective plastic from floor retainers before securing them to walls.
2. Fasten floor retainer (Fig. 37) to walls using #10-16 x 3/4" drill tip screws from hardware package.

NOTE: Walls are predrilled for floor retainer attachment.



Fig. 37

3. Seal all edges (Fig. 38) with NSF approved silicone.

NOTE: Rear corner trim must be fully sealed prior to installing floor trim.

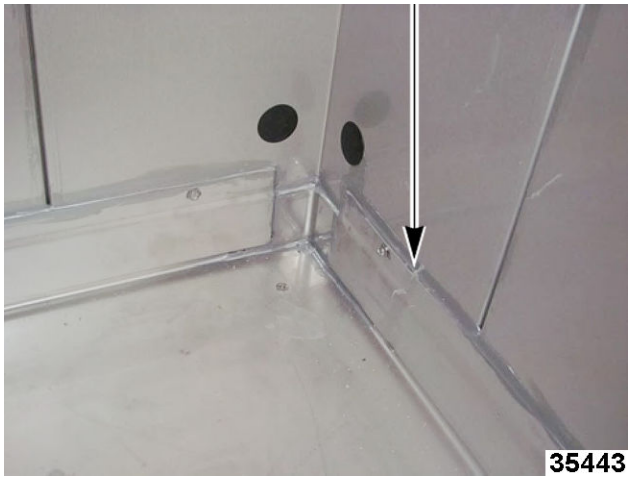


Fig. 38

OUTER FLOOR TRIM

1. If not already done, peel back protective plastic from outside of walls, corners, and jambs.



Fig. 39

2. Make sure the surface where the outer floor trim will be attached is clean and free from oil.
3. Remove protective plastic from outer surface of outer trim.
4. Remove protective strip from adhesive tape strip on back of outer floor trim.
5. Place outer trim piece(s) against floor, then press floor trim against proofer walls, corners, and jambs.

HUMIDITY SENSOR BRACKET

1. In the left front corner of front ceiling panel next to the door jamb, in the forwardmost hole, install two 1.50" nylon snap bushings. Install one in the inner ceiling skin, and one in the outer ceiling skin.
2. Mount sensor bracket to ceiling panel using two 10-32 x 0.5" hex head screws.

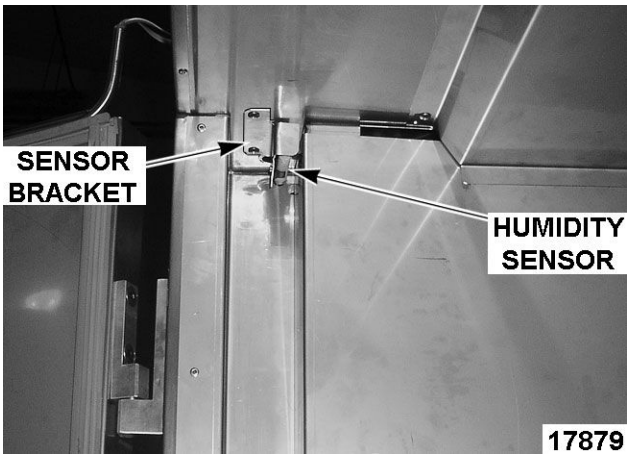


Fig. 40

NOTE: Sensor will be installed later in SERVICE ENTRANCE AND JUNCTION BOXES.

AIR DUCT ASSEMBLY

NOTE: Refer to WALL, DUCT, & EVAPORATOR CONFIGURATIONS for air duct locations.

1. If not already done, remove protective plastic from wall panels and ceiling panels where duct will be mounted.
2. Install two 1/4-20 x 1/2" hex bolts into the mounting holes in the ceiling panel(s).
3. Remove intake and intermediate panels for air ducts.
4. Hang each duct from the two bolts in the ceiling panel(s) using the keyway cutouts in the top of air duct.
5. Make a note of which holes in the duct align with the holes in ceiling.

NOTE: The duct in the front left corner has four 1-1/2" holes in the ceiling above the duct. All other ducts have three 1-1/2" holes in the ceiling panels above them.

NOTE: PW3S 40"D and PW2S 120"D units do not have precut ceiling access holes, and need to have the holes drilled prior to air duct installation.

6. **PW3S 40"D and PW2S 120"D only:** Cut holes in ceiling.

NOTE: When drilling, use constant pressure and slow speed.

   A. Mark holes in ceiling through access holes in top of air duct directly above both sets of element wires and above spray nozzle connection.

   B. Remove air duct and cut holes into the ceiling using 1.5" hole saw and arbor.

   C. Proceed to Step 8.

7. Remove duct from ceiling hanger bolts.

8. Install 1-1/2" diameter hole plug into any ceiling panel holes that will not be used above air duct.

NOTE: Do not plug the hole in ceiling that will be directly above air duct.

9. Rehang air duct on hex bolts installed in Step 2.

10. Locate the four holes in the back of each air duct (Fig. 41), and align them with the four threaded inserts installed in wall panel(s) with 1/4-20 x 1/4" hex bolts.



Fig. 41

11. Tighten ceiling hanger bolts to secure air duct to ceiling panel(s).

12. Install 1.50" snap bushings into all available holes in inner ceiling panel above air duct.

NOTE: If holes do not line up or need to be cleaned out, a 1.5" hole saw may be used to remove excess material. Drill from the top of the cabinet.

13. Route heating element wire harness through right most hole in ceiling panel above air duct, then route element wires through one of the two holes with bushings.

14. Route both fan harnesses and the high limit harness through the first hole to the left of the hole through which the element wires were routed.

15. Repeat above steps for all remaining ducts.

DRAIN CONNECTION

See Engineering Drawings ***PW Proofer Drain Specifications & Instructions*** and ***RPW Retarder Proofer Drain Specifications & Instructions*** for more details.

NOTE: Following these instructions will result in meeting the requirement of 1/4" per foot slope on drain lines.

1. Determine heat duct placement per model layout. See WALL, DUCT, & EVAPORATOR CONFIGURATIONS.
2. Determine pipes required for model. See illustrations:
   - RPW Retarder Proofer Tube & Pipe Configurations (AI5771)
   - PW Proofer Tube & Pipe Configurations (AI5772)

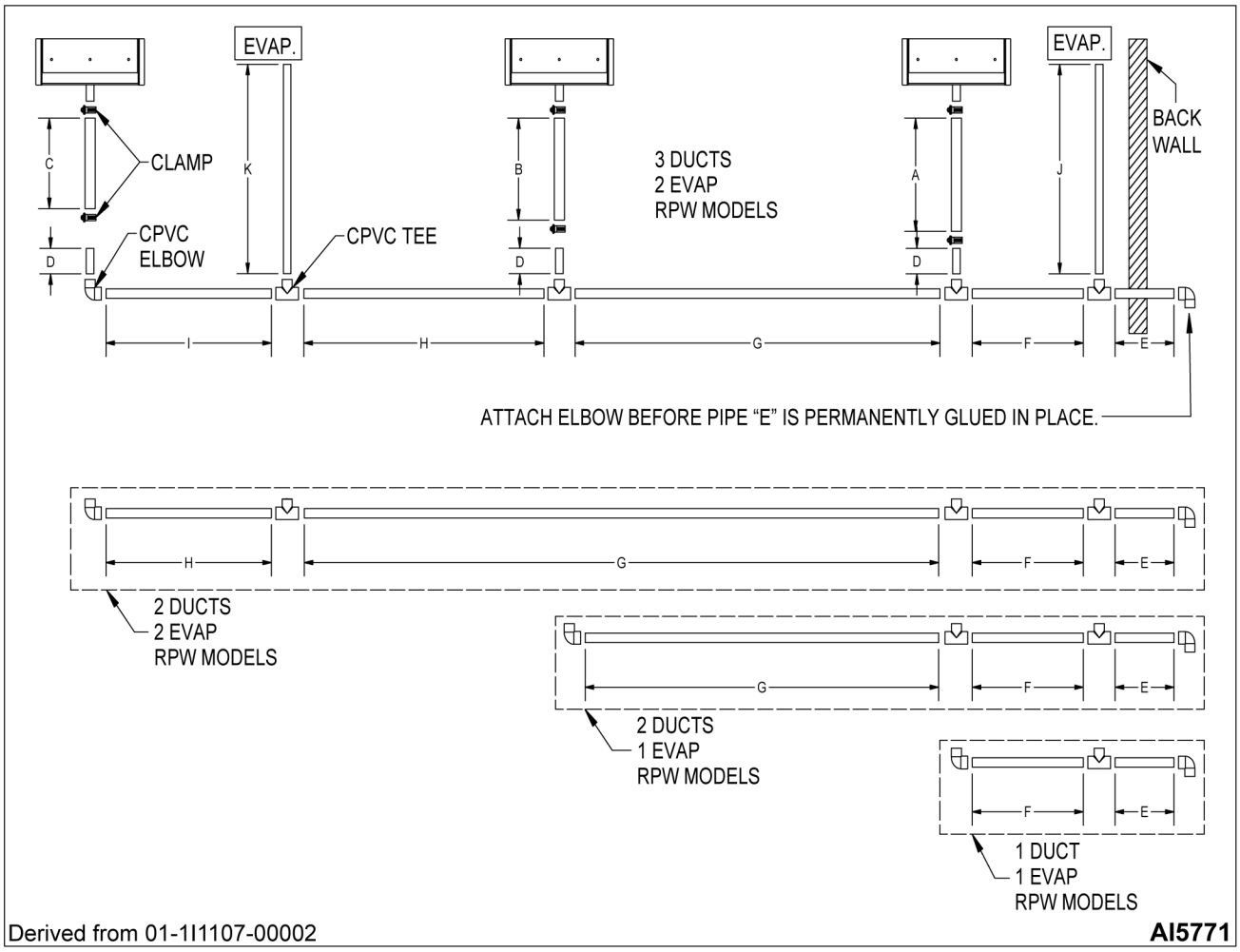


Fig. 42

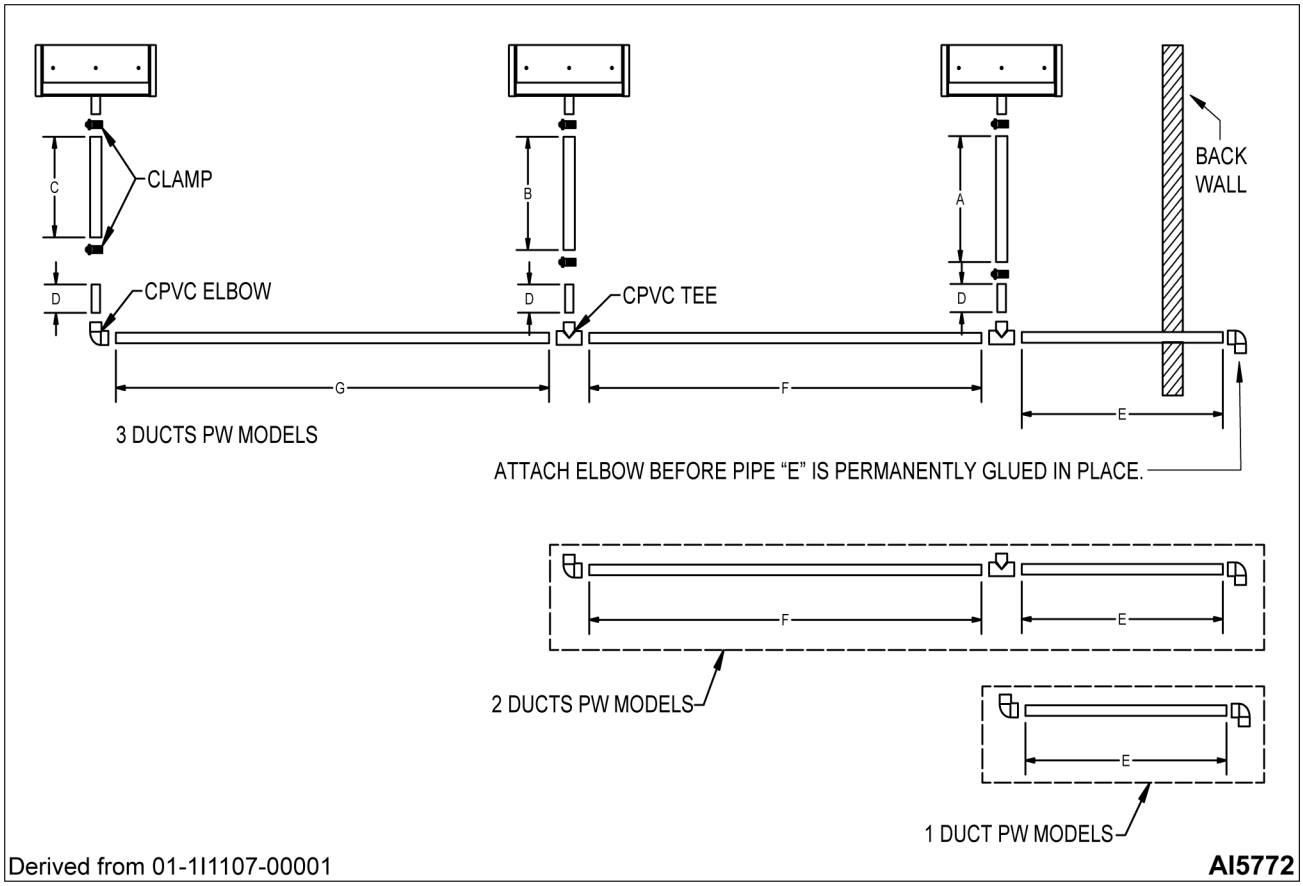


Fig. 43

3. Cut **clear tubes** and **CPVC pipes** to appropriate length. See charts:
   - RPW Retarder Proofer Pipe Lengths (39242)
   - PW Proofer Pipe Lengths (39243)

RETARDER PROOFER DRAIN PIPES, TUBES, & FITTINGS

# of Evaps	Depth	Model	Ducts per Wall	Supplied 10" Clear Tube Qty	Clear Tube Cut Length			Supplied CPVC Pipe Length	CPVC Pipe Cut to Length								Supplied Fittings Qty			
					A	B	C		D	E	F	G	H	I	J	K	Clamp	Elbow	Tee	Adapter Elbow
1	40"	RPW2E RPW1S RPW2S	1	1	10			71							71		2	1	1	1
								36	1 x 2.25	6.5	18.25									
1	60"	RPW1S	1	1	9			71							71		2	1	1	1
								48	1 x 2.25	6.5	39									
1	60"	RPW2E RPW2S	2	2	10	9		71							71		4	1	2	1
								60	2 x 2.25	6.5	12.25	25.5								
2	80"	RPW2E RPW1S RPW2S	2	2	10	9		71							71		4	1	3	1
								71								70				
								71	2 x 2.25	6.2	12.25	26	18.5							
2	100"	RPW2E RPW1S RPW2S	2	2	10	8.5		71							71		4	1	3	1
								71								70				
								48	2 x 2.25	6.5	12.25		18.25							
								48				46.25								
2	120"	RPW2E RPW2S	2	2	10	8		71							71		4	1	3	1
								71								69.25				
								48	2 x 2.25	6.5	12.25		18.25							
								71				66.5								
2	120"	RPW2S	3	3	10	9	8	71							71		6	1	4	1
								71								69.25				
								71	3 x 2.25	6.5	12.25		26.5	18.25						
								48				39								

30242

Fig. 44

PROOFER, DEHUMIDIFYING PROOFER DRAIN PIPES, TUBES, & FITTINGS

Depth	Model	Ducts per Wall	Duct Location	Supplied 10" Clear Tube Qty	Clear Tube Cut Length			Supplied CPVC Pipe Length	CPVC Pipe Cut to Length				Supplied Fittings Qty			
					A	B	C		D	E	F	G	Clamp	Elbow	Tee	Adapter Elbow
34"	PW1E	1	L Wall	1	10			24	1 x 2.25	19.5			2	1	0	1
40"	DPC1S, PW1S, PW2E, PW2S	1	L Wall	1	10			36	1 x 2.25	26			2	1	0	1
40"	*PW3S	1	L Wall	2	10			36	1 x 2.25	26			4	2	0	2
		1	R Wall		10			36	1 x 2.25	26						
60"	PW1E, PW2E, PW1S	1	L Wall	1	9			48	1 x 2.25	45.5			2	1	0	1
60"	PW2E, PW2S	2	L Wall	2	10	9		60	2 x 2.25	19.5	25.5		4	1	1	1
60"	*PW3S	1	L Wall	2	9			60	1 x 2.25	45.5			4	2	0	2
		1	R Wall		9			36	1 x 2.25	26						
80"	PW1E, PW2E, PW1S, PW2S	2	L Wall	1	10	9		71	2 x 2.25	19.5	45.5		4	1	1	1
80"	*PW3S	2	L Wall	3	10	9		71	2 x 2.25	19.5	45.5		6	2	1	2
		1	R Wall		10			36	1 x 2.25	26						
100"	PW1E, PW2E, PW1S, PW2S	2	L Wall	2	10	8.5		24		19.5			4	1	1	1
								71	2 x 2.25		65.5					
100"	*PW3S	2	L Wall	3	10	8.5		24	2 x 2.25	19.5			6	2	1	2
								71			65.5					
		1	R Wall		10			36	1 x 2.25	26						
120"	PW1E, PW2E, PW1S	2	L Wall	2	10	8		24	2 x 2.25	19.5			4	1	1	1
								85.5			85.5					
120"	PW2S	3	L Wall	3	10	9	8	71	3 x 2.25	19.5	39		6	1	2	1
								48				45.5				
120"	*PW3S	2	L Wall	3	10	8		24	2 x 2.25	19.5			6	2	1	2
								85.5			85.5					
		1	R Wall		10			36	1 x 2.25	26						

* Devices with duct placement on Right AND Left walls.

39243

Fig. 45

4. Add primer to all CPVC joints (1, Fig. 46).
5. Add cement to all CPVC joints (1, Fig. 46).

NOTE: Both primer AND cement must be applied.

6. Fully insert clear tubing onto pipe fittings.

NOTE: This illustration (2, Fig. 46) shows tube fully inserted **after** having been cut to appropriate length.

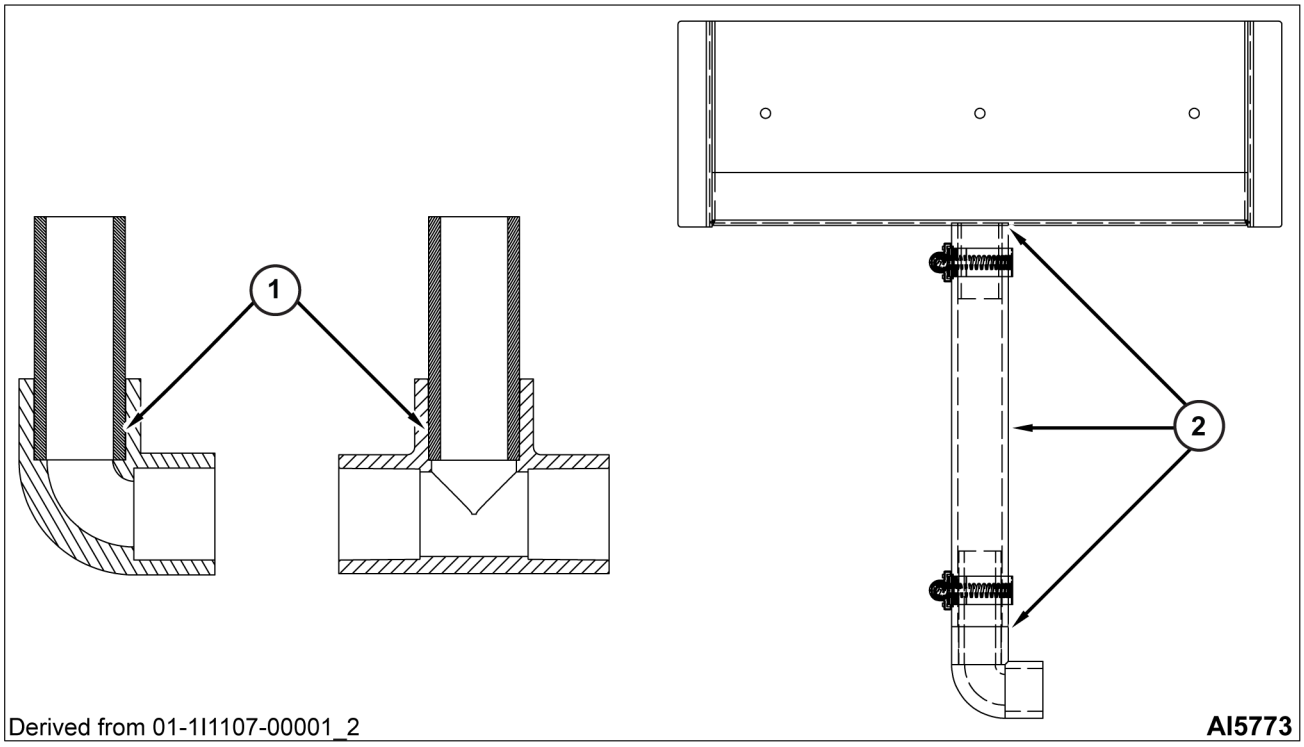


Fig. 46

SPRAYER CONNECTION

NOTE: See APPENDIX 1 - Water Supply Fitting Connections for detailed push-to-connect instructions.

1. For each air duct, rework two 1-1/2" dome plugs by drilling a 1/4" hole in the center of each plug.
2. For each air duct, remove one 40" piece of 1/4" plastic tubing from water supply kit.
3. Insert tubing through one modified dome plug (from Step 1).
4. Apply NSF approved silicone around edge of the remaining unused hole in ceiling panel. Water line will be routed through this hole.
5. Snap plug into hole the hole in ceiling from inside air duct.
6. Insert tube into PTC fitting on spray nozzle assembly, and push any excessive tubing though ceiling, then seal around tubing and plug with NSF approved silicone.

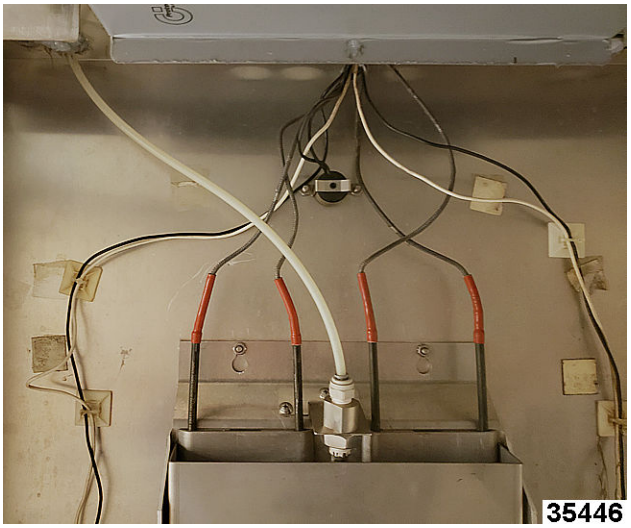


Fig. 47

7. From the top of the proofer, apply NSF approved silicone around edge of the hole for the water supply line in ceiling.
8. Slide tubing through second plug, and install plug into hole in ceiling (on top of proofer).



Fig. 48

9. Apply NSF approved silicone around tubing and plug.
10. Repeat steps 3 through 9 for all air ducts.

AIR INTAKE & INTERMEDIATE PANEL

1. Reinstall intermediate panel(s) onto air duct assembly(ies). Intermediate panel fits inside air duct body assembly.
2. Install air intake cover onto air duct assembly. Air intake cover fits over air duct body assembly.

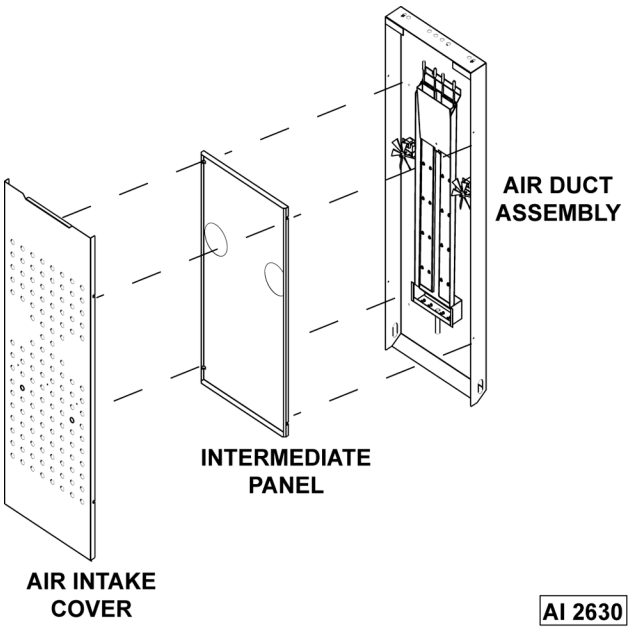


Fig. 49

3. Using a 10-32 truss head screw, secure air intake cover in upper right-hand corner.

CEILING AIR FLOW PANEL

1. Loosely install four 10-32 thumb screws into threaded insert in the ceiling in front of each air duct.



Fig. 50

2. Install air flow panel onto thumb screws through key slots.
3. Slide panel flange (1, Fig. 51) tightly against air duct intake cover.

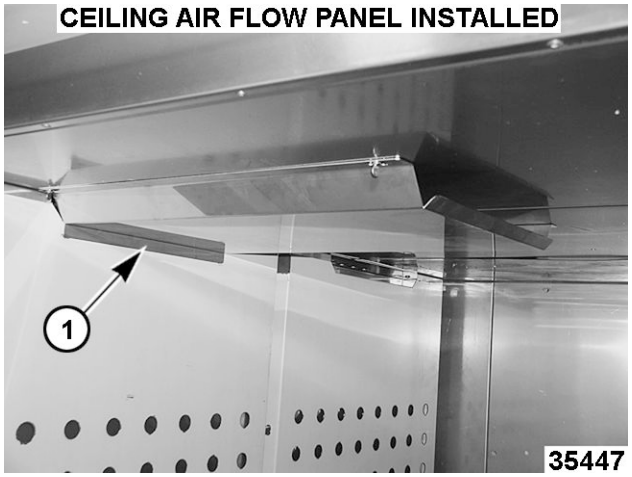


Fig. 51

4. Install one thumb screw into each panel flange and air intake cover.
5. Tighten four thumbscrews installed in Step 1.

BUMPERS

1. If not already done, remove protective plastic on walls and air duct assembly(ies).
2. Using10-32 x 1.00" flat head self-drilling screws, install bumpers onto walls and air duct inlet cover(s) at the pre-drilled holes.

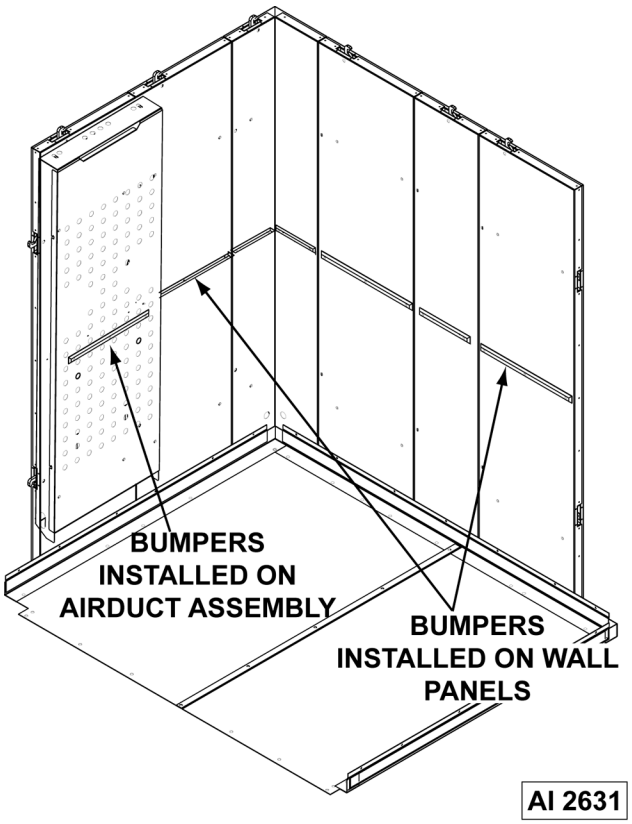


Fig. 52

3. Using 10-32 x 3/4" flat head screws and 10-32 acorn nuts, install bumpers onto bumper mounting bracket at right front corner.

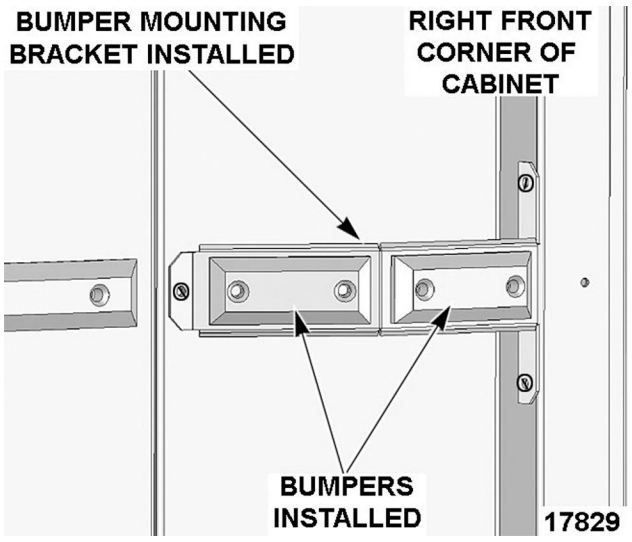


Fig. 53

4. Using 10-16 x 3/4" self-drilling screws, install bumper mounting bracket to the inside of right front corner of proofer.

DOOR HANDLE

1. Remove protective plastic from interior and exterior of loading door.
2. Insert 1/4-20 x 4.0" flat head mounting screws through bumper and pre-drilled holes in the door. Screws will protrude through the front of the door.

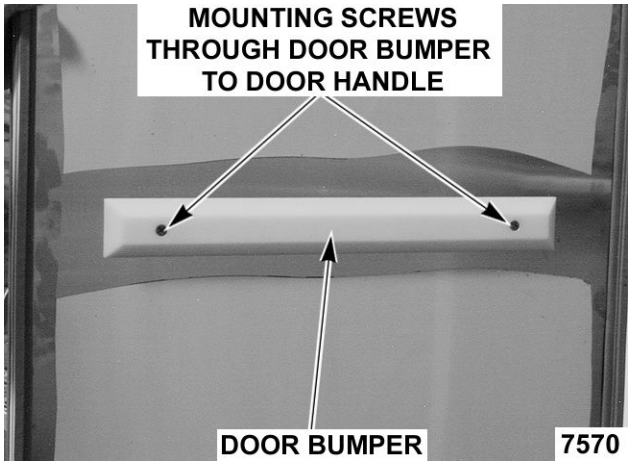


Fig. 54

3. Tighten screws into door handle.
4. Repeat for any additional door.

DOOR HINGES

NOTICE

Failure to follow this updated procedure may cause irreparable damage to the front corner panels, making them unusable. Following this procedure will retain the backer plates within the corners, and not allow them to possibly separate inside the corners.

NOTE: On double door units, the door with the control opening will mount to the left side.

NOTE: Use Red High strength thread locker on all hinge bolts.

NOTE: Torque all hinge bolts to 90 in-lbs or 7½ ft-lbs.

First Time Install Of Hinges

NOTE: Single door units can be hinged from either corner panel to obtain door swing required.

1. Remove upper hinge bolts from upper and lower hinge locations in the desired front corner section.
2. Apply thread locker to both bolts and loosely secure female halves of hinges to both hinge locations.
3. Remove both lower hinge bolts from corner.
4. Rotate hinges to a vertical position.



Fig. 55

5. Apply thread locker to bolts and reinstall through hinge.
6. Secure hinges by tightening all 4 hinge bolts.
7. Repeat process, if necessary, for opposite front corner if the unit has two loading doors.

NOTE: Ensure bushings (Fig. 56) are installed in female halves of hinges.



Fig. 56

Door Hinge Mounting

1. Remove upper hinge bolts from hinge locations at top and bottom of door.
2. Apply thread locker to both bolts and loosely secure male halves of hinges to both hinge locations.

NOTE: Be sure to position male half of hinge with post positioned downward (Fig. 57).

3. Remove both lower hinge bolts.
4. Rotate hinges to a vertical position.
5. Apply thread locker to bolts and reinstall through hinge.
6. Secure hinges by tightening all 4 hinge bolts.
7. Repeat process, if necessary, for other loading door if the unit has two loading doors.

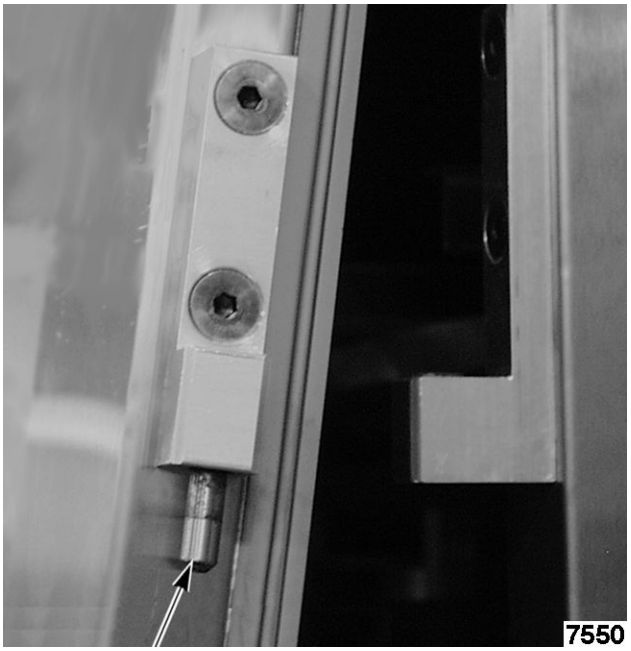


Fig. 57

8. Remove unused hinging screws provided for alternate door swing from opposite front corner panel, and replace with plug buttons provided in the unit assembly hardware package.

NOTE: Do not stand door up on door seal at any time.

9. Install plug buttons into hex sockets of all flat-head hinge bolts in loading doors and front corner panels.

NOTE: If button-head screws were removed from the loading door to reverse hinging on single door unit, fill socket in button-head screws with silicone caulk and wipe smooth.

NOTE: Before installing plug buttons apply a dab of silicone on back side of plug buttons.

10. Install door onto cabinet.

DOOR MAGNET

1. Use four 10-16 x 3/4" hex head self-drilling screws to install magnet assembly (1, Fig. 58) to top of door (2, Fig. 58).

NOTE: Double door unit shown.

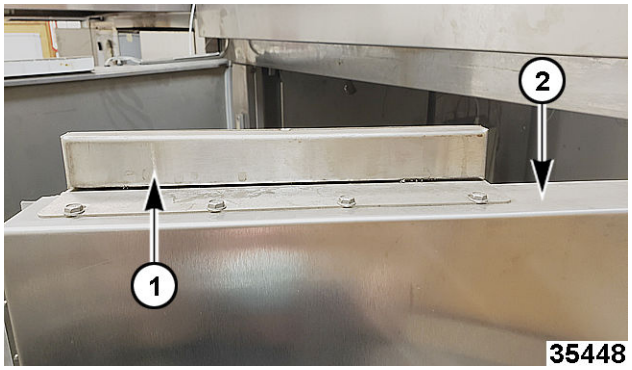


Fig. 58

2. Repeat Step 1 for double door installation.

DOOR SWEEP

1. Loosen retaining screws (1, Fig. 59) located on inner door skin, and adjust door sweep (2, Fig. 59) to facility floor as necessary.

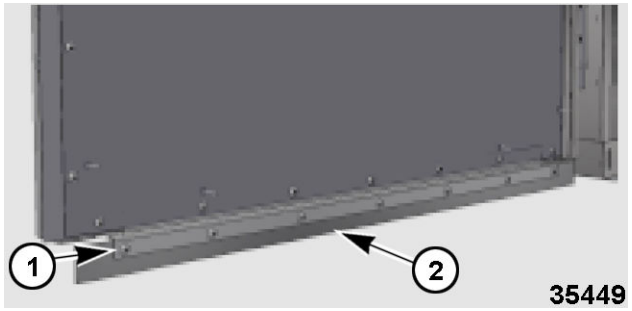


Fig. 59

NOTE: The door sweep on each door should be adjusted to seal cabinet when door is closed, but should **NOT** drag excessively when door is opened.

2. Tighten door sweep bracket retaining screws loosened in Step 1.

SERVICE ENTRANCE AND JUNCTION BOXES

1. If service entrance box is not factory-mounted, install it on the left front corner of the ceiling top. Use pre-drilled holes to position the box, then secure with 10-16 x 3/4" hex head self-drilling screws.

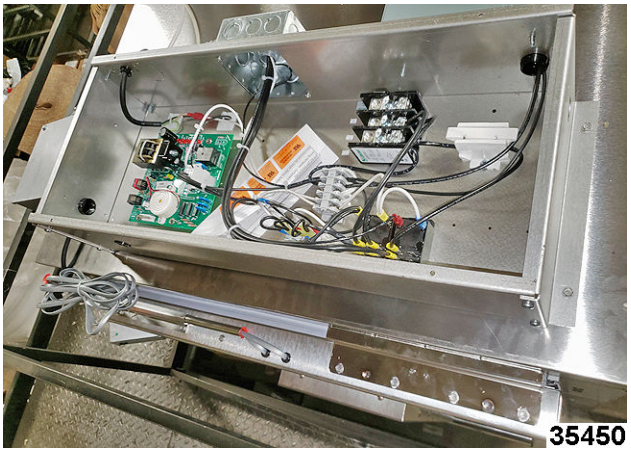


Fig. 60

2. Install 1-1/2" snap bushings into the wire routing holes.
3. Remove cover from junction box.
4. Align junction box over air duct wire routing holes, then secure to ceiling top with 10-16 x 3/4" hex head self-drilling screws.

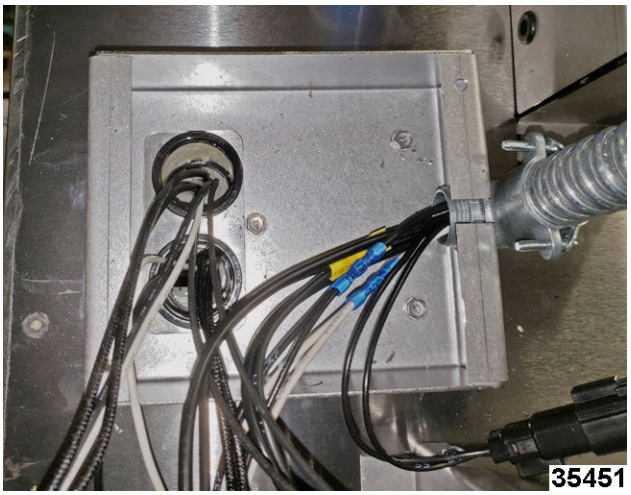


Fig. 61

5. Connect watertight connectors from air duct to control box extension harness for heaters, fans, and high limit.

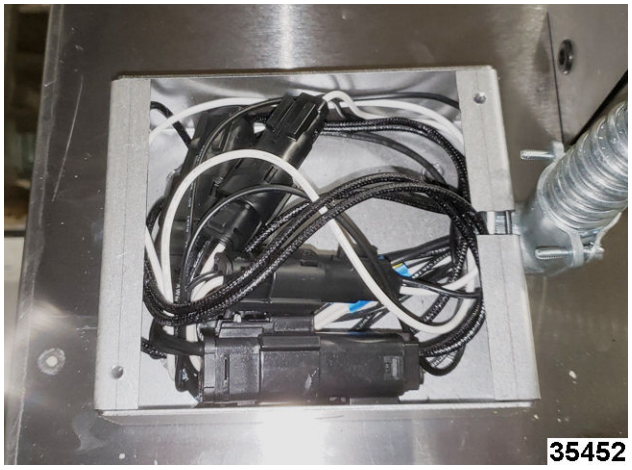


Fig. 62

6. Use NSF approved silicone to fully fill all ceiling holes in junction box.
7. Install junction box cover.
8. Repeat for each air duct.
9. Install humidity sensor into humidity sensor bracket. Make sure end of sensor is 1/4" from the end of bracket (Fig. 63).

NOTE: Do not remove protective covering (1, Fig. 63) from sensor.

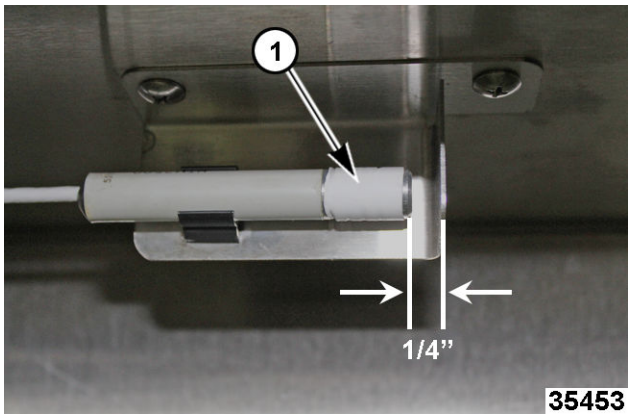


Fig. 63

10. Route humidity sensor wire through forward most hole in the ceiling, out the top, and through the access hole in service entrance box.



Fig. 64

11. Connect humidity sensor harness (1, Fig. 65) to circuit board in service entrance box.

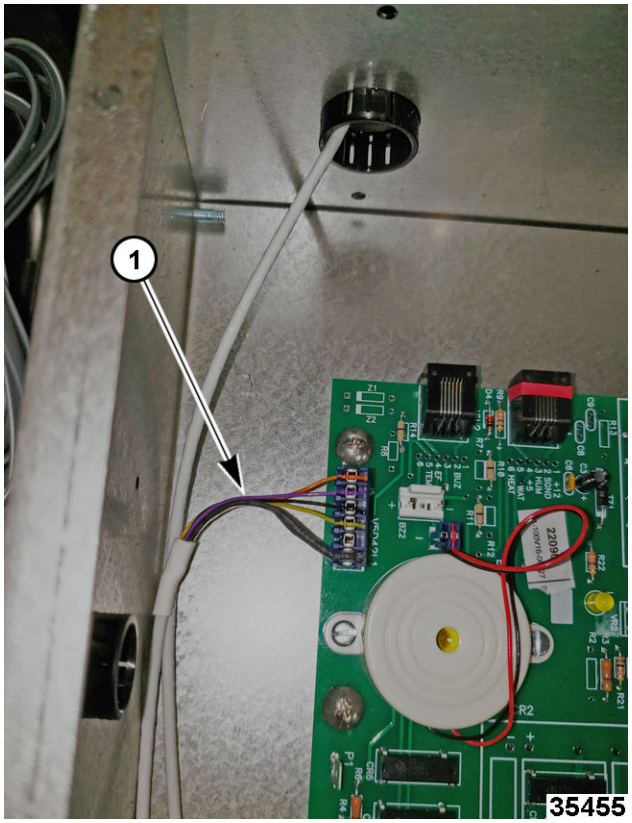


Fig. 65

12. Use NSF approved silicone to fill ceiling hole for humidity sensor wire.

WATER SUPPLY LINE CONNECTION

NOTE: A 3/4" FGHT (Female Garden Hose Thread) - to - 1/2" FNPT (Female National Pipe Thread) adapter has been provided if needed.

NOTE: Some cabinets may require connecting a tee after the solenoid valve. Make sure poly tube is fully inserted into the fittings.

NOTE: See APPENDIX 1 - Water Supply Fitting Connections for detailed push-to-connect instructions.

On Single Duct Cabinets

1. Insert 1/4" poly tube from spray nozzle assembly through grommet on side of solenoid cover, and connect to the Push-to-Connect (PTC) elbow attached to the bottom of the solenoid (Fig. 66).

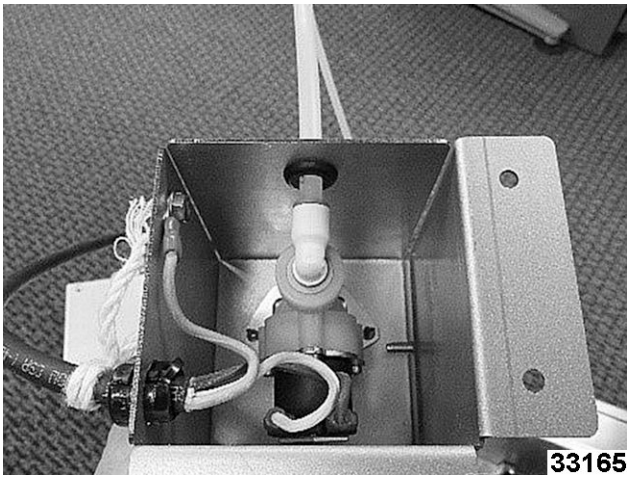


Fig. 66

2. Fasten solenoid box to ceiling top behind service entrance box with four 10-16 x 3/4" hex head screws.

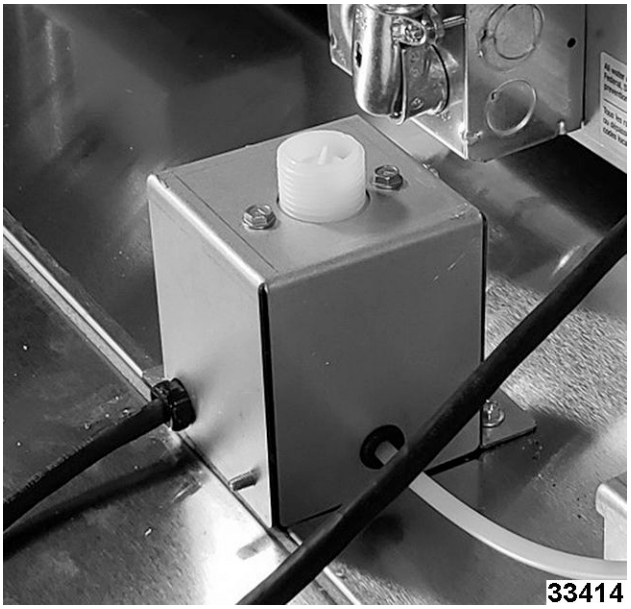


Fig. 67

NOTE: make sure poly tubing is not kinked, and that it does not interfere with any junction box conduits.

On Multiple Duct Cabinets

1. Insert the supplied 3-inch long, 1/4" poly tube (1, Fig. 68) through grommet on side of solenoid cover, and connect to the Push-to-Connect (PTC) elbow attached to the bottom of the solenoid.
2. Attach one of the supplied PTC tees (2, Fig. 68) to the 3-inch poly tube.

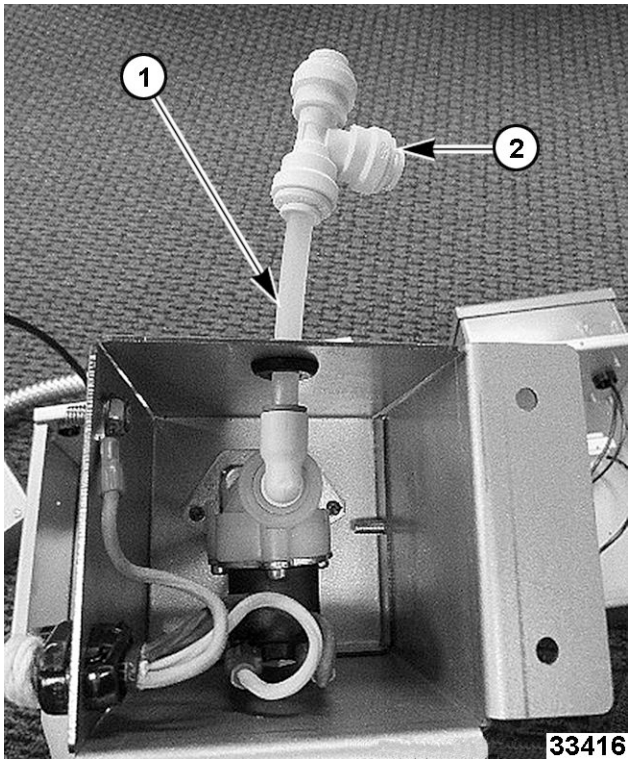


Fig. 68

3. Fasten solenoid box to ceiling top beside service entrance box with four 10-16 x 3/4" hex head self-drilling screws. Make sure solenoid box does not interfere with air duct power conduits.

NOTE: Verify poly tubing is not kinked and is fully inserted into the fittings.

NOTE: An additional tee (1, Fig. 69) and a 40-inch piece of poly tubing (2, Fig. 69) are supplied for each additional duct.

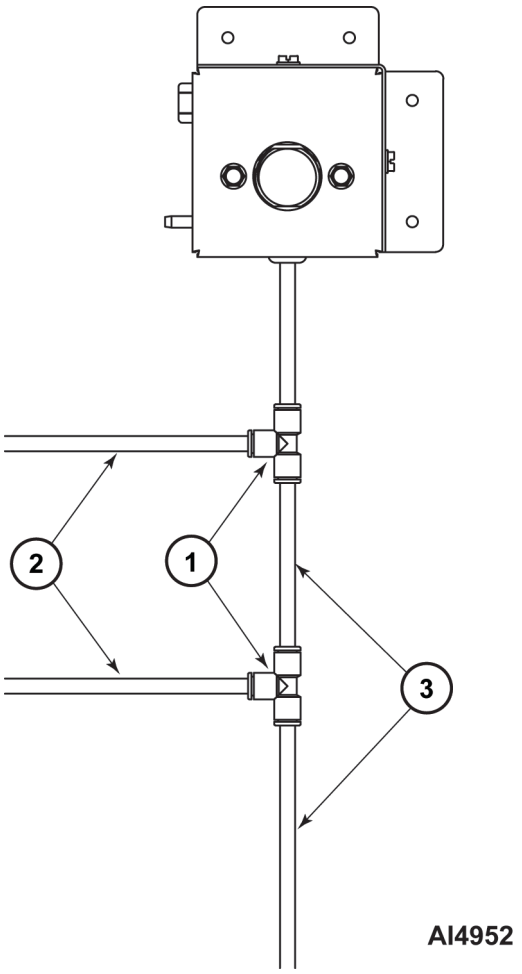


Fig. 69

4. Run a piece of poly tubing (3, Fig. 69) (length varies, depending on the size of the proofer) to each duct in series, and connect with tee fitting. The last duct will not connect using a tee, but will connect into the tee of the previous duct.

TRIM PANELS

1. Install both forward side trim panels using 10-16 x 3/4" hex head self-drilling screws.

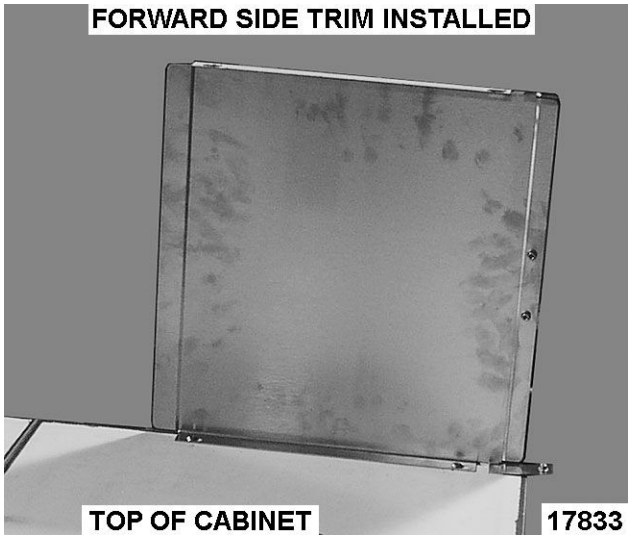


Fig. 70

2. Install 7/8" snap bushing into hole in lower front trim section from the bottom.
3. Mount lower front trim to ceiling panel, and secure with 10-16 x 3/4" hex head self-drilling screws.
4. Install 10-32 x 1/2" screws though lower from trim and into side trim.

NOTE: Upper front trim will be installed during ELECTRICAL SUPPLY CONNECTION procedure.

CONTROLLER TO COMPONENT BOX CONNECTION

1. Route wires from short side of control wire conduit assembly through hole in lower section of upper front trim. Insert end of conduit through lower trim and rest conduit on top of door.

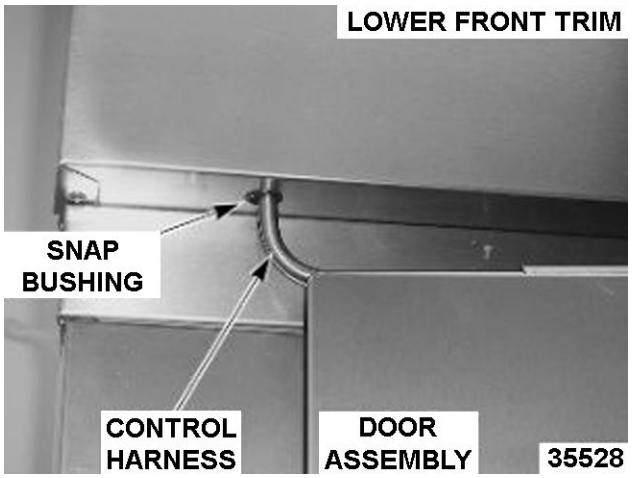


Fig. 71

NOTICE

Take care to not damage control cables when routing through lower trim.

NOTE: Lead wires are routed through the 90-degree control conduit wire harness assembly from the factory. One wire is marked with red tape on each end.

NOTE: On units with multi-timer displays, there will be a third wire in conduit assembly. Refer to separate instructions supplied with multi-timer control panel for installation instructions.

2. Loosen two retaining screws in conduit clamp on top of control door, and slip long side of conduit under clamp.
3. Position short side of conduit in center of opening in lower trim, and tighten conduit clamp screws to secure conduit in place.

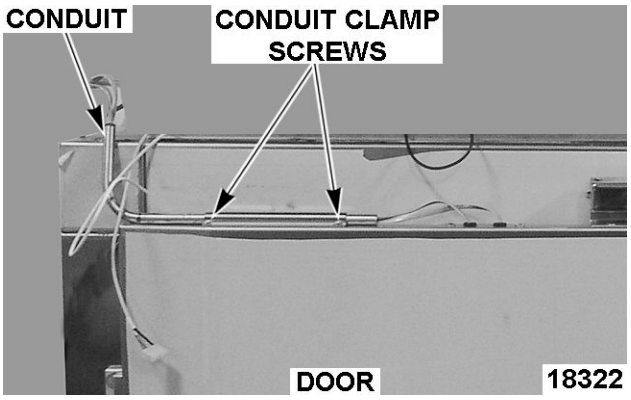


Fig. 72

4. Route conduit cables through top of door into the controls department. The cables should not extend below control opening in the control door (Fig. 73). Gently pull any excess slack in control cables to the top of unit by pulling on wires at short end of control conduit inserted through lower section of upper trim.

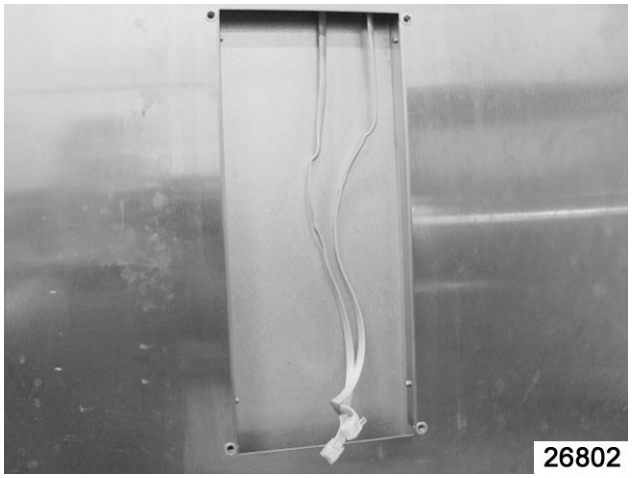


Fig. 73

5. Install strain relief bushings (1, Fig. 74) into top of door (2, Fig. 74) around each control cable (3, Fig. 74). Seal with NSF approved silicone to obtain watertight seal around control cables.

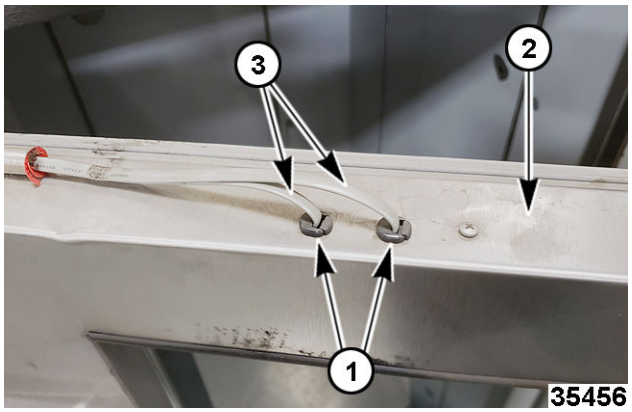


Fig. 74

6. Apply silicone around the perimeter of control opening on control door (Fig. 75).

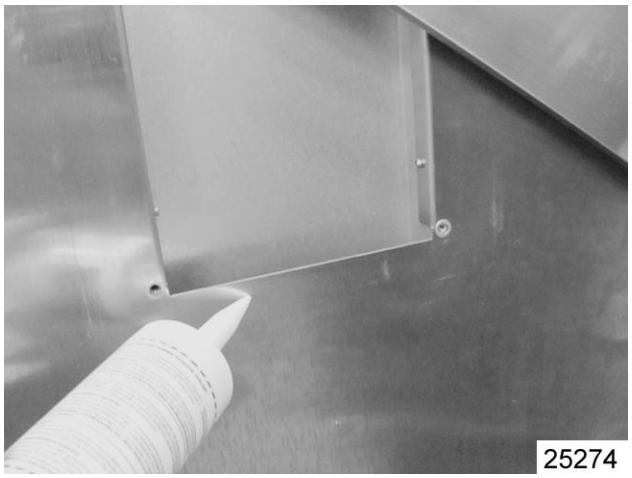


Fig. 75

7. Feed control cables through access holes in control panel mounting plate, leaving enough cable in the service entrance so that the control cables loop below the access holes in mounting plate.
8. Attach mounting plate to door face using four 10-32 x 1/2" truss head screws (Fig. 76).

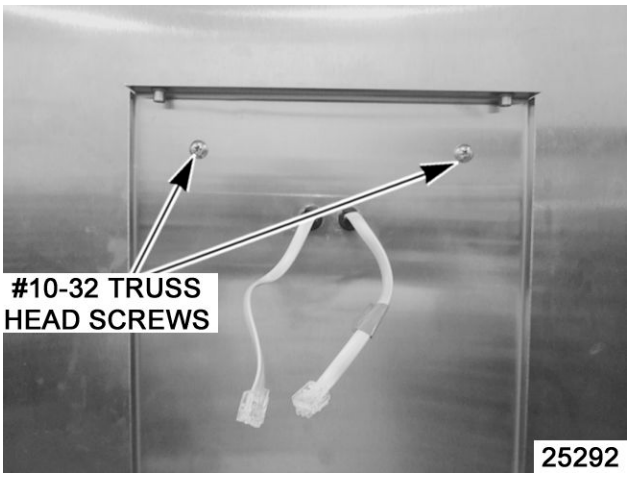


Fig. 76

9. Adjust cables so that a 5" length of them extends through mounting plate. Install strain relief bushings around cables and press into holes in mounting plate. Seal bushings and cables with NSF approved silicone.

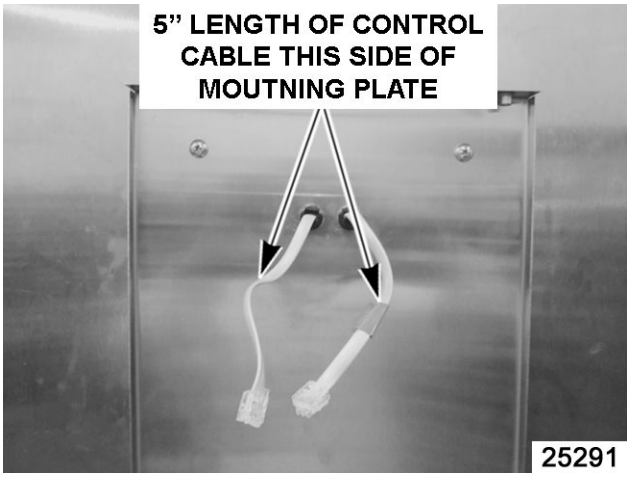


Fig. 77

Connect control cables to PC board/cover assembly.

NOTE: The cable with the red tape should be plugged into PCB socket with same color tape on it.

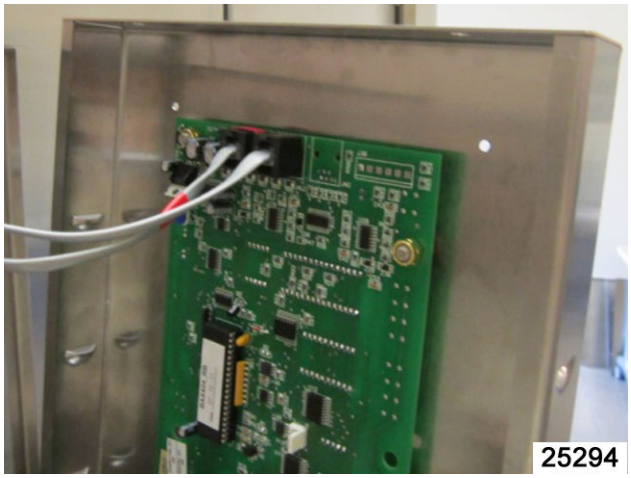


Fig. 78

10. Secure control panel to mounting place using four 10-32 x 1/2" truss head screws.

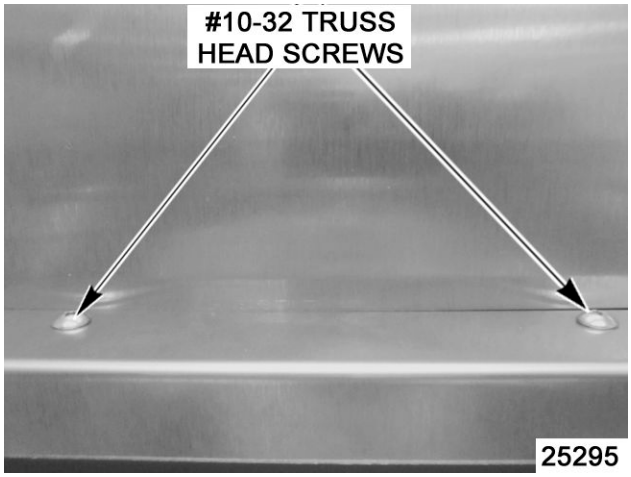


Fig. 79

NOTE: Louvers should be located on sides and bottom of cover.



Fig. 80 PW CONTROL PANEL



Fig. 81 RPW CONTROL PANEL

11. Connect red lead wire to the socket with the red mark on the power board, and connect the unmarked lead wire to the unmarked socket on the power board in the service entrance box.

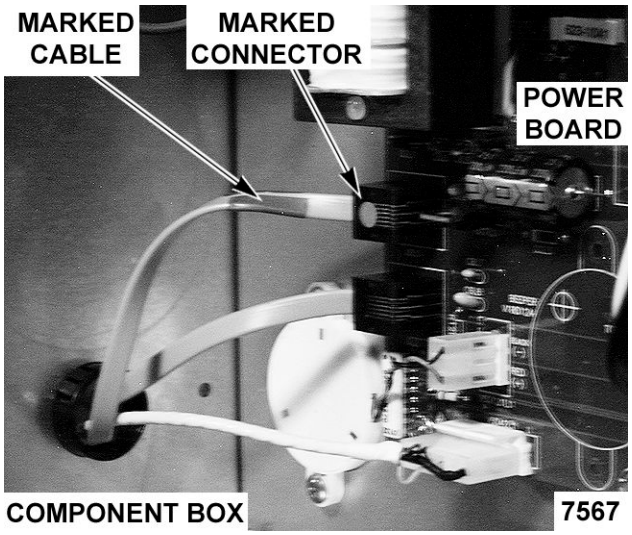


Fig. 82

ELECTRICAL SUPPLY CONNECTION



⚠ WARNING

Disconnect the electrical power to the machine and follow lockout / tagout procedures. There may be multiple circuits. Be sure all circuits are disconnected.

1. Connect electrical supply per label on the component service entrance box cover, **ensuring the neutral wire is connected at terminal #3 on terminal strip (Fig. 83 , Fig. 84)**.

NOTICE

Energizing power supply without a neutral connection could result in damage to circuit board.

NOTE: Damage resulting from failure to confirm neutral connection prior to energizing the equipment will **not be covered under warranty**.

NOTE: DIAGRAMS BELOW (Fig. 83 , Fig. 84) ARE FOR REFERENCE ONLY. SEE SERVICE ENTRANCE LABEL AS WELL AS SCHEMATIC LABEL ON SPECIFIC UNIT FOR PROPER RATINGS AND WIRE CONNECTIONS.

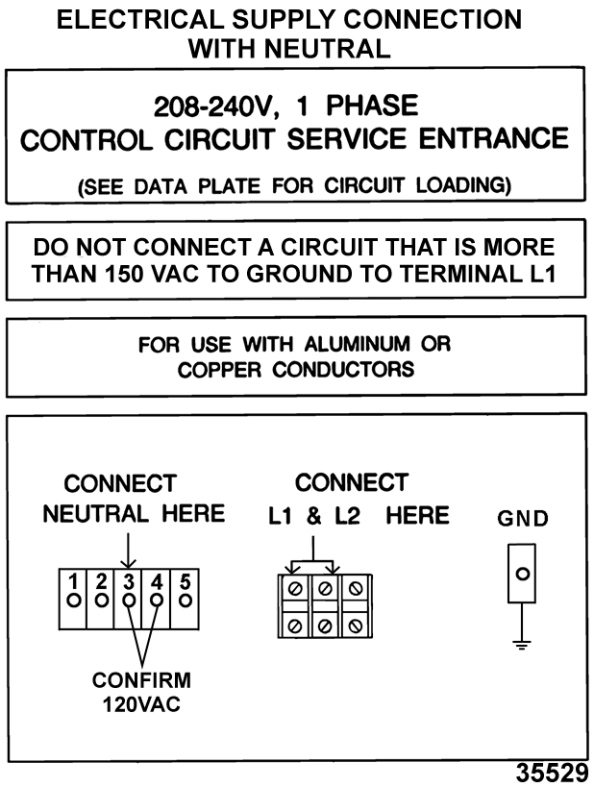


Fig. 83

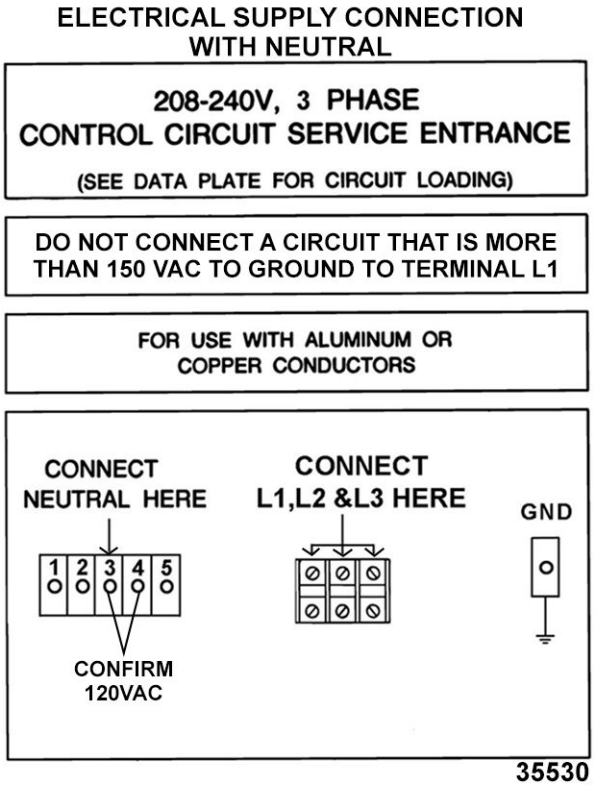


Fig. 84

NOTE: If 208-240 volt electrical supply does not have a neutral, a step-down transformer can be installed (see Fig. 85). Step down transformer must be installed into a leak tight housing supplied by customer.

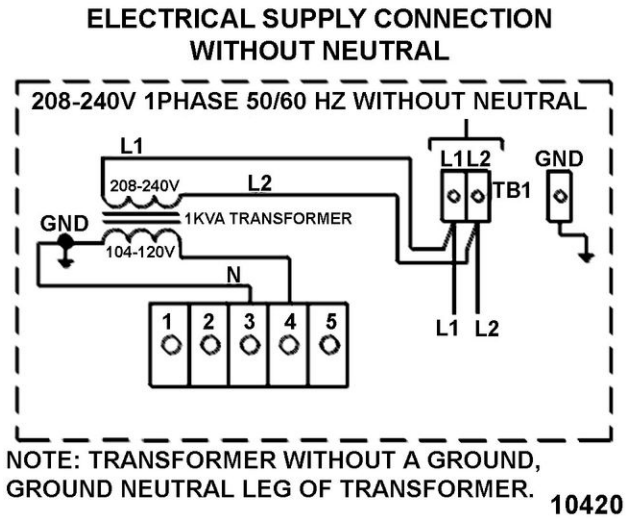


Fig. 85

2. Install service entrance box cover with 10-32 x 1/2" hex head machine screw in 2 places.

3. Install upper section of front trim and secure to side trim and lower front trim with 10-32 x 1/2" hex head screws.

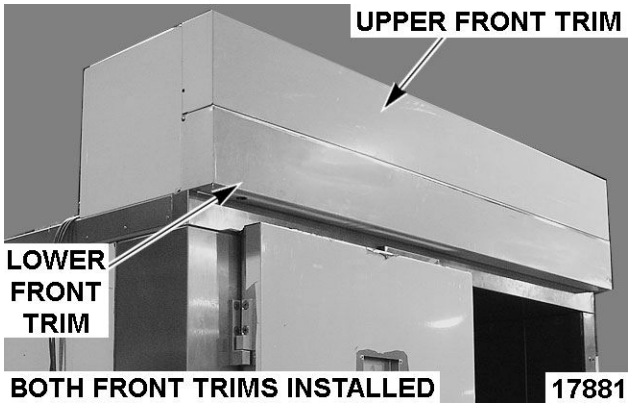


Fig. 86

FINAL CHECKS

1. Remove all remaining protective plastic.
2. Install plugs in any unused holes on the inside of wall panels and ceiling panels. Use Xtree Clip-Nylon 66 for 1/4-20 nut inserts. Use Arrow Clip-Nylon 66 for 10-32 nut inserts. Use 1/2" black button plugs to plug cam lock holes.
3. Install black 1-1/2" dome plugs into unused 1-1/2" access holes in ceiling panels. Install domes plug into holes on inside of ceiling panels, and 1-1/2 snap bushings onto outside of holes in ceiling panel. Fill unused holes with NSF approved silicone.
4. Plug inside and outside of unused drain line holes in front and rear corners with 1-1/4" black plastic domed plugs.
5. Test for proper operation.

NOTE: The fans of each proofing system will run continuously for 20 minutes after power has been shut off at the controller.

6. Complete Installation Checklist and return copy to Bakery System Service Support.

HARDWARE REFERENCE GUIDES

- ***PW/RPW Hardware Reference Guide***
- ***PW3 Hardware Location and Indentification***

APPENDIX

APPENDIX 1 - Water Supply Fitting Connections

The following is a general overview for properly connecting water supply fittings on Proofer and Retarder/Proofer models.

NOTE: These instructions are for 1/4" supply tubing only.

Fittings: GHT fitting, water solenoid, supply tube, push-to-connect tee fitting, push-to-connect spray nozzle assembly.

Tools Required: measuring tape, marker, Teflon tape or NSF-61 approved thread sealant.

Attach GHT Fitting to Solenoid Valve

1. Hand-tighten GHT fitting to water solenoid valve (2, Fig. 87).

NOTE: No sealant or Teflon tape is required on the valve end of fitting (1, Fig. 87) as it has a rubber washer preinstalled.

2. Apply NSF thread sealant or Teflon tape to the male NPT fitting (not shown) that attaches to the NPT side (3, Fig. 87) of the GHT fitting.

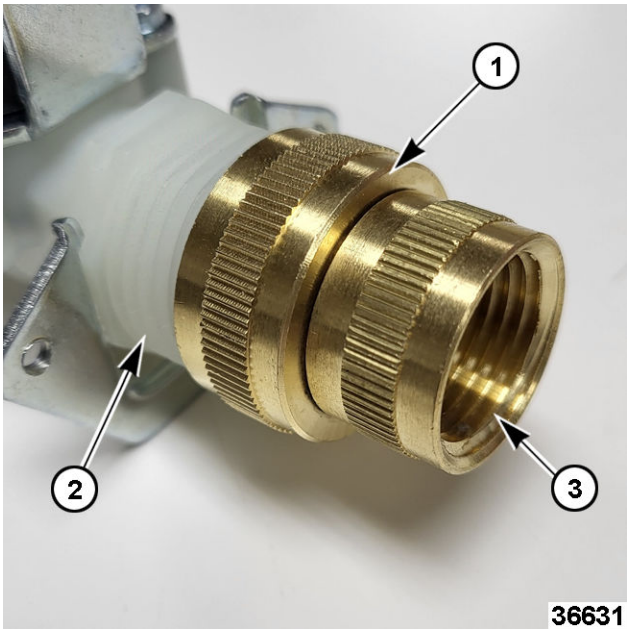


Fig. 87

Mark Supply Tubes

1. Measure and mark 9/16" from the end of tubes (Fig. 88).

NOTE: Make sure the ends are cleanly cut.

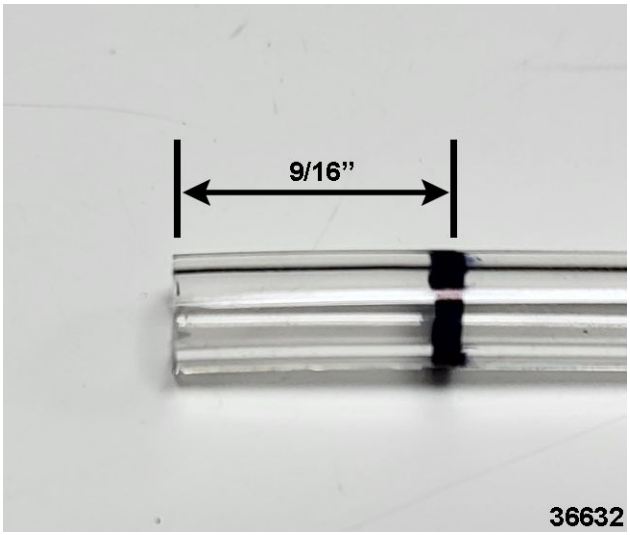


Fig. 88

Connect Supply Tubes

1. Connect marked end of supply tubing to push-to-connect solenoid (Fig. 89) and tee (Fig. 90) fittings.

NOTE: When fully inserted into the solenoid and tee fittings, tube marking (1, Fig. 89 & Fig. 90) is visible and aligns with the fitting's release ring (2, Fig. 89 & Fig. 90).

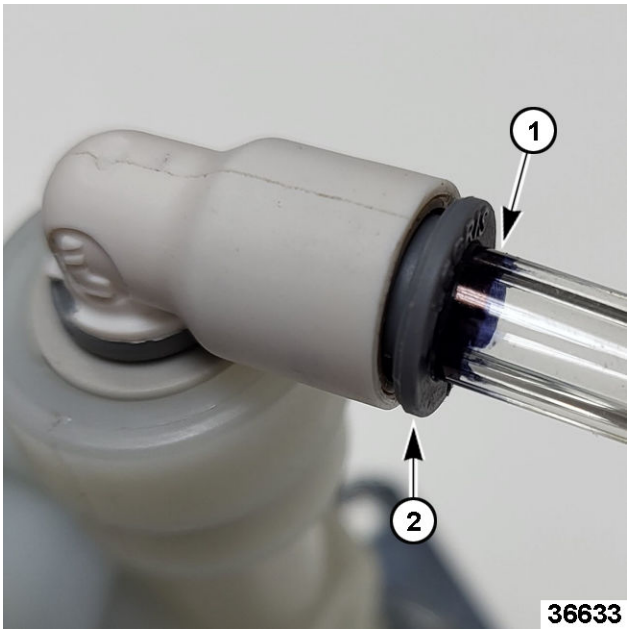


Fig. 89

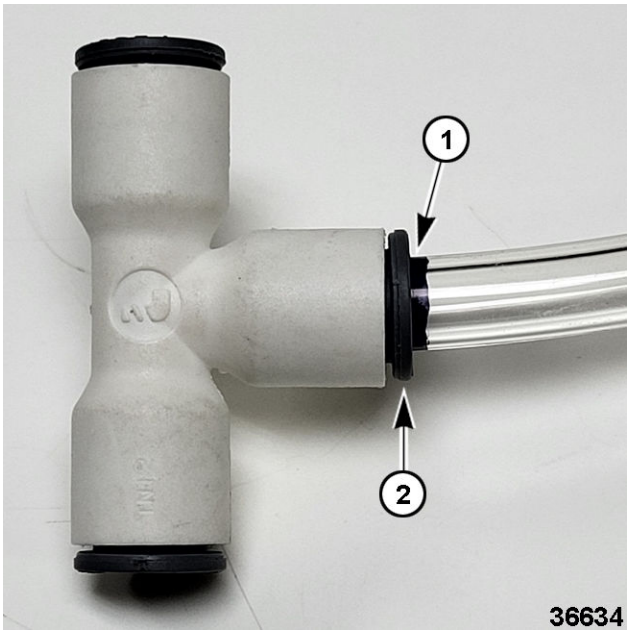


Fig. 90

2. Connect marked end of supply tubing to push-to-connect spray nozzle.

NOTE: When fully inserted into the spray nozzle, tube marking is NOT visible (Fig. 91).

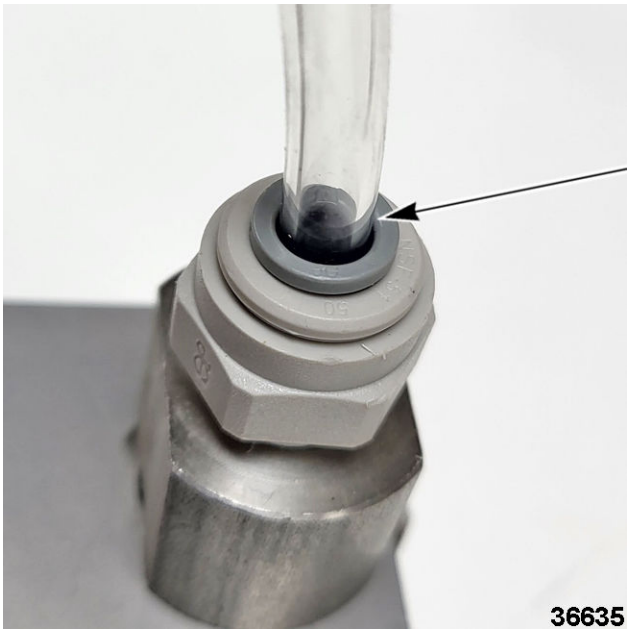


Fig. 91

PROOFER/RETARDER - HARDWARE IDENTIFIER

PICTURE	PART NUMBER	DESCRIPTION
	01-1000V4-00073	ANCHOR, DROP-IN (1/4-20, MILD STEEL)
	01-1000V4-00100	SCREW, MACHINE - FLAT HEAD (1/4-20 X 4.00", PHLPS, 18-8 SST)
	01-1000V4-00138	SCREW, MACHINE - THUMB W/ SHOULDER (#10-32 X 1/2", 18-8 SST)
	01-1000V4-00221	SCREW, MACH-FH (1/4-20 X 0.50, PHLP, 18-8 SST)
	01-1000V4-00222	SCREW, MACH-FH (1/4-20 X 0.75, PHLP, 18-8 SST)
	01-1000V4-00223	SCREW, MACH-FH (1/4-20 X 1.00, PHLP, 18-8 SST)
	01-1000V4-00411	NUT, ACORN (10-32, 18-8 SST)
	01-1000V4-00412	SCREW, MACHINE - TRUSS HEAD (10-32 X 1/2, 18-8 SST)
	01-1000V4-00426	SCREW, SHEET METAL - HEX HEAD (#10-16 X 0.75, #3 DRILL TIP, 410 SST)
	01-1000V4-00435	WASHER, LOCK - SPLIT #10 (.20" ID X .334" OD X .047" THK, 18-8 SST)
	01-1000V4-00440	SCREW, MACHINE - TRUSS HEAD (10-32 X 1/2, **BLACK OXIDE**)
	01-1000V4-00469	SCREW, MACHINE - FLAT HEAD (#10-32 X .75", PHLP, SST)
	01-1000V4-00533	BOLT, HEX - CAP (1/4-20 X 1/2" LONG, SST 304)
	01-1000V4-00574	SCREW, MACH-FH (1/4-20 X 0.50 W/ **ANTI-SEIZE ND957 PATCH**, PHILLIPS, 18-8 SST)
	01-1000V4-00575	SCREW, MACH-FH (1/4-20 X 0.75 W/ **ANTI-SEIZE ND957 PATCH**, PHILLIPS, 18-8 SST)
	01-1000V4-00576	SCREW, MACH-FH (1/4-20 X 1.00 W/ **ANTI-SEIZE ND957 PATCH**, PHILLIPS, 18-8 SST)
	01-1000V4-00598	SCREW, SHEET METAL - FLAT HEAD (#10-32 X 5/8", PHLP, SST)

PICTURE	PART NUMBER	DESCRIPTION
	01-1000V4-00609	SCREW, MACH-FLAT HEAD (#10-16 X 1.00, PHLP, SELF DRILLING, 410 SST)
	01-1000V4-00610	SCREW, SHEET METAL-HEX HEAD W/ WASHER (#14 X 4.00 IN, SLOTTED, ZINC PLTD)
	01-1000V4-00611	SCREW, MACHINE - HEX HEAD (#10-32 x 0.50, 304 SST)
	01-1000V5-00059	BUSHING, SNAP - 7/8" HOLE (BLK)
	01-1000V5-00073	BUSHING, SNAP-1.50" HOLE (BLK)
	01-100V15-00064	PLUG, PUSH-IN - 1/4" (BLACK)
	01-100V15-00066	PLUG, BUTTON - 1/2" (BLACK POLYETHYLENE)
	01-100V15-00071	BUSHING, STRAIN RELIEF (FLAT CABLE)
	01-100V15-00073	CLIP, PUSH-IN - PLASTIC (BLACK, FOR 3/8-16 HOLE)
	01-100V15-00076	CLIP, XTREE - NYLON 66 (BLACK, FOR 1/4-20 INSERT OR 0.188 HOLE)
	01-100V15-00090	CLIP, ARROW - NYLON 66 (BLACK, FOR 10-32 INSERT OR 0.156 HOLE)
	01-100V15-00078	**1-1/2" HOLE** PLUG, DOME - BLACK PLASTIC (1-1/2" HOLE)
	01-100V15-00082	**1.25" DIA HOLE** PLUG, DOME - BLACK PLASTIC
	01-100V18-00078	BIT, DRILL - HI-SPEED STEEL (#7, 6.00 IN LONG, 135° SPLIT POINT, JOBBER)
	01-100V18-0128E	BIT, DRILL (#20, SHORT)
	01-100V18-0129A	TAP, #10-32 UNF (4 FLUTE)

Note: Part numbers in this document for the Hardware are abbreviated,

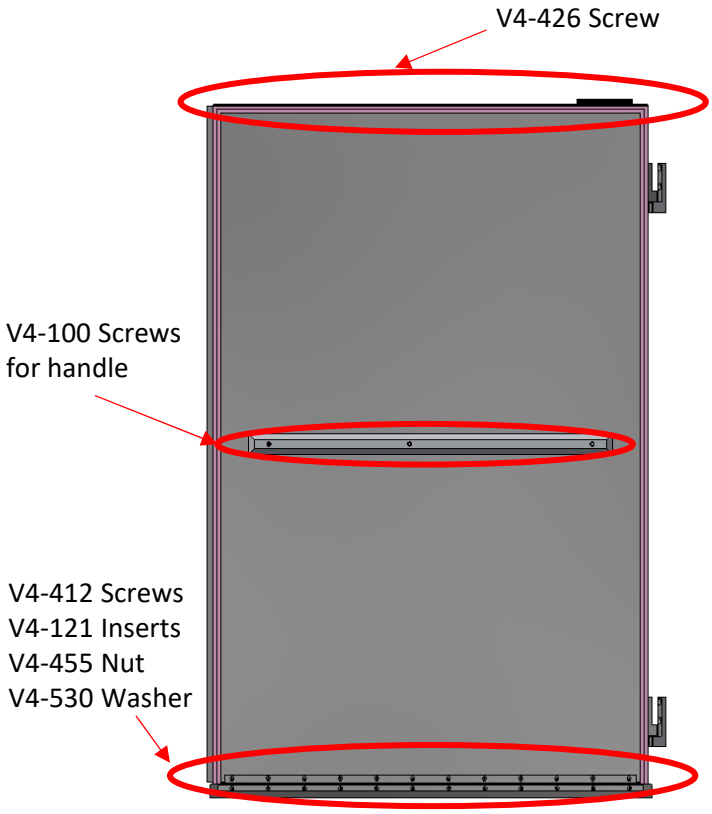
Example: (V4-426 would be 01-1000V4-00426 and V15-66 would be 01-100V15-00066 in Enterprise Parts locator)

PW3 HARDWARE LOCATION AND IDENTIFICATION



PW3 HARDWARE LOCATION AND IDENTIFICATION

Inner Door, Proofer





V4-412, SCREW, MACHINE - TRUSS HEAD (10-32 X 1/2, 18-8 SST) (66 PL)



V4-455, NUT, HEX (#10-32, 18-8 SST) (12 PL)



V4-530, WASHER, LOCK - INTERNAL TOOTH (#10, SST) (12 PL)



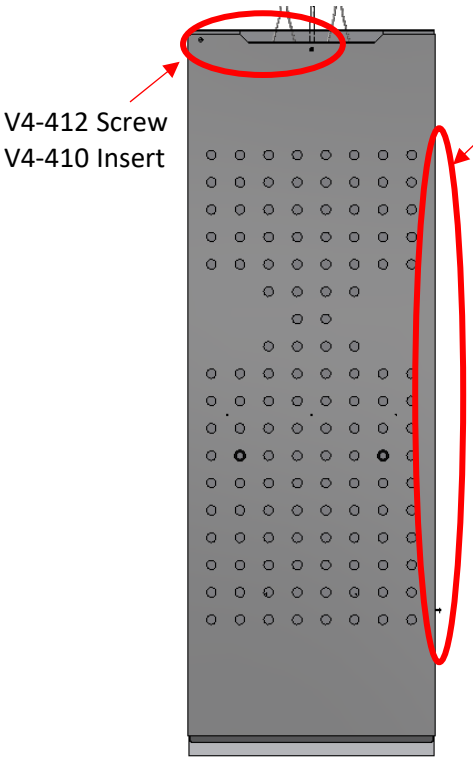
V4-100, SCREW, MACHINE - FLAT HEAD (1/4-20 X 4.00", PHL, 18-8 SST) (3 PER 3 WIDE DOORS)

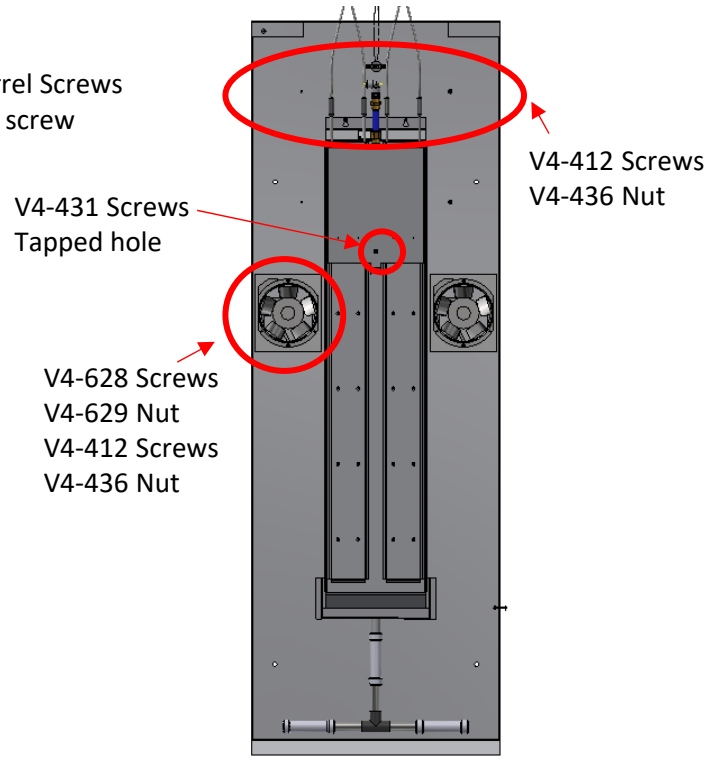


V4-426, SCREW, SHEET METAL-HEX HEAD (#10-16 X 0.75, #3 DRILL TIP, SST) (2 PL)

PW3 HARDWARE LOCATION AND IDENTIFICATION

Air Duct, Proofer







RIVET, BUTTON HD (5/32", SS) (MARSON SSB5-10S) (16 PER DUCT)



V4-410, NUTSERT, 10-32 ALUM 0.296 HOLE (1 PER DUCT)



V4-412, SCREW, MACHINE - TRUSS HEAD (10-32 X 1/2, 18-8 SST) (12 PER DUCT)



NUT, HEX (#10-32, 18-8 SST) (12 PER DUCT)



V4-431, SCREW, MACHINE- TRUSS HEAD (#10-32 X 1.0, 18-8 SST) (1 PER DUCT)



V4-305, NUT, BARREL - TRUSS HEAD (#8-32, BARREL .50L X .25 OD, PHIL (8 PER DUCT)



V4-306, SCREW, SET MACHINE - HEX SOCKET (#8-32 X 1/2, SST) (4 PER DUCT)



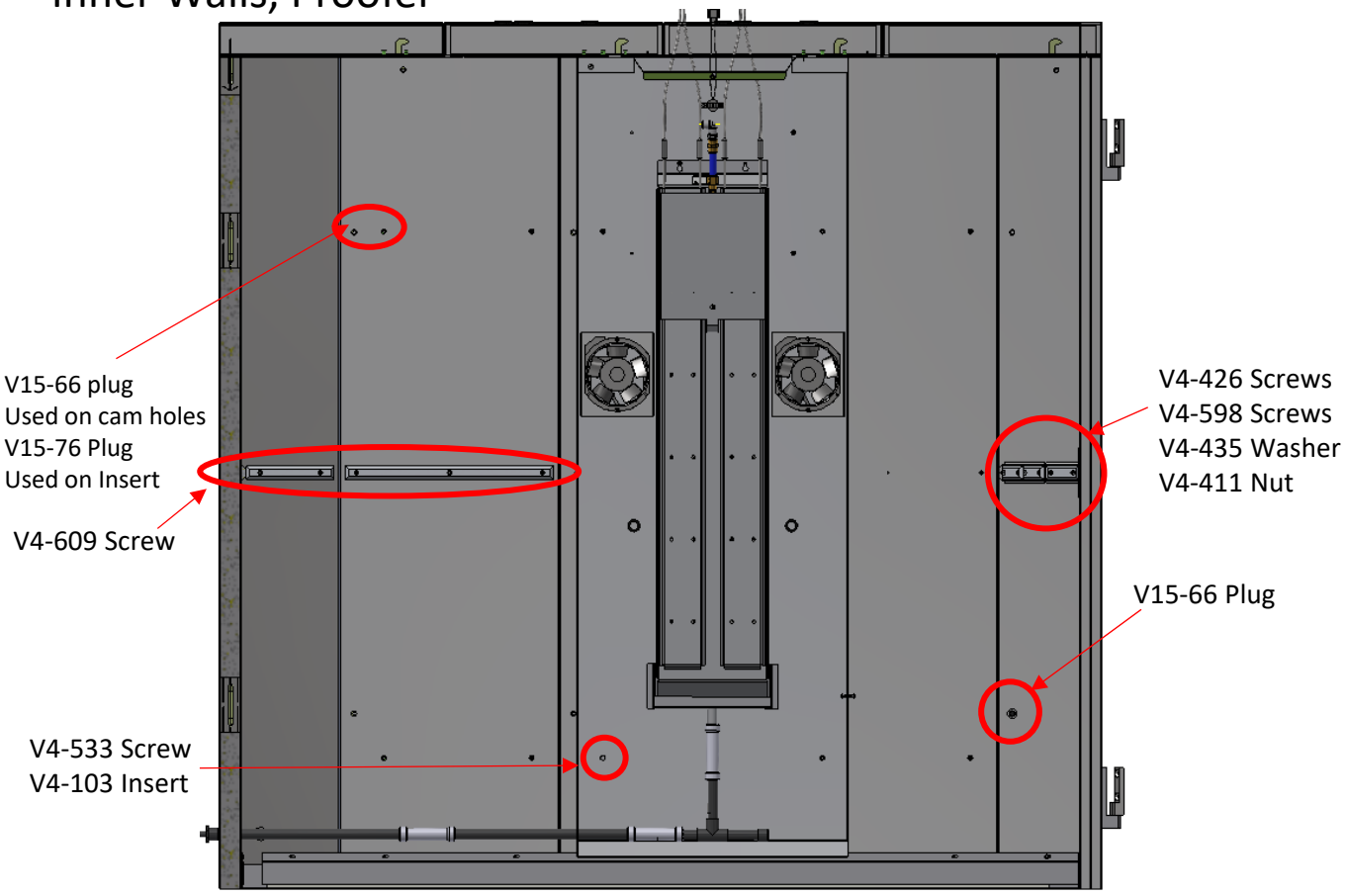
V4-629, NUT, HEX W/LOCK NUT (#8-32, SST) (4 PER DUCT)



V4-628, SCREW, MACHINE - PHIL PAN HEAD 8-32 X 2.50L (SST) (4 PER DUCT)

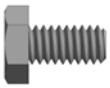
PW3 HARDWARE LOCATION AND IDENTIFICATION

Inner Walls, Proofer





V4-426, SCREW, SHEET METAL-HEX HEAD (#10-16 X 0.75, #3 DRILL TIP, SST) (3 PL)



V4-533, BOLT, HEX - CAP SST 304 1/4"-20 X 1/2" L (6 PER DUCT)



V4-609, SCREW, MACH-FLAT HEAD (#10-16 X 1.00, PHLP, SELF DRILLING, 410 SST) (A/R)



V15-76, CLIP, PUSH-IN - PLASTIC (BLACK, FOR 1/4-20 INSERT OR 0.187 HOLE) (4 PER WALL PANEL)



V4-103, INSERT, THREADED - ROUND (1/4-20, 0.375 HOLE, ALUM) (4 PER WALL PANEL)



V4-598, SCREW, FLAT HEAD (#10-32 X 5/8" F-TIP, PHLP,) (6 PL)



V4-411, NUT, ACORN (10-32, 18-8 SST) (6 PL)



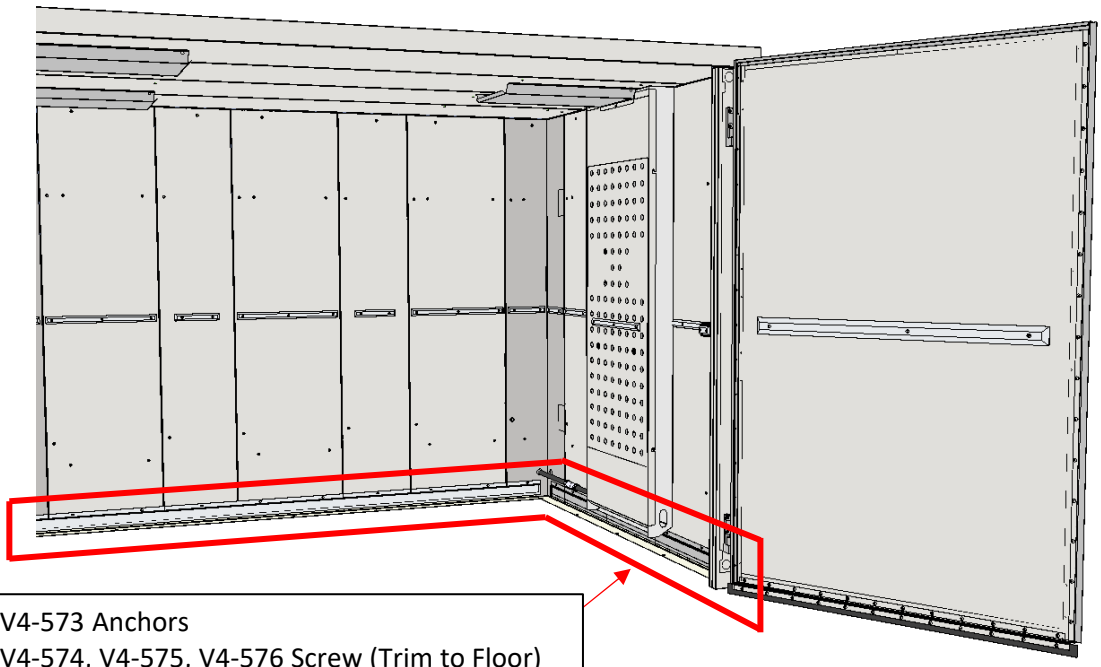
V4-435, WASHER, LOCK - SPLIT #10 (.20" ID X .334" OD X .047) (6 PL)



V15-66, PLUG, BUTTON - 1/2" (BLACK POLYETHYLENE)
(FOR CAM OPENINGS) (3 PER WALL PANEL)

PW3 HARDWARE LOCATION AND IDENTIFICATION

Floor, Anchors, Proofer



V4-573 Anchors
V4-574, V4-575, V4-576 Screw (Trim to Floor)
DEPENDING ON DEPTH OF ANCHOR

V4-426 Screw (Trim to Wall)



V4-426, SCREW, SHEET METAL-HEX HEAD (#10-16 X 0.75, #3 DRILL TIP, SST) (26 PL)



V4-573: ANCHOR, DROP-IN - 1/4-20 (STAINLESS STEEL) USES V4-73A TOOL (21 PL)



V4-574: SCREW, MACH-FH (1/4-20 X 0.50 W/ ANTI-SEIZE ND957 PATCH, PHILLIPS, 18-8 SST)

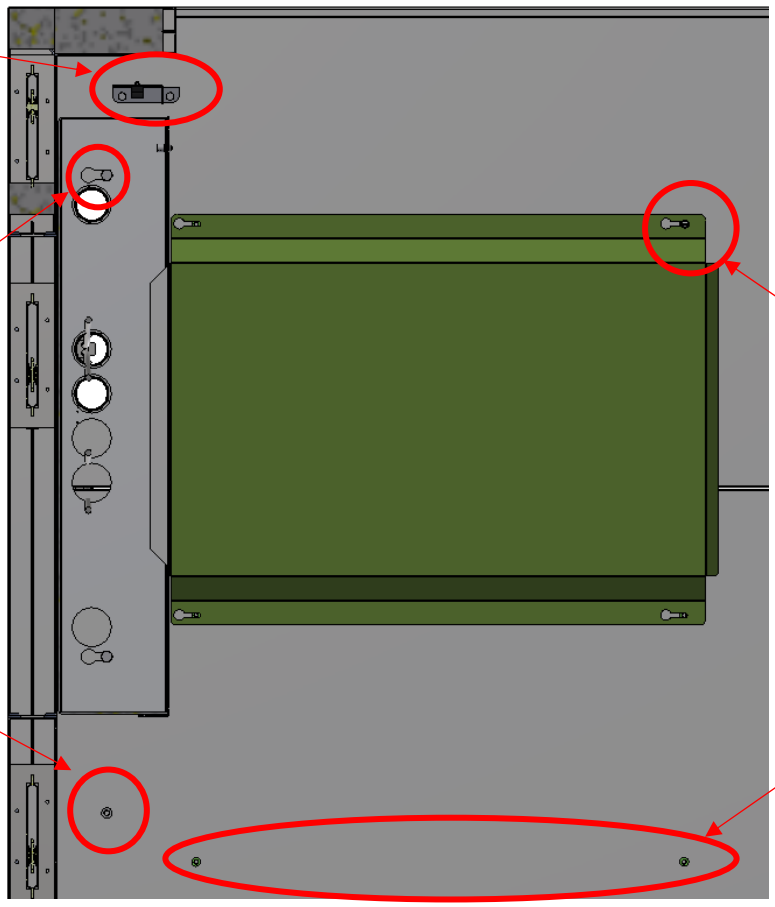
V4-575: SCREW, MACH-FH (1/4-20 X 0.75 W/ ANTI-SEIZE ND957 PATCH, PHILLIPS, 18-8 SST)

V4-576: SCREW, MACH-FH (1/4-20 X 1.00 W/ ANTI-SEIZE ND957 PATCH, PHILLIPS, 18-8 SST)

(21 PL)

PW3 HARDWARE LOCATION AND IDENTIFICATION

Ceiling, Heat Duct, Proofer





V4-138, SCREW, MACH - THUMB W/ SHOULDER (#10-32 X 1/2", 18-8 SST) (4 PER DUCT)



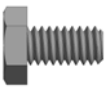
V4-611, SCREW, MACHINE - PAN HEAD (#2-56 X 0.250, PHILLIPS, 18-8 SST) (1 PL)



V4-566 NUT, HEX (#2-56, 18-8 SST) (1 PL)



V4-567, SCREW, MACHINE - HEX HEAD (#10-32 x 0.50, 304 SST) (2 PL)



V4-533, BOLT, HEX - CAP SST 304 1/4"-20 X 1/2" L (6 PER DUCT)



V4-103, INSERT, THREADED - ROUND (1/4-20, 0.375 HOLE, ALUM) (4 PER CEILING)



V15-76, CLIP, PUSH-IN - PLASTIC (BLACK, FOR 1/4-20 INSERT OR 0.187 HOLE) (2 PER CEILING)



V4-412, SCREW, MACHINE - TRUSS HEAD (10-32 X 1/2, 18-8 SST) (4 PER CEILING)

PW3 HARDWARE LOCATION AND IDENTIFICATION

01-1P2437-00001 STANDARD MISC HARDWARE PACKAGE

PACKAGE DESCRIPTION	PART NUMBER	DESCRIPTION	QTY	USED ON LOCATION
TOP	01-1000V4-00426	SCREW, SHEET METAL - HEX HEAD (#10-16 X 0.75, #3 DRILL TIP, 410 SST)	12	4X4 J BOX / COMPONENT BOX / FORWARD TRIM SIDES TO CEILING
	01-1000V4-00611	SCREW, MACHINE - HEX HEAD (#10-32 x 0.50, 304 SST)	20	CNTRL BOX COVER / UPPER FWD TRIM
INTERIOR	01-1000V4-00598	SCREW, SHEET METAL - FLAT HEAD (#10-32 X 5/8", PHLP, SST)	7	LH JAMB BUMPER SUPPORT
	01-1000V4-00609	SCREW, MACH-FLAT HEAD (#10-16 X 1.00, PHLP, SELF DRILLING, 410 SST)	30	BUMPERS
	01-1000V4-00611	SCREW, MACHINE - HEX HEAD (#10-32 x 0.50, 304 SST)	6	CORNER RETAINER ANGLES / HUMIDITY SENSOR BRACKET
	01-1000V4-00426	SCREW, SHEET METAL - HEX HEAD (#10-16 X 0.75, #3 DRILL TIP, 410 SST)	25	FLOOR TRIM / WALL BRACKETS
	01-1000V4-00138	SCREW, MACHINE - THUMB W/ SHOULDER (#10-32 X 1/2", 18-8 SST)	10	CEILING DUCT
	01-1000V4-00533	BOLT, HEX - CAP (1/4-20 X 1/2" LONG, SST 304)	20	AIR DUCT MOUNTING
	01-1000V4-00411	NUT, ACORN (10-32, 18-8 SST)	7	BUMPER TO BRACKETS
	01-1000V4-00435	WASHER, LOCK - SPLIT #10 (.20" ID X .334" OD X .047" THK, 18-8 SST)	8	BUMPER TO BRACKETS
	01-1000V5-00073	BUSHING, SNAP-1.50" HOLE (BLK)	14	AIR DUCT / HUMIDITY SENSOR
	01-100V15-00076	CLIP, PUSH-IN - PLASTIC (BLACK, FOR 1/4-20 INSERT OR 0.187 HOLE)	34	UNUSED AIR DUCT MOUNTING LOCATIONS ON WALLS
	01-100V18-0128E	BIT, DRILL (#20, SHORT)	1	MISC
	01-100V18-0129A	TAP, #10-32 UNF (4 FLUTE)	1	MISC
	01-100V15-00066	PLUG, BUTTON - 1/2" (BLACK POLYETHYLENE)	38	CAM LOCK HOLES, 1/2"
	01-100V15-00082	PLUG, DOME - BLACK PLASTIC (1.25" DIA HOLE)	11	DRAIL LINE HOLES
DOORS	01-1000V4-00100	SCREW, MACHINE - FLAT HEAD (1/4-20 X 4.00", PHLPS, 18-8 SST)	7	DOOR HANDLE/BUMPER
	01-1000V4-00412	SCREW, MACHINE - TRUSS HEAD (10-32 X 1/2, 18-8 SST)	10	CONTROL PANEL
	01-100V15-00073	CLIP, PUSH-IN - PLASTIC (BLACK, FOR 3/8-16 HOLE)	9	UNUSED HINGE HOLES
	01-1000V5-00059	BUSHING, SNAP - 7/8" HOLE (BLK)	2	WIRES, CONTROL DOOR TOP
	01-100V15-00071	BUSHING, STRAIN RELIEF (FLAT CABLE)	4	DOOR CONTROL CABLE
	01-100V15-00064	PLUG, PUSH-IN - 1/4" (BLACK)	18	HINGE PLUGS