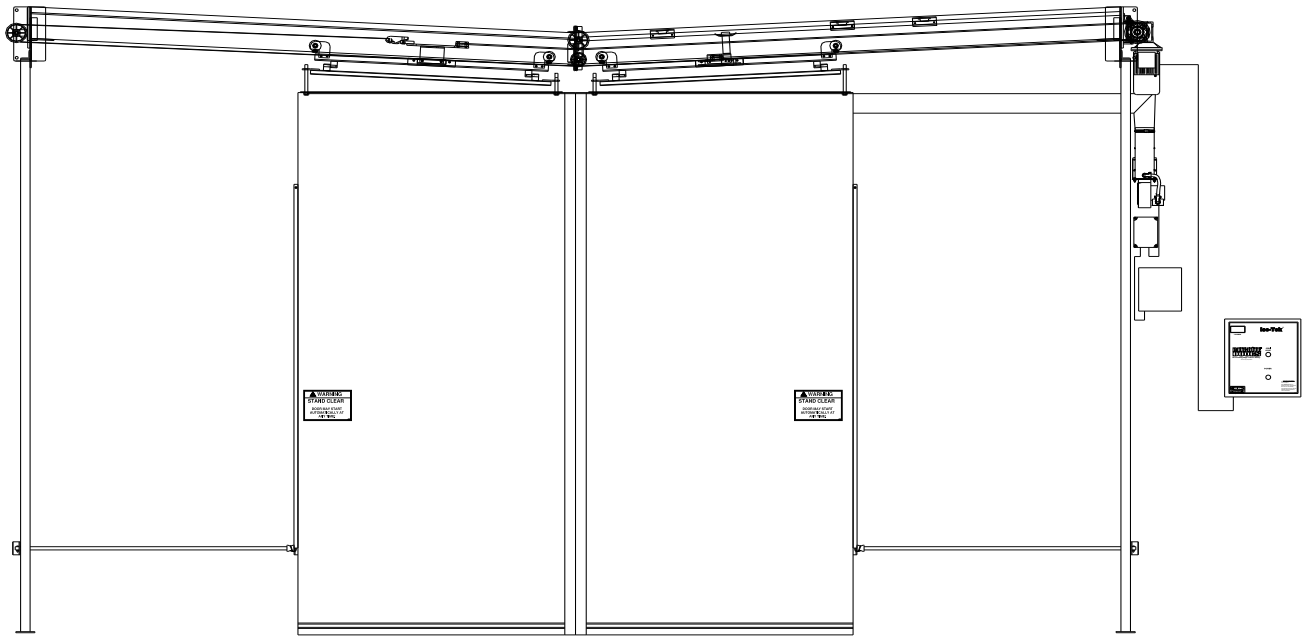
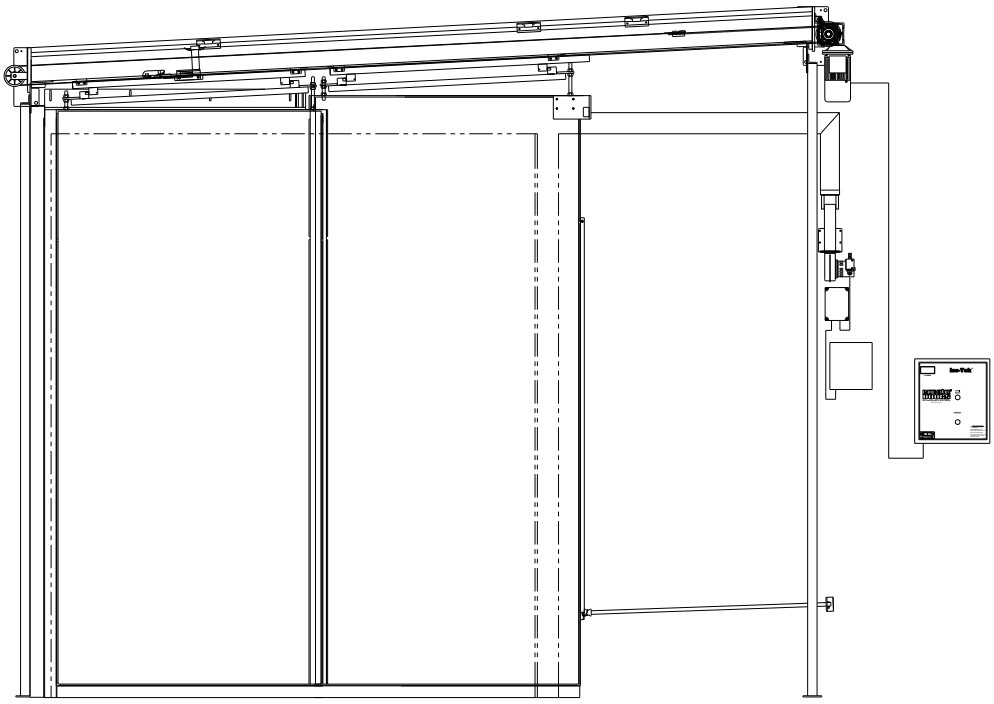
ISO-TEK®

BI-PARTING & SINGLE SLIDE DOOR

MODEL 8600





This manual to remain with the door:
Date Installed:_____

ISO 9001 CERTIFIED

RITE-HITE® ALWAYS LOOKING AHEAD

Made In the U.S.A.

This Manual Covers All Doors Shipped After 2-20-06. Refer to 8600H for door prior.

PRINTED IN U.S.A.
EMAIL: PRINTSHOP@RITEHITE.COM

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NOTICE TO END USER

Our mission is to "Improve Industrial Safety, Security and Productivity Worldwide Through Quality and Innovation."

Thank you for purchasing the ISO-TEK door from RITE-HITE DOORS, INC. The ISO-TEK Bi-Parting or Single Slide door system is a fast, smooth opening, low maintenance door that is designed to provide superior environmental separation while reducing passage time and temperature loss. The information contained in this manual will allow you to operate and maintain the door in a manner which will insure maximum life and trouble free operation.

This manual should be thoroughly read and understood before beginning the installation, operation or servicing of this door. Complete Final Checklist prior to leaving site
Refer to Partslist manual for exploded views and part numbers.

When ordering parts through Aftermarket or Warranty department, always include your door serial or RHC# to be sure that you receive the correct parts. The RHC and serial # for your door is located on a label on the side of the control box, ***Figure 16.1.*** The actual parts used on your door may be different than shown in this manual due to special engineering or product improvement.

Your local RITE-HITE DOORS, INC. Representative provides a Planned Maintenance Program (P.M.P.) which can be fitted to your specific operation. Call your local representative or RITE-HITE DOORS, INC. at 1-414-355-2600 or toll free at 1-800-456-0600. If any procedures for the installation, operation or maintenance of the ISO-TEK door system have been left out of this manual or are not complete, contact RITE-HITE DOORS, INC. Technical Support at 1-563-589-2722.

SPECIAL FEATURES

- i-COMM™ Universal Controller
- Minimal space requirements
- Impactable panels with a high R value
- Unique sloped header provides minimal seal wear
- Smooth - fast opening
- Interlocking seals provide tight seal
- Heavy - duty industrial materials
- No external heat system required
- Motor torque detection prevents damage to product and door

RECOMMENDED SERVICE PARTS

Fuse 10 Amp	51000033 (3)
Fuse 1 Amp KLDR	51000034 (3)
Patch Kit	53700186 (1)
Relay 24 VAC Dpdt 5 Amp	66450003 (1)
Side Roller	67200033 (2)
Strap Elastic	72200028 (2)
Limit Switch w/16' [4877] Cable	72700117 (1)

INSTALLATION TOOLS REQUIRED

Fork and scissors lift	#2 Square Driver, and Phillips Bit For Drill
Hydro level	Plumb Bob and Chalkline
10' [3048] Step ladder	18" [457] Clamps (2)
Cordless drill	Straps For Lifting Header (optional)
25' [7620] Tape measure	1/2" [13] & 5/8" [16] masonry and/or drill bit for thru bolting
Wire strippers	9/16" [14], 15/16" [24] open end and/or socket wrench
6' [1829] Carpenters level	11/16" x 12" [17 x 305] drill bit for thru bolting
Utility knife	Straight screwdriver (small 1/8" [3] spade)
(2) 15/16" [24] open end wrenches	***Hardware for mounting the header, support posts, retention rod, blower and perimeter seals to wall are provided. Caulk for perimeter seals is not provided. Tubes of RTV Silicone Caulk (keep warm for use)***
Hammer	
Phillips Screwdriver	
Hammer Drill and Cordless Drill (3/8" [10] or 1/2" [13])	

CHAPTER 1 - SAFETY WARNINGS

SAFETY IDENTIFICATION

DANGER

Danger indicates the presence of a hazard that *will cause severe personal injury, death.*

WARNING

Warning indicates the presence of a hazard that *can cause severe personal injury, death.*

CAUTION

Caution indicates the presence of a hazard that *will or can cause minor personal injury, death.*

NOTICE

Notice communicates installation, operation, or maintenance information that is safety related but not hazard related and may cause equipment or property damage.

NOTE:

A Note is used to inform you of important installation, operation or maintenance information.

GENERAL SAFETY NOTICES

DANGER

When working with electrical or electronic controls, make sure that the power source has been locked out and tagged according to OSHA regulations and approved local electrical codes.

DANGER

A qualified electrician should install the wiring in accordance with local and national electrical codes.
Use lockout and tagout procedures to avoid injury.

DANGER

To reduce risk of injury or death, an earth ground connection MUST BE made to the green/yellow control box ground terminal. If metal conduit is used as the ground connector, an N.E.C. approved ground bushing and green/yellow wire MUST BE properly attached to the conduit for connection to the ground terminal.

WARNING

Make sure to barricade the door opening on both sides to prevent unauthorized use until the door has been completely installed.

NOTICE

Damage or debris may fall into electrical components causing failure or severe equipment damage, when drilling holes in the box.
DO NOT turn control box upside down or go too deeply into the box.

NOTICE

In freezer and cooler applications where a conduit passes from a warm to cold temperature zone, the conduit must be plugged with epoxy. This will help prevent condensation from forming in the conduit. For more information, see Section 300-7a of the National Electric Code.

NOTICE

Do not drill holes on top of control box to run conduit, as dust particles and moisture may cause damage to electrical components. The safest location is at the bottom. Failure to do so will void warranty.

NOTICE

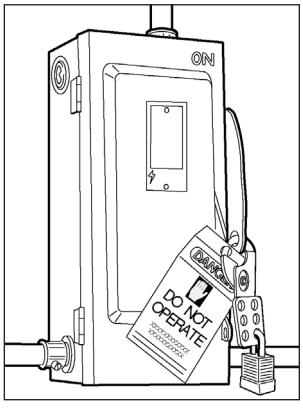
An uneven or rough floor may cause seal wear and frost to develop.

LOCKOUT/TAGOUT PROCEDURES

The Occupational Safety and Health Administration requires that, in addition to posting safety warnings and barricading the work area, the power supply has been locked in the OFF position or disconnected. It is mandatory that an approved lockout device is utilized. An example of a lockout device is illustrated. The proper lockout procedure requires that the person responsible for the repairs is the only person who has the ability to remove the lockout device.

In addition to the lockout device, it is also a requirement to tag the power control in a manner that will clearly note that repairs are under way and state who is responsible for the lockout condition. Tagout devices have to be constructed and printed so that exposure to weather conditions or wet and damp locations will not cause the tag to deteriorate or become unreadable.

RITE-HITE Corporation does not recommend any particular lockout device, but recommends the utilization of an OSHA approved device (refer to OSHA regulation 1910.147). RITE-HITE Corporation also recommends the review and implementation of an entire safety program for the Control of Hazardous Energy (Lockout/Tagout). These regulations are available through OSHA publication 3120.



CHAPTER 1 - DOOR JAMB

NOTE:

Check for electrical prints included in the parts or control box, as they supersede any prints included in this owners manual on ***Pages 30 - 34.***

It is important to verify the following basic information before starting with the installation.

TO PREVENT DAMAGE TO CONTENTS, STORE DRY BETWEEN 40° and 80° F, [4° and 27° C].

1. Alternate dimensions in brackets are in [millimeters].
2. Make sure that you are working at the correct location and that you have any special work permits.
3. Inspect the installation site to make sure that there are no overhead obstructions (sprinkler pipes, HVAC systems, electrical supply lines, etc.) that might interfere with the lifting of the header assembly during installation.
4. Detour material handling equipment during the installation.
5. Make sure that the correct electrical power is supplied to the door control box and can be shut off without interfering with other plant operations.
6. Move the entire crate of the door components as close to the door opening as possible.
7. **USE CAUTION** when moving the panel boxes, they **MUST BE** stored flat on the floor or placed with the longest side flat on the floor. **DO NOT** lean the panel boxes height wise against a wall, as panels may become warped.
8. In the case of multiple doors being installed, it is imperative to install the proper control box with the matching door unit. The serial # for your door is on a label located on the side of the control box and lower track, ***Figure 16.1.***
9. Remove the poly lumber from crate and place in same environment where it will be installed. This is to allow its temperature to equalize with the surrounding temperature and allow for shrinkage or expansion.
10. Install activation and optional equipment last after verifying door operation.

DOOR JAMB

1. Measure Door Opening Width at the top (A).
2. Measure Door Opening Width at the floor (B).
3. Measure Door Opening Height at left side (C).
4. Measure Door Opening Height at right side (D).
5. Dimensions from Steps 1 - 4, ***Figure 4.1.*** should be within ± 1/2" [13] of the dimensions listed on the serial number label. If the measurements do not agree, STOP! Contact your RITE-HITE DOORS, INC. representative.
6. Surface MUST be flat, smooth and collinear with opposite side (E).
7. Using a 6' [1829] carpenter's level (F), verify that the door jambs and header are plumb and perpendicular.
8. Using a laser level (G), place a mark where the laser is sighted on each side of the jamb to determine if the floor is level. Measure both sides from floor to the mark and if the floor is not level to within 1/8" [3], shim under the sideframe that will be located on the "Low Side" (H) (greatest measurement) of the door opening.

   For space clearance requirements, see Architectural drawings on ***Pages 49 - 51.***

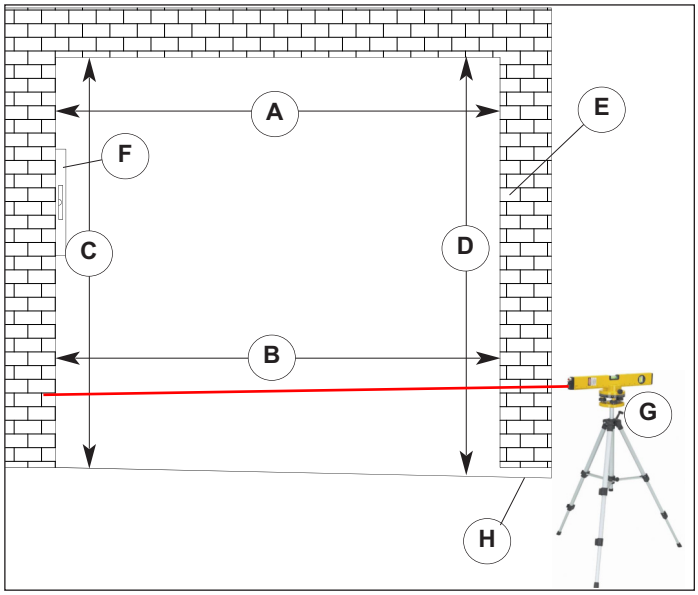


Figure 4.1

CHAPTER 1 - POLY LUMBER INSTALLATION

NOTICE

The poly lumber may warp due to temperature changes, make sure to mount the lumber flush with the chalk line.

1. Prior to raising the header, attach 15” [381] poly piece(s) (A) to header bracket(s) with #10 x 1” [25] screws provided.
2. Snap a chalk line at (B) and repeat for opposite side, ***Figures 5.1 & 5.2.***

   2P - 62 3/4” [1594]

   4P - 81 1/4” [2064]

   2PN - 44 1/4” [1124]
3. Place 2” x 8” [51 x 203] poly lumber (C) on each side of the jamb (H) on the chalk line. Secure to wall using the pre-drilled holes and the 1.8” [46] fab lock fasteners. If the fasteners are not compatible with the wall material, assure that the proper fastener is used and does not protrude beyond the poly lumber.
4. If thru-bolting is required, fastening at the top, middle and bottom is adequate, and must be countersunk. Backer plates for the poly lumber may be required.
5. Caulk the perimeter of the poly lumber and countersunk holes (if applicable) using RTV silicone before proceeding to door installation.
6. Snap a chalk line at (D) and install 2” x 8” [51 x 203] poly lumber for header seal mounting.

   2P - O.D.H. plus 7 1/2” [191]

   4P - O.D.H. plus 9 1/2” [241]

   SS - O.D.H. plus 11” [279]
7. If there is a gap between the two vertical frames and the horizontal frame, fill the gap with the 5/8”Ø [16] foam (E) provided and caulk in place.
8. If blockout Is required this space will need to be blocked out (F) for retention straps.
9. Place longest 2” x 8” [51 x 203] poly lumber (G) on the non-drive side and O.D.H. plus 3 1/2” [89] on drive side. Secure to wall using the pre-drilled holes and the 1.8” [46] fab lock fasteners. If the fasteners are not compatible with the wall material, assure that the proper fastener is used and does not protrude beyond the poly lumber.
10. 118 1/4” [3004] Poly lumber for horizontal seal mounting (R).

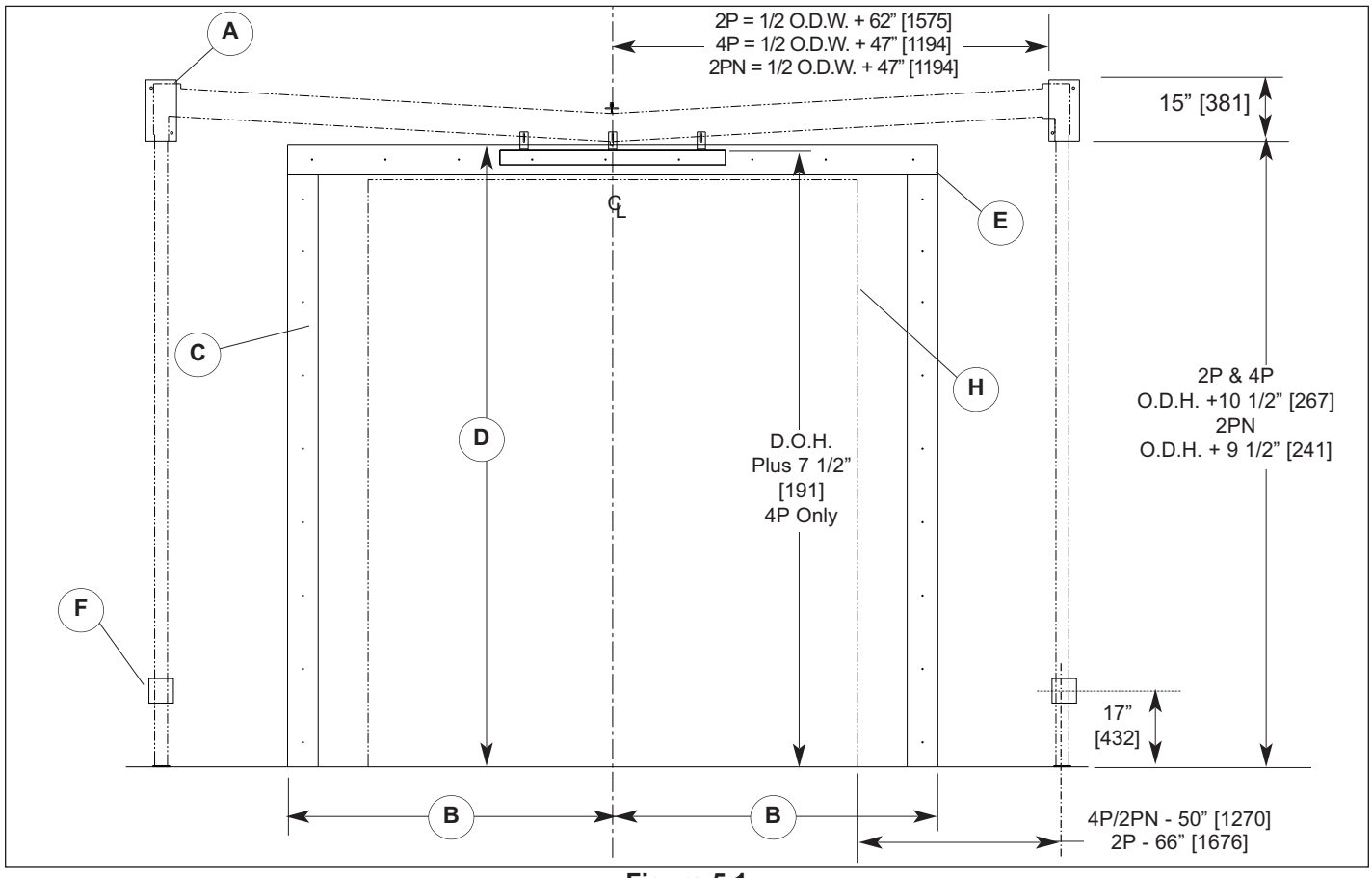


Figure 5.1

CHAPTER 1 - POLY LUMBER INSTALLATION

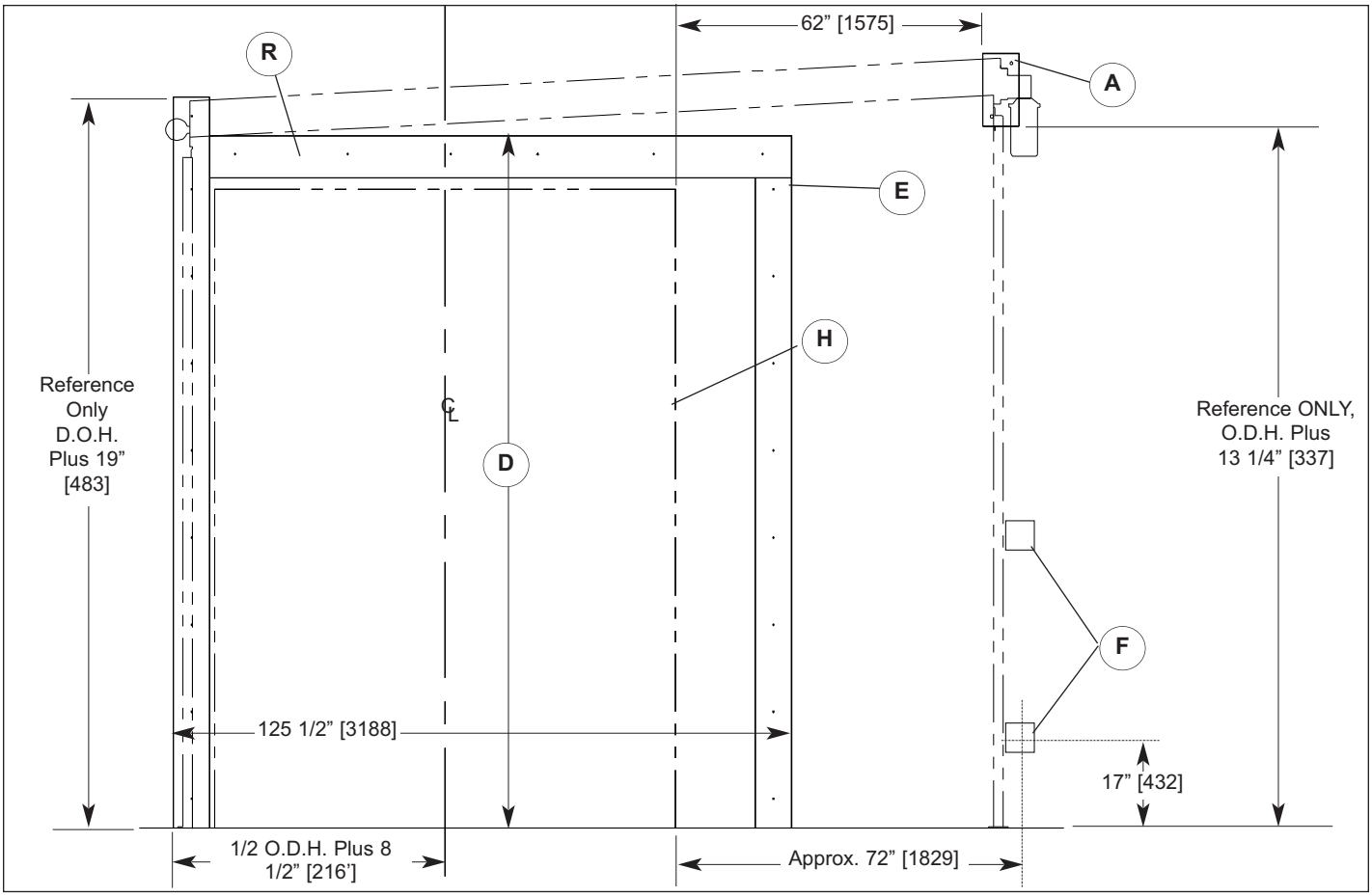


Figure 5.2

NOTE:

If the wall is a flat surface and can be securely mounted to, the poly lumber is not required.

If the poly lumber kit is utilized, it is important that the thickness of the material be added to the overall dimensions when determining space availability. The header must be spaced out an equivalent distance to the seal spacing from the wall.

If thru-bolting is required on the poly lumber, fastening at the top, middle and bottom is adequate, and must be countersunk.

If the poly lumber kit was purchased with the door, hardware and backplates for mounting the header to the wall are provided.

Hardware for mounting the poly lumber to wall, provided if it is a sheet metal wall and fasteners provide a secure method of fastening to the wall. If not proper hardware must be purchased in the field. Hardware for fastening support posts to concrete are included.

RITE-HITE DOORS NOTES PAGE

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CHAPTER 1 - HEADER INSTALLATION

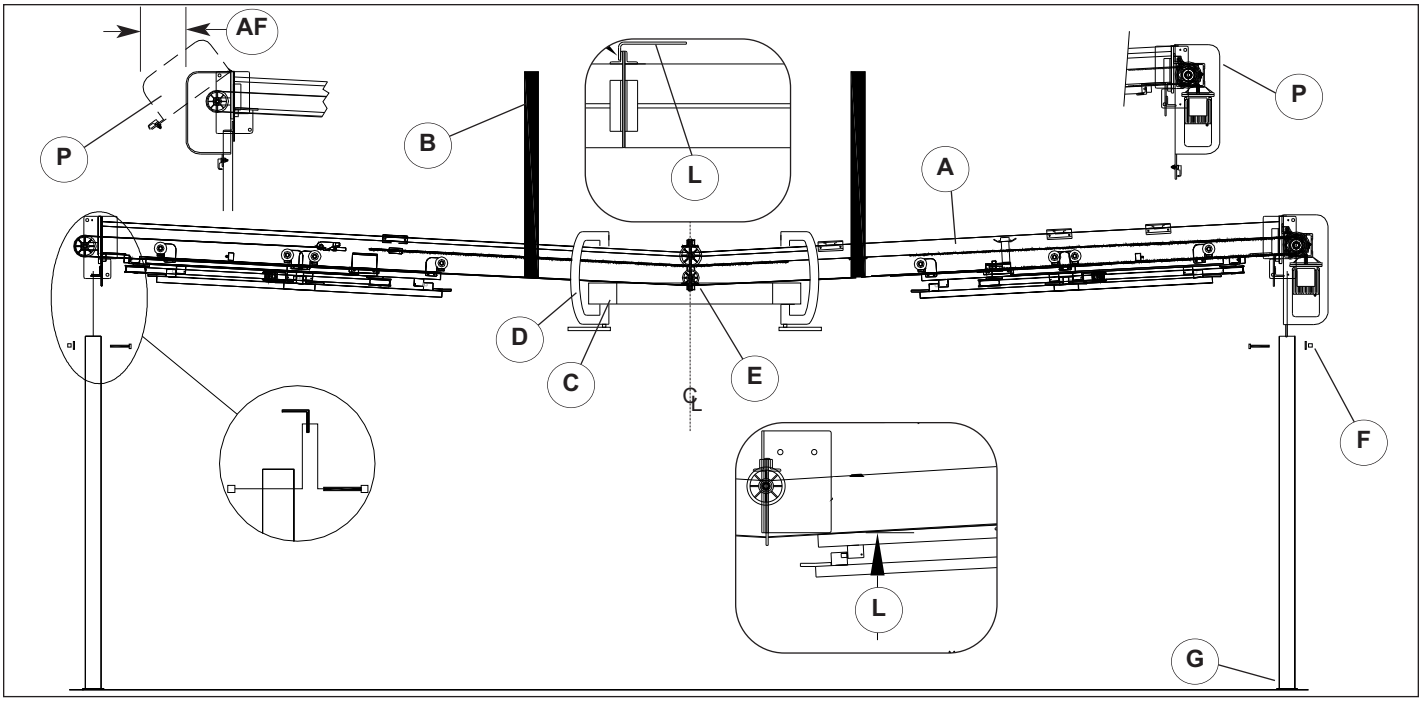

Figure 8.1

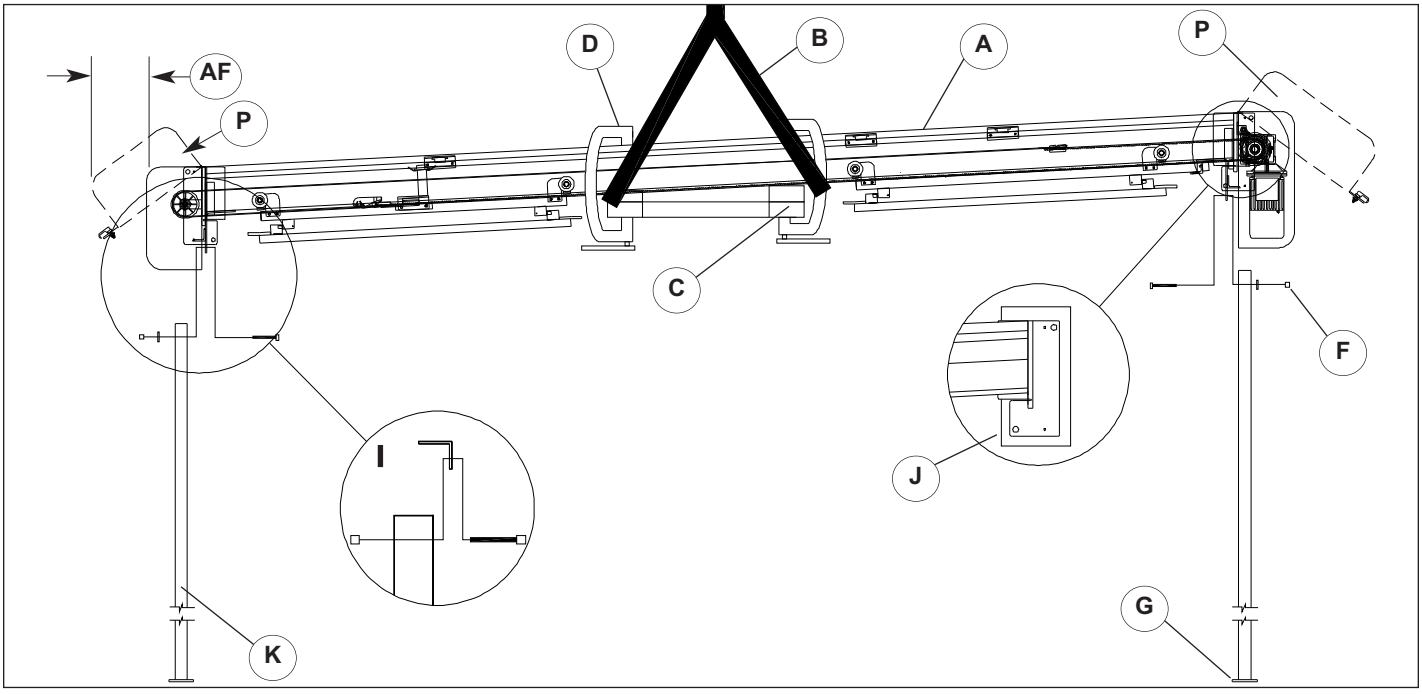

Figure 8.2

NOTICE

If nylon all thread is used for thru-bolting in freezer applications, use caution not to overtighten.

NOTICE

It is HIGHLY recommended to thru-bolt the header with the all threaded rods provided as this is the main support for the door.

CHAPTER 1 - HEADER INSTALLATION

1. The preferred method of raising the header (A) is to lift with two cargo straps (B), (rated for 1000lb [454 kg] minimum each). Straps may need to slide toward drive side, as it is heavier and can cause the header to be unbalanced. Be sure to route the straps underneath all belting to prevent damage to the drive system.
2. Cut wire tie and slide trolleys to the end of the header to make room for straps or dunnage (C).
3. Place the header in front of the jamb and center so it is in the proper place when lifting, ***Figures 8.1 & 8.2.***
4. Make sure to clamp (D) forks opposite the motor to prevent straps or dunnage from sliding off and the header from tipping.
5. Carefully raise header and center header over opening.

Do not move forklift until all header fasteners are in place.

6. Align the center splice (E) of the header with the center mark on wall and with support posts providing support by resting on the floor. Plumb the posts in both directions.
7. Fasten support posts to header using the 3/8” x 3” [10 x 76] bolts, washers and lock nuts provided (F).
8. With the header centered in the opening, mark the holes for anchoring the posts. Use the four 3/8” x 2 3/4” [10 x 70] concrete anchors for floor (G).
9. For BP - with the header centered in the opening, mark the holes for mounting the header and fasten using the four 1/2” x 24” [13 x 610] threaded rods.
10. For SS - Attach 15” [381] poly lumber to header bracket (J).
11. For SS - with the header positioned 8” [203] from edge of the jamb (AE), mark the holes for mounting the header and fasten using the four 1/2” x 24” [13 x 610] threaded rods.
12. For SS - The support post with the holes for mounting the end panel needs to go on the non-drive side (K). The drive side post is offset (AD).
13. Fasten bracket to the wall (Q).
14. 2 9/16” [65], plus blockout thickness (M), ***Figure 8.3.***
15. After header is installed make sure that it is level from front to back (N).
16. Rear header bracket mounted at O.D.H. + 10” [254] (L), ***Figure 8.1.***
17. End caps (P) are optional for the drive and non-drive sides, and require 10”156” [254-381] (AF) clearance to open, as they hinge at the top, and lift upward. To remove end caps, lift latch handle and pull upward.
18. Header facing is optional. Limit switch adjustment can be made without removal of the facing. To install facing align latches with slot on top of the header and turn clock-wise to fasten, to remove facing, turn latches at top of header.

    Make sure the center header facade mounting bracket does not interfere with the approach open limit switch function. If so, adjust the limit switch toward the opening so it is fully operational. Make sure the outside brackets do not interfere with open or closed limit switches, ***Figures 8.4 & 8.5.***

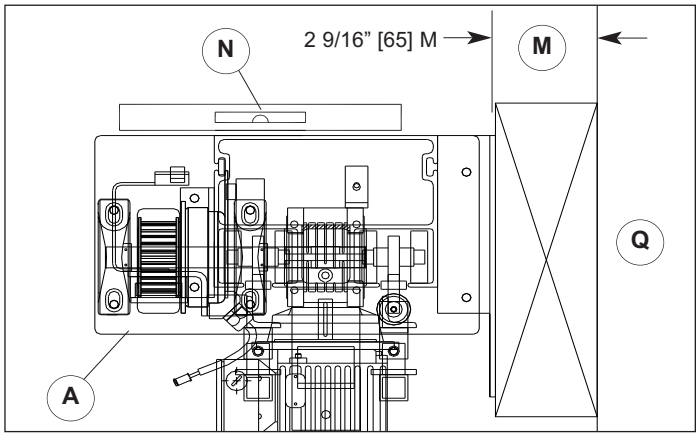

Figure 8.3

COMPONENT KEY:

R- LH Facade
S - RH Facade
T - Open limit switch
U - Close limit switch
V - Approach close and open limit switch
W - Creep Open limit switch (CE only)
X - Drive Assembly (Motor/Gearbox, Clutch, Pillow block bearing)
Y - L/S trip plate
Z - Header wall mounting brackets
AA - Non-drive flat belt pulley
AB - Drive belt center pulley
AC - Flat belt center pulley

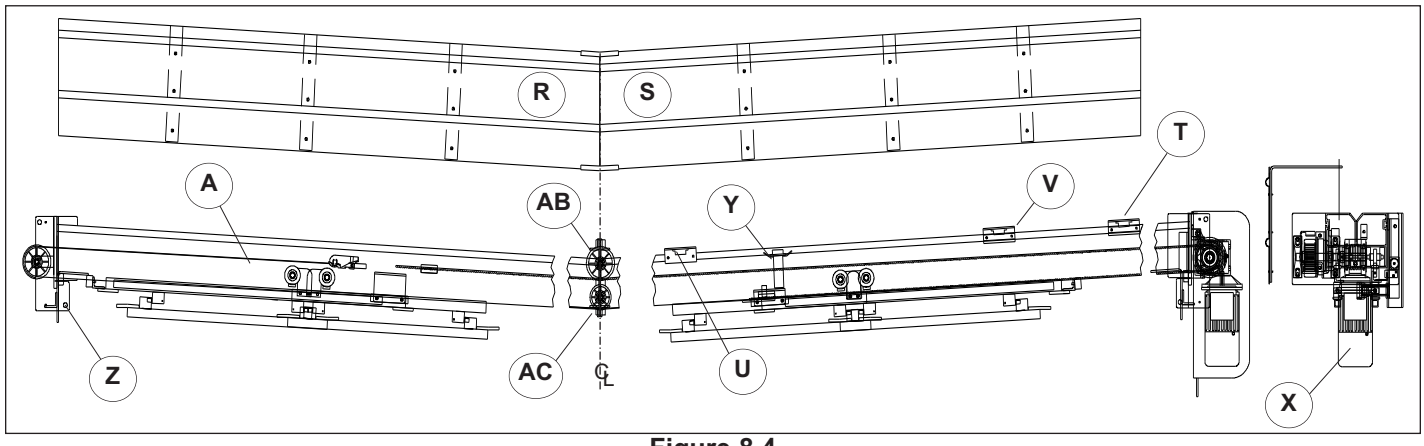

Figure 8.4

CHAPTER 1 - HEADER INSTALLATION

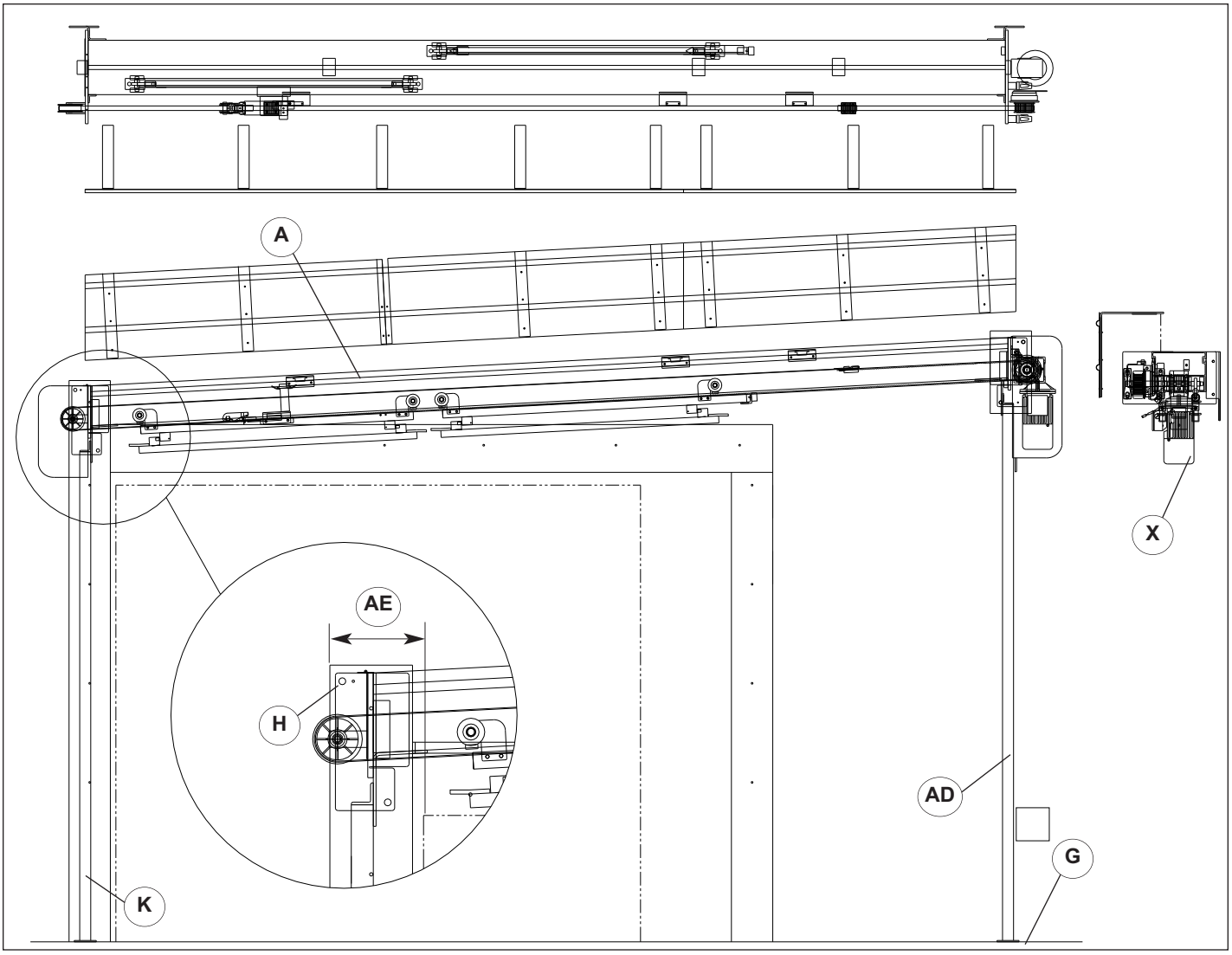

Figure 8.5

SIDE PANEL INSTALLATION

1. Place the side panel (A) to the inside of the non-drive support post (B) with the angles (C) facing away from the opening. This post will have holes for fastening the side panel. Using the 3” [76] phillips head screws provided, fasten the side panel to the support post. Use Caution not to overtighten the screws, ***Figure 8.6.***
2. Square the side panel to the wall or poly lumber and using the 1” [25] phillips head screws (D) provided, fasten to the wall using all the holes in the angle. The side panel may have two, three or four angle brackets.
3. Caulk the perimeter of the side panel (E) to avoid temperature loss and frost buildup.

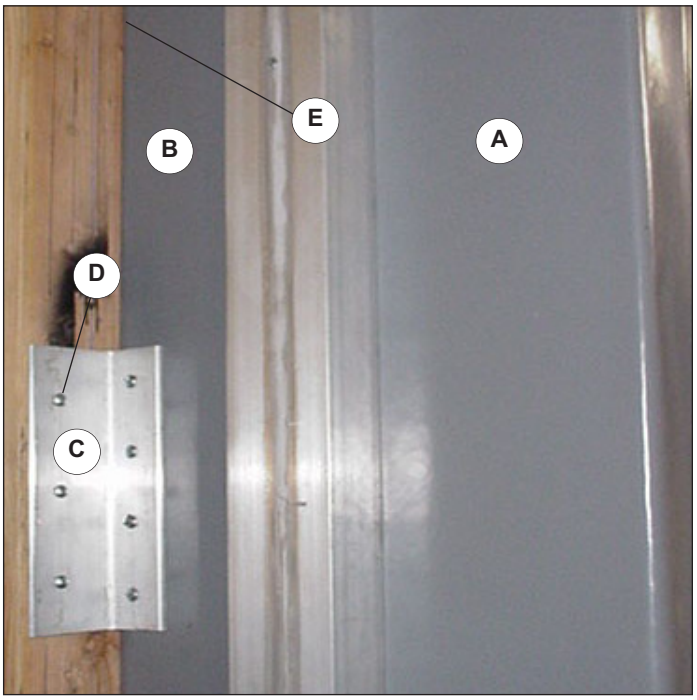

Figure 8.6

CHAPTER 2 - THERMAL AIR SEAL INSTALLATION

LINTEL SEAL (4P)

1. Place a mark on the center of the lintel seal. Align with the centerline mark of the door jamb and the chalk line snapped at O.D.H. plus 7 1/4" [184], ***Figure 11.2.***
2. Fasten to wall using the fasteners provided or a fastener suitable for the wall that it is being mounted to.

LINTEL SEAL (SS)

1. Align the top of the aluminum Lintel Seal at O.D.H. plus 8 3/4" [222] at the snapped chalk line and tight against the side panel, ***Figure 11.3.***
2. Fasten to wall using the fasteners provided or a fastener suitable for the wall that it is being mounted to. Place fasteners in the middle of the slot on the lintel seal bracket for adjustment to slide up or down.
3. Caulk the seal between the lintel seal and the side panel after the door is running and seals adjusted.

THERMAL AIR SEAL

1. Lay thermal air seal (O) assembly on the floor. The extended section (A) with short 90° bend will be on the drive side, ***Figure 11.1 -*** 2P, ***Figure 11.2 -*** 4P and ***Figure 11.3 -*** SS.
2. Mark the centerline of the jamb, at the top of the lintel. Place horizontal marks across the header up from the top of the jamb as follows:

   2P - 5 1/4" [133]
   4P - 7 1/4" [184]
   SS - 8 3/4" [222]
3. Fasten air seal and rail every 18" [457] (B) using the fasteners provided or a fastener suitable for the wall that

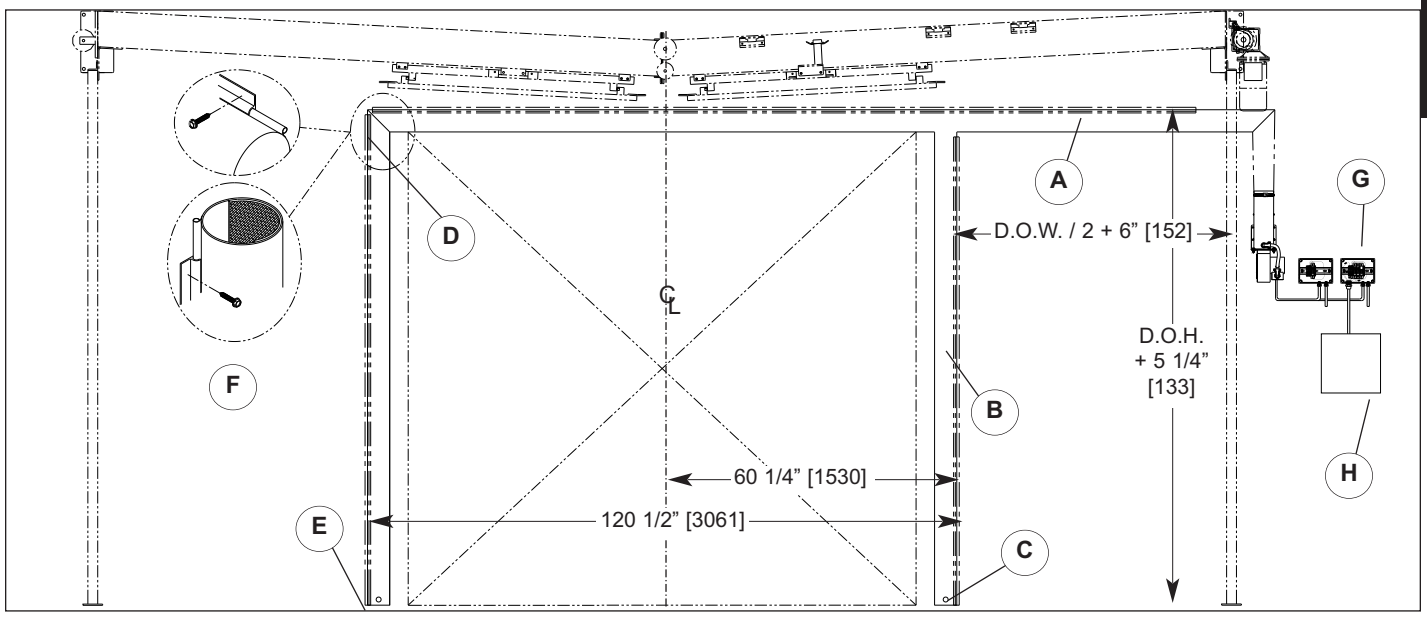

Figure 11.1 - 2 Panel

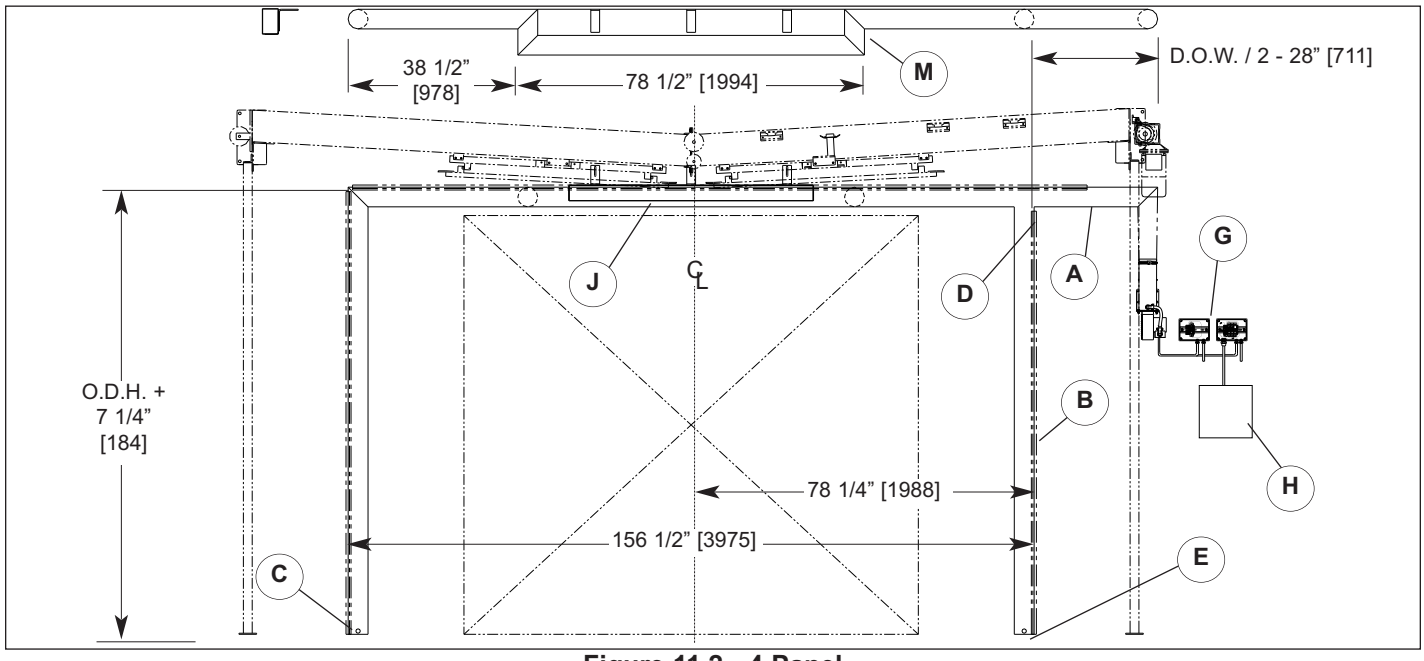

Figure 11.2 - 4 Panel

CHAPTER 2 - THERMAL AIR SEAL INSTALLATION

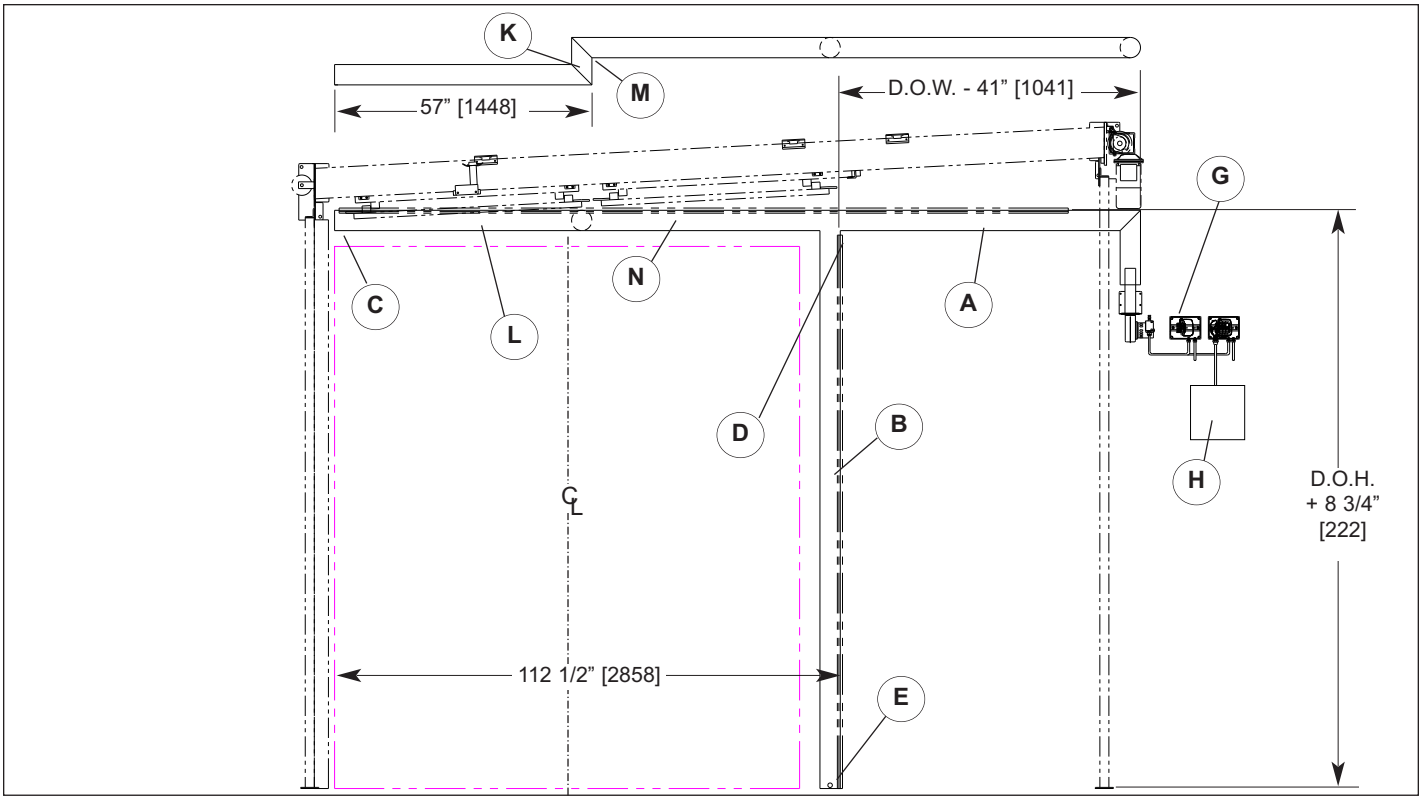

Figure 11.3 - Single Slide

it is being mounted to.

4. Place marks on the side of the jamb from the centerline of the opening as follows to outside of rails:

   2P - 60 1/4" [1530]
   4P - 78 1/4" [1988]
   SS - From the non-drive side of the opening, measure over 112 1/2" [2858] and place marks on the drive side of the jamb.

5. With air seal tight to floor and exhaust hole (P) free and toward the warm side (C), place a screw in the predrilled holes of the retainer, 3" [76] from the top and bottom (E) to hold in place, ***Figure 11.4.***

6. At the top of the side seal, pull seal taught, making sure seal is twist and wrinkle free and place screw through bulb (Q) to prevent from sliding down (D).

7. Repeat procedure for opposite side.

8. Assure that with the door in the closed position the air seal is sealing on the back side of the panels. If seal is past the end of the panel, loosen the retainer and move the seal closer to the opening. It is critical to have the seal properly sealing against the panel, versus the seal being mounted at an angle.

9. Side view orientation w/insulation toward cold side (F).

10. Junction box (G) and optional step down transformer (H).

11. Lintel seal (J).

    SEAL SHOULD NOT HANG INTO OPENING.

12. Lintel seal (K), Lintel front rail (L), Panel stop (M), Horizontal wall rail (N).

13. Place fasteners in the middle of the slot on the lintel seal bracket for adjustment to slide up or down.

14. Caulk the seal between the lintel seal and the side panel after the door is running and seals adjusted.

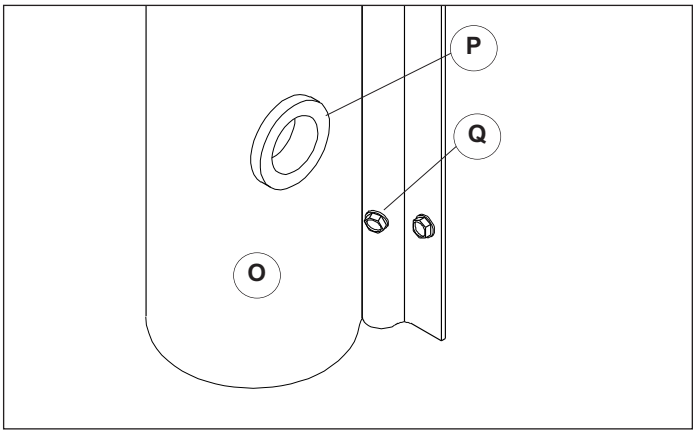

Figure 11.4

NOTICE

Use Caution When Fastening Seal to the Wall, So As Not to Puncture the Air-Seal.

NOTICE

Air seal legs should touch the floor allowing air to exit away from the freezer and should not have twists that obstruct air flow.

NOTICE

DO NOT BEND PANELS! Handle with care, panels must be laid flat on the floor or stood longest side on the floor.

CHAPTER 3 - RETENTION SYSTEM INSTALLATION

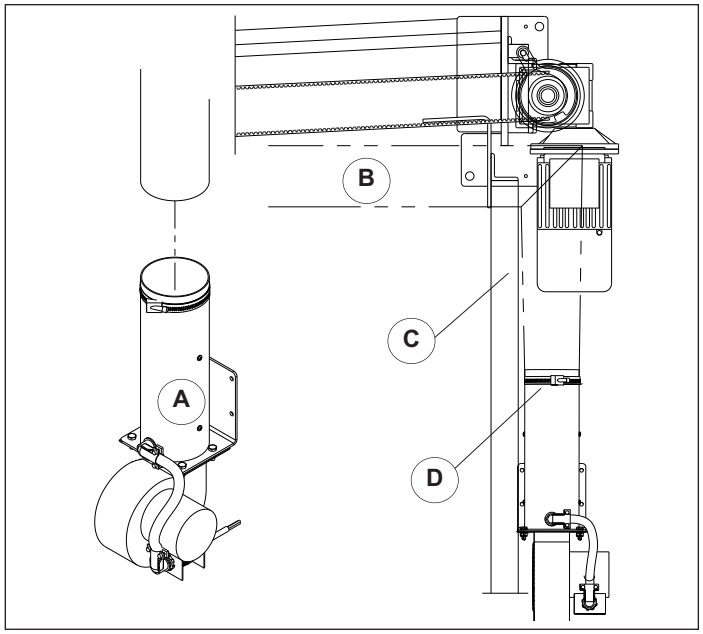

Figure 13.1

BLOWER INSTALLATION

1. Mount the blower unit (A) to the wall in line with the 90° extension (B) of the air seal (B). No part of the blower should be to the inside of the support post (C), ***Figure 13.1.***
2. The 5' [1524] 120V blower cable will need to be hard wired to a junction box. Plugging into an outlet is not recommended as blower must continuously run.
3. Place air seal (B) around the tube on the blower unit, remove wrinkles and strap in place with the clamp (D). Thermal Air seal outlet is high temp fabric, do not replace or add to it.
4. Assure that with the door in the closed position the air seal is sealing on the back side of the panels. If air seal is past the end of the panel, loosen the retainer and move the seal closer to the opening. It is critical to have the seal properly sealing against the panel, versus the seal being mounted at an angle.

NOTE: ***End user is responsible for 120V supply to the blower unit. Wire blower unit per drawings on Pages 30 - 34.***

Blower unit MUST be mounted on a flat surface, if the wall has ridges mount so it spans over two of the ridges.

COMPONENT KEY:

J - Close limit switch

K - Approach closed or open limit switch

L - Creep Open limit switch

M - Open limit switch

N -Trolley

P - Adjusting nut

Q - Panel hanging stud

R - Panel hanger

S - Optional vision

T - Follower panel

U - Optional accent panel

V - Nose engaged with side seal at the bottom, with 2" [51] gap at the top.

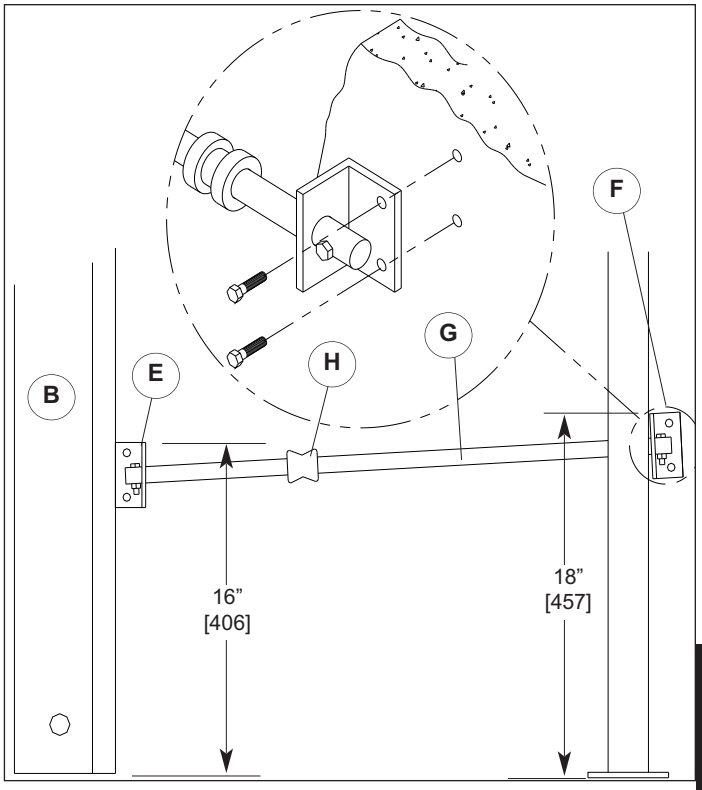

Figure 13.2

5. Fasten the inside slide rod bracket (E) to the wall 16" [406] from the floor to the top of the bracket with the edge of the angle against the aluminum retainer, ***Figure 13.2.***
6. Fasten the outside slide rod bracket (F) 18" [457] from the floor to the top of the bracket and past the support post.
7. Slide rod (G), Collar (H).

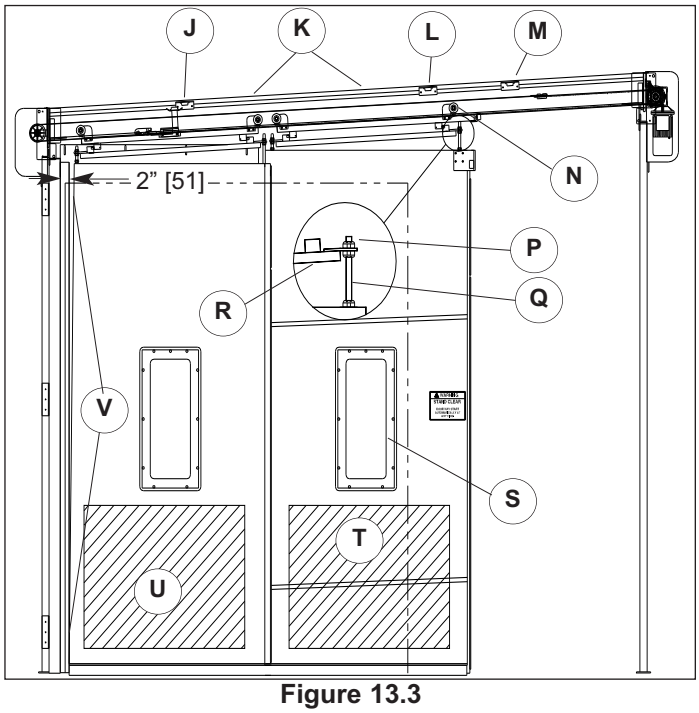

Figure 13.3

Panel Install

CHAPTER 3 - PANEL INSTALLATION

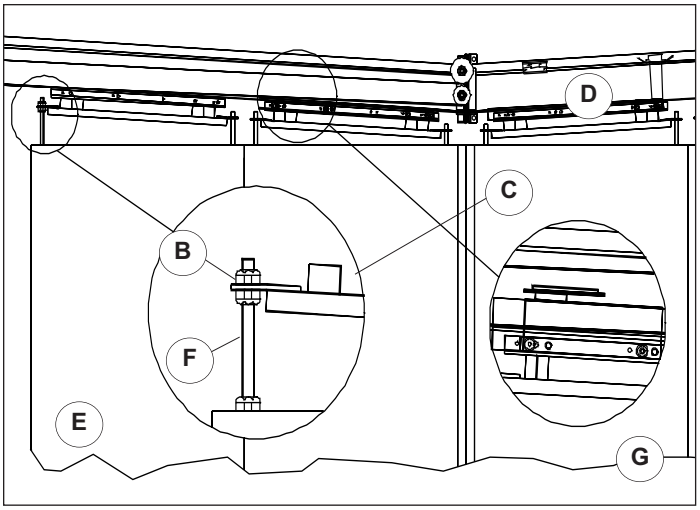

Figure 14.1

1. Place panel (A) on it's side and remove the top 5/8" [16] nut (B).
2. Push the panel hangers (C) toward the outside of header (D).
3. With the 4P or SS design, install the follower panels (E) to the rear panel hangers closest to the wall. The follower panels will be marked B-RH and B-LH. The 2 lead panels will be marked A-RH and A-LH.
4. Install panel, making sure not to allow the panel to bend. Insert the studs (F) at the top of the panel through the panel hanger holes and fasten with the 5/8" [16] nut (15/16" wrench) removed prior, ***Figures 13.3 & 14.1.*** If room is limited, the stud may need to be loosened up and turned into panel to be able to get the panel low enough. Make sure to turn the stud back out the same number of threads turned in.
5. If the door is a 2P design, install the lead panels in the same manner as the follower panel were installed.
6. If the door is a 4P or SS design push door to full open position and clamp belting together to prevent the door from closing. Lift lead panel into place and insert studs through the panel hanger holes.
7. If panels on the 4P door are not centered when closed, center the door with the non-drive side panel adjusting plate (G), ***Figure 14.1.***
8. The lead panels will need to be adjusted with door closed so that the bottom of the panel provides a tight seal at the floor, and the nose seals the full height of the door.
9. For SS doors, adjust the lead panel so the bottom of the nose seal is touching the side seal and there is a 2" [51] gap at the top of the side panel.

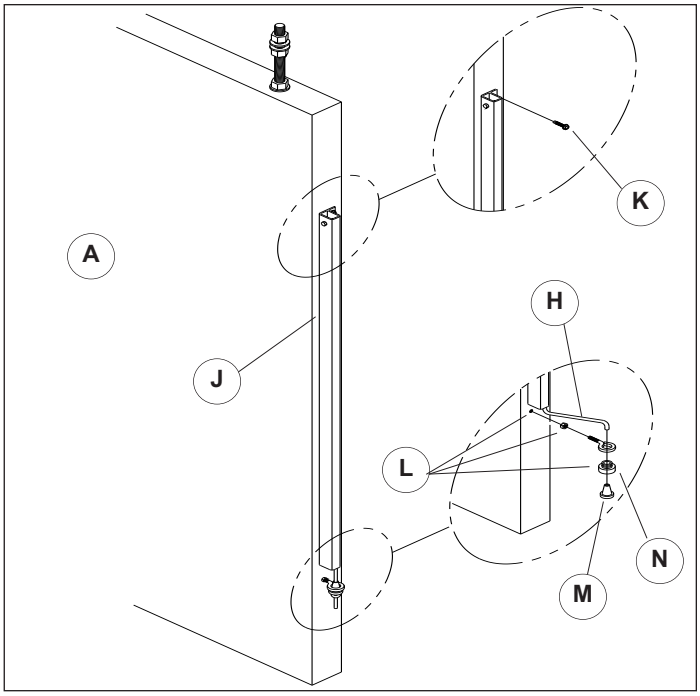

Figure 14.2

10. To adjust lead panels, push the panels closed and tighten all 5/8" [16] nuts so that the opening is sealed. Make sure there is at least 2 or 3 threads of the bolt sticking out past the nut, if not, turn stud out of panel.
11. Adjust the vertical position of the lead panel so the back end of the floor seal is compressed at least 1/2" [13] with the door in the closed position.
12. Final adjustment should occur after door is operational.

CHAPTER 3 - PANEL INSTALLATION

PANEL RETENTION SYSTEM

1. Fasten the spring loaded tube (J) on the side of the panel at the pre-marked holes (K) with the cord toward the floor, ***Figure 14.3.***
2. Screw nut and eyebolt (L) into the tapped hole on the side of the panel. The panel eyebolt should be approximately 3 1/2” [89] above the center of the slide rod.
3. Cord (H) should be tensioned to maintain a 3 1/2” [89] gap from the panel to the wall. Repeat process for opposite side.
4. Make sure the insert is seated in the eyebolt when adjusted.
5. Insert cord thru the top of the eyebolt with eyebolt insert (N) facing up, pull 6” [152] of cord out, tie a knot below the eyebolt insert (M) and then wrap around the slide collar (P) and fasten with cable clamp (Q), cut excess cord.
6. Attach lead panel strap ring (R) to the follower panel retention strap (S), ***Figure 14.4.***
7. Locate the right hand or left hand follower panel bracket (T) and the (2) 1/4-20 x 3/4” [6 x 19] allen head screws located in the parts box. When the door opens, the lead panel will catch the follower panel bracket and pull the panel open.
8. Mount the bracket to the upper outside corner of the follower panel, using the fasteners provided, ***Figure 14.5.***

NOTICE

DO NOT pull the cord so tight that the seal becomes distorted. This will cause lack of air flow and may result in moisture or frost build up.

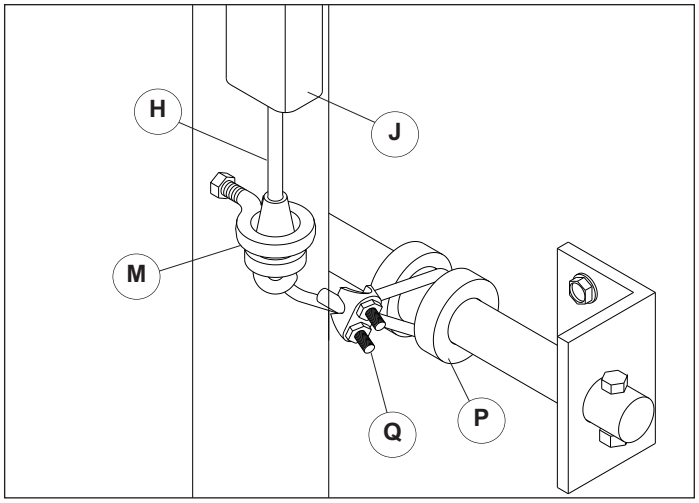

Figure 14.3

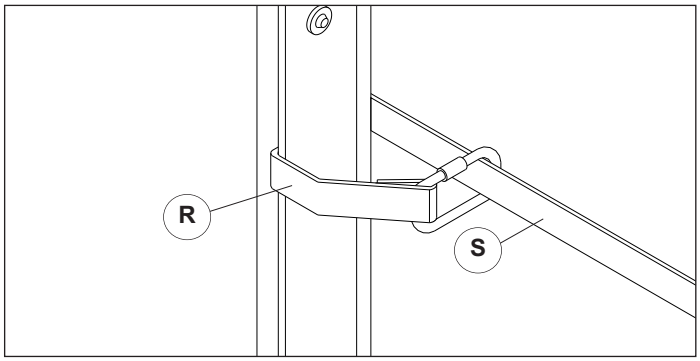

Figure 14.4

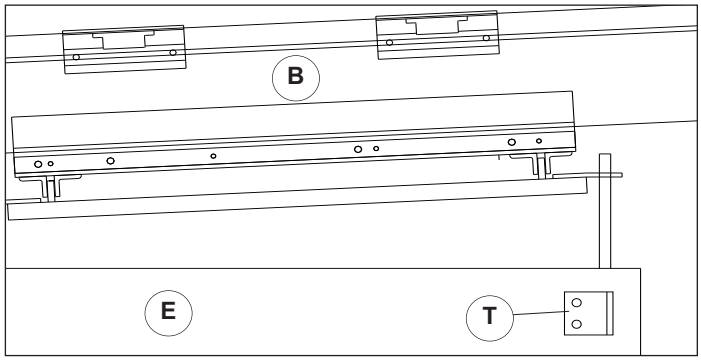

Figure 14.5

CHAPTER 4 - ELECTRICAL INSTALLATION

DANGER

When working with electrical or electronic controls, make sure that the power source has been locked out and tagged according to OSHA regulations and approved local electrical codes.

DANGER

A qualified electrician should install the wiring in accordance with local and national electrical codes.
Use lockout and tagout procedures to avoid injury.

DANGER

To reduce risk of injury or death, an earth ground connection MUST BE made to the green/yellow control box ground terminal. If metal conduit is used as the ground connector, an N.E.C. approved ground bushing and green/yellow wire MUST BE properly attached to the conduit for connection to the ground terminal.

NOTICE

Do not drill holes on top of control box to run conduit, as dust particles and moisture may cause damage to electrical components. The safest location is at the bottom. Failure to do so will void warranty.

NOTICE

In freezer and cooler applications where a conduit passes from a warm to cold temperature zone, the conduit must be plugged with epoxy. This will help prevent condensation from forming in the conduit. For more information, see Section 300-7a of the National Electric Code.

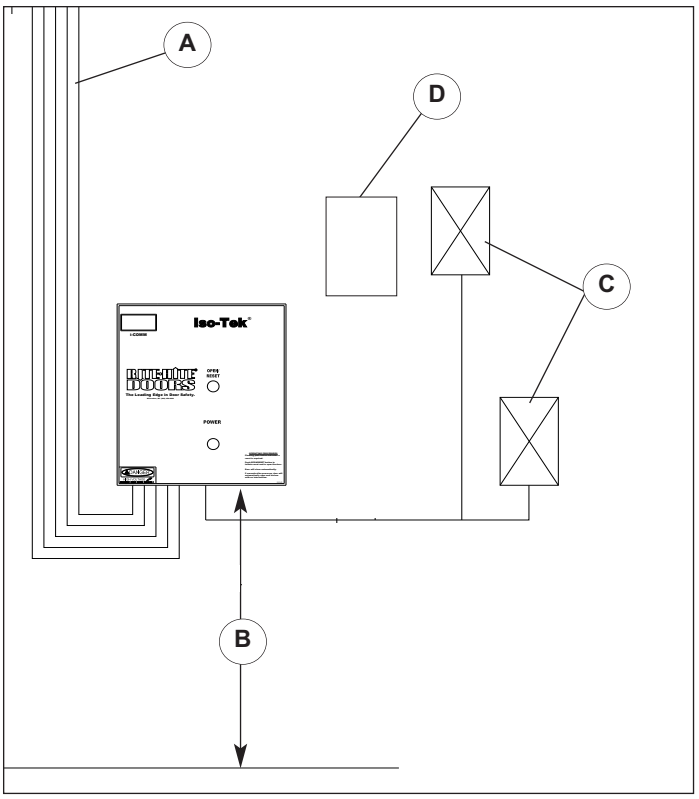

Figure 16.1

WARNING

Make sure to barricade the door opening on both sides to prevent unauthorized use until the door has been completely installed.

NOTICE

Damage or debris may fall into electrical components causing failure or severe equipment damage, when drilling holes in the box.
DO NOT turn control box upside down or go too deeply into the box.

1. It is the responsibility of the installing electrician to be sure all local, state, and national electrical codes are met.

2. Local electrical codes may require the use of rigid conduit or a junction box when running the electrical cables from the header down to the control box. Make sure to route all conduit through the bottom of the control box.

3. Motor, clutch, limit switch and fan cables (A) come prewired ready to be wired into the control box. Control box to activation (pull cords, motion detectors, etc.) conduit run, by others.

   The door frame is grounded via the motor ground wire provided.

4. It is the responsibility of the buyer to provide electrical service up to the control box with proper branch service protection (C) and an approved means of disconnect. See amperage chart on ***Page 31.***

5. Drill a hole for the power supply cable (by others) in the bottom of the control box.

6. All control boxes should be mounted on the warm side or on the wall adjacent to the door 54” [1372] from floor to bottom of box and 6” [152] from support post.

7. The control box is provided with class CC protective fusing for the incoming power.

8. Connect wiring as indicated by the device field wiring diagram located on ***Pages 30 - 34***. Incoming 3-phase power must connect into terminals L1, L2, and L3. Ground must attach to the green/yellow terminal.

9. The incoming power terminals in the control box will not accommodate wires larger than 10AWG.

NOTE:

Route all field installed wires inside the control box so that separation is maintained between line voltage wires and low voltage class II wiring.
575V Doors require the transformer to be in a separate control box (D), which will be mounted near the door control box.

CHAPTER 4 - ELECTRICAL INSTALLATION

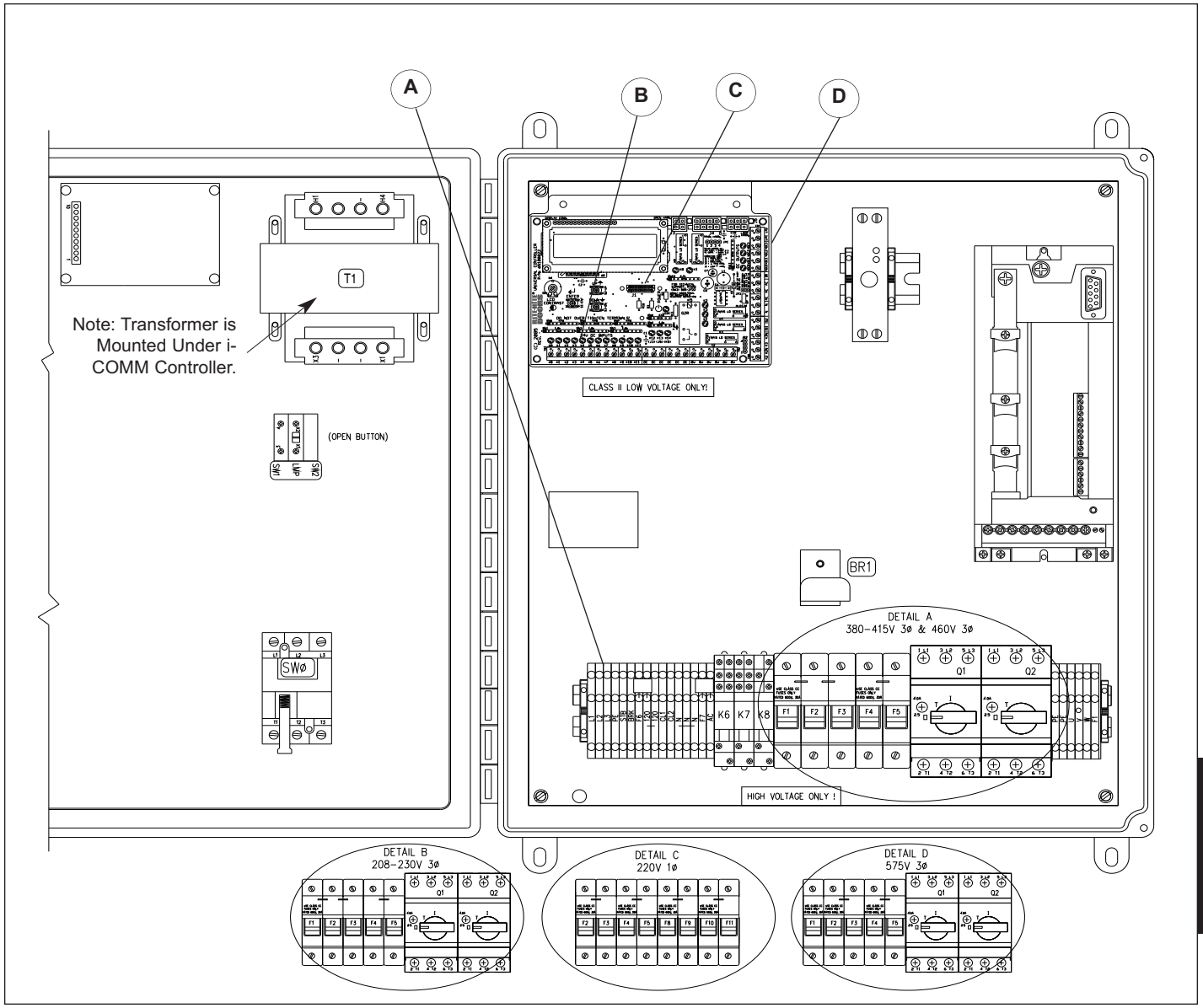

Figure 16.2

A - Incoming Power Terminals: L1, L2, L3
B - Input LED's
C - Downloader Receptacle
D - Output LED's

CHAPTER 4 - I-COMM DISPLAY MESSAGES

LCD DISPLAY MESSAGES:

TOP DISPLAY	BOTTOM DISPLAY	REASON / FAULT MESSAGES	ACTION REQUIRED
Door Faulted	Limit Failure	Limit switch has failed	Service Required*
	Limit Pulse Fail	n/a	
	Low Voltage	Drop in voltage caused controller to restart	Push Open/Reset*
	Menu Interrupt	Menu Interrupted	Push Open/Reset*
	Normal Power Up	Indicates Loss of Power	Push Open/Reset*
	Obstruction	Door has detected obstruction and reversed 3 times	Inspect & Reset*
	Open Time Limit	Run open time limit exceeded	Service Required*
	Reset From Sleep	Indicates the controller was awaken from sleep mode	Service Required*
	System Clock read	System clock failed	Service Required*
	Unknown	Unknown fault	Service Required*
	Unknown State	State unknown	Service Required*
	VFD Trip # xxx	Inverter is in fault. xxx Indicates the active inverter fault	Push Open / Reset
	Watchdog Timer	Indicates the boards watchdog timer has reset	Service Required*
		DOOR IS OPENING	
Door is Opening			
		DOOR IS OPEN	
Door is Open		When not in preannounce to close	None
Stand Clear		When in preannounce to close	None
	Activation On	Indicates activation on (overrides timer display)	Device Holding Open
	Closing in xx.xs	Displays closing time in seconds	None
	Waiting for cmd.	Indicates door is waiting for manual close cmd.	Close Door
		DOOR IS CLOSING	
Stand Clear	Door Closing		None
		DOOR IS CLOSED	
Door Closed	Cycles: xxxxxx	Displays cycle count	None
Door Closed	Interlock Active	Door is interlocked and cannot be opened	Perform Interlocking
		DOOR IS STOPPED	
Door Stopped	Push Open/Close		Open/Close Door

RITE-HITE® DOORS

ISO-TEK®

i-COMM™ LOGIC TABLE

NAME	Func.	INPUT FUNCTION	STATE TABLE * O	C	Ro	Rc	COMMENTS
X0		Open Limit Switch	1	Ø	1	1	On when door activates switch
X1		Close Limit Switch	Ø	1	1	1	On when door activates switch
X2	2 ___	User Input (Activation) (4)	1	1	1	1	On to open door (4)
X3	2 ___	User Input (Activation) (4)	X	X	X	X	On to open door (4)
X4		Approach Open Limit Switch	X	X	X	X	On when door activates switch
X5	3 ___	Toggle Command (4)	X	X	X	X	On to toggle open or close (4)
X6	2 ___	Activation Command - Open (4)	X	X	X	X	On to open door (4)
X7	2 ___	Activation Command - Open (4)	X	X	X	X	On to open door (4)
X8		Non-Dedicated	X	X	X	X	Non-Dedicated
X9		Non-Dedicated	X	X	X	X	Non-Dedicated
X10		Reverse	X	X	X	X	Off to reverse door.
X11		Non-Dedicated	X	X	X	X	Non-Dedicated
X12		Open/Reset Switch (1)	X	X	X	X	On to reset from fault (1)
X13		Induction Loop Activation (1)	X	X	X	X	On to open door (1)
X14		Non-Dedicated	X	X	X	X	Non-Dedicated

NAME	Func.	OUTPUT FUNCTION	STATE TABLE * O	C	Ro	Rc	COMMENTS
K0		VFDI: Speed bit 1	Ø	Ø	1	Ø	On when door is opening
K1		VFDI: Speed bit 2	Ø	Ø	X	1	On when door is closing and fast open.
K2		Brake Output	1	1	Ø	Ø	On to engage motor brake.
K3	Ø ___	User Out (Interlock) (4)	Ø	1	Ø	Ø	User selectable output (4)
K4		Fault	1	1	1	1	On when no fault.
K5		Fault	1	1	1	1	On when no fault.
YDC0	2 ___	User Out (Preannounce) (4)	X	Ø	Ø	1	User selectable output (4)
YDC1	20___	User Out (4)	X	X	X	X	User selectable output (4)
YDC2	20___	User Out (4)	X	X	X	X	User selectable output (4)
YDC3	20___	User Out (4)	X	X	X	X	User selectable output (4)
J3-1		Fault (Flashing Push-button)	Ø	Ø	Ø	Ø	On when in fault
J3-2		Non-Dedicated	Ø	Ø	Ø	Ø	Non-Dedicated

Timer Adjustment

1. PRESS [ENTER]. Controller will stop and fault door.
2. Press [UP] until desired timer is displayed, display will read "Set Close Timer" or "Set Preannounce".
3. Press [ENTER]. Display will show current timer value.
4. Using [UP] & [DOWN] keys select desired time.
5. Press [ENTER] to return to Main Menu.
6. Press [DOWN] until exit is displayed.
7. Press [ENTER] to save values.
8. Reset Door.

Preannounce Timer is the amount of time the Preannounce to close output will be on before door closes.

Close Timer is the amount of time the door will remain open before the preannounce to close timer activates

*** KEY:**

O = Open State Ø = OFF
C = Closed State 1 = ON
Ro = Running Open X = May be ON or OFF
Rc = Running Close

NOTES:

(1) Device operation can be changed through menu. Consult i-COMM manual for additional details.
(4) Default setting shown in table & comments. Record any changes on space provided. Consult I-COMM manual for additional details.

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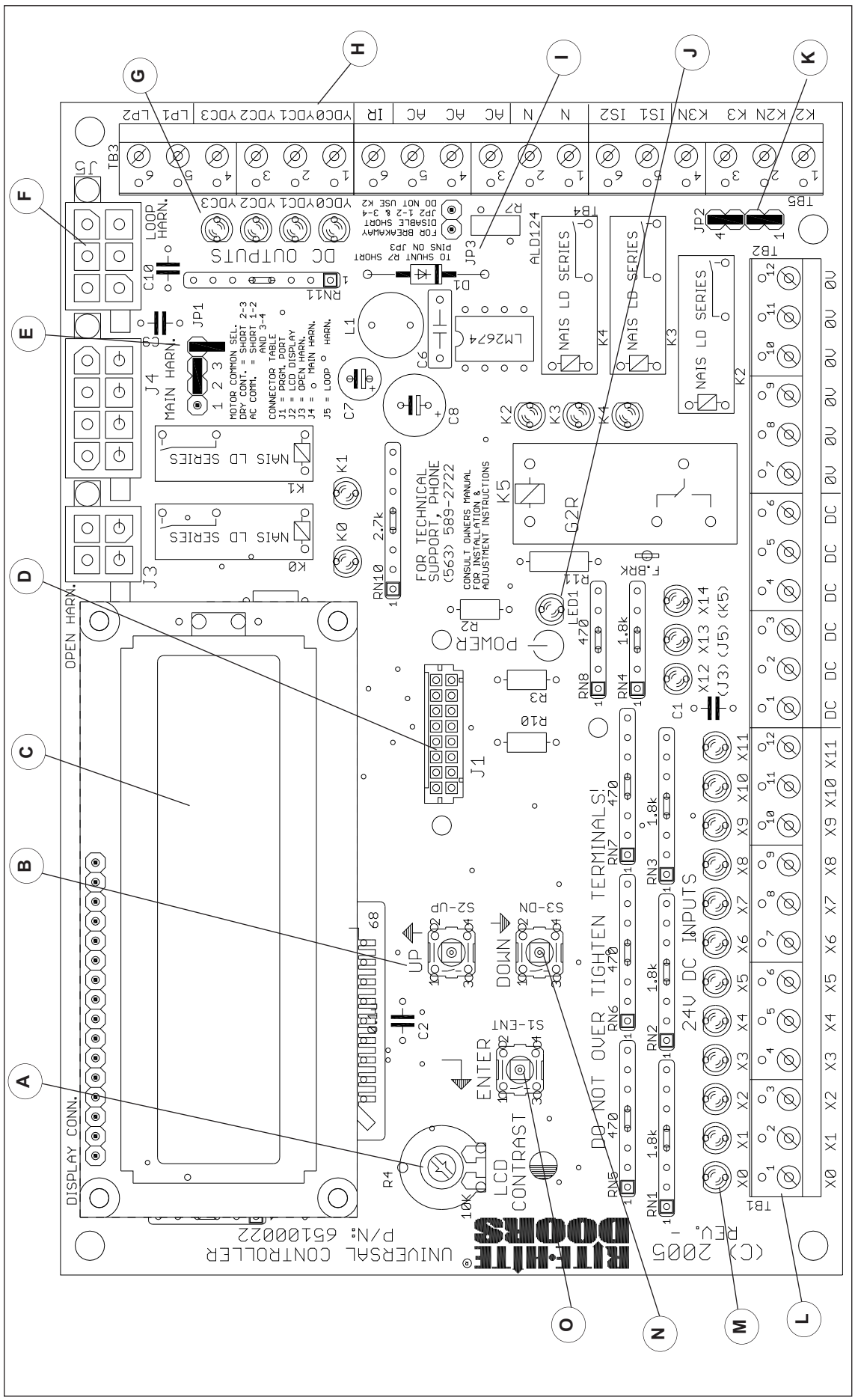
CHAPTER 4 - I-COMM DISPLAY MESSAGES



I-COMM LAYOUT DESCRIPTIONS

A	Display Contrast Potentiometer (Lighter / Darker)	I	JP3 Jumper
B	Up Key	J	Power LED
C	LCD Display	K	JP2 Jumper
D	J1 Programming Port	L	Input Terminals
E	JP1 Jumper	M	Green Input Terminal LED's
F	Induction Loop	N	Down Key
G	Red Output Terminal LED's	O	Enter Key
H	Output Terminals		

CHAPTER 4 - I-COMM DISPLAY MESSAGES

Operation of the door is not possible when using the menu system.

1. To enter the menu press the ENTER key, the Controller will stop and fault the door.
2. Use the arrow keys (Up and Down) to navigate through the choices
3. When the desired item is selected press enter to view the value or setting.
4. Use the arrow keys to change the value if needed. Once editing is completed press ENTER to return to the main menu.
5. ***When settings are completed, scroll to the "Exit" option in the main menu and press ENTER.***
6. Changes are not saved until the menu mode is exited. Turning power off while in the menu mode will cancel all changes.

Display Cycle Count	Read-Only	Displays current cycle count for the door.
Set Close Timer	Read/Write	Displays and sets current close timer. This time plus the Preannounce Timer will be the amount of time the door will stay open. Setting the Close Timer to 0 will place the door in toggle mode. In toggle mode the reclose timer will be disabled. (Valid Range: 1-255 seconds, with 0 = Toggle Mode)
Set Preannounce	Read/Write	Displays and sets Preannounce to close timer. This time plus the Close Timer will be the amount of time the door will stay open. (Valid Range: 0-255 seconds)
Display Model #	Read-Only	Displays door model.
Set Loop Func.	Read-Write	Valid Choices are: Auto Close Mode - Loop board will open and reverse door. (Note: Door will not close is Toggle Mode is enabled (Close Timer = 0)) Rev/Hold Open - Loop board will only reverse door. Loop will not open door from fully closed.
Set Open PB Func	Read-Write	Valid Choices are: Auto Close Mode" - Push button will open and reverse door. (Note: Door will not close is Toggle Mode is enabled (Close Timer = 0)) Toggle Mode - Places the Open/Reset button in Toggle. Push the Open/Reset once to open the door and again to close. Note reclose is disabled when door has been opened via Toggle. Reset/Jog Only - Open/Reset button will only reset and jog the door. If pressed while door is traveling close, door will reverse to open. (If Reset Only is required without opening door please consult applications or Rite-Hite Door Technical Support)
Output Definition	Read-Write (see chart)	Use to change functions of outputs where allowed. (YK2 Relay K2), YK3 (Relay K3), YDC0, (Note: Outputs which are not changeable will display "Not Adjustable") YDC1, YDC2, YDC3
Input Define	Read-Write	Use to change functions of inputs where allowed. X2, X3, X5, X6, X7 (Note: Inputs which are not changeable will display "Not Adjustable")
Language	Read-Write	Use to change language of the menus. Select Additional Languages (i.e., Spanish)
Fault History	Read-Only	Displays Last five faults as codes. Use arrows to provide a detailed description of each fault code displayed. See details below.
Partial Config	Read-Write	Consult Technical Support (=/> Version 2.2.5)
Open Alrm Time	RW - #25	Use to set time alarm on when door open
Clock	Read/Write	Displays date and time.
Passcode	Read/Write	Consult Customer Service.
Copy from Loader	Write-Only	Copies program from loader to i-COMM. Use up arrow to start copy process. See details below.
Copy to Loader	Read-Only	Copies program in i-COMM to loader. Use up arrow to start copy process. See details below.
Exit [Enter]	Read-Only	Use to exit menu system and save changes.

PROCEDURE FOR USING DOWNLOADER CHIP:

1. Turn power off.
2. Plug in downloader chip.
3. Turn power on.
4. Press ENTER.
5. Scroll to “Copy From Loader”.
6. Press ENTER and UP key to start copy process.
7. When complete, turn power off and remove loader.
8. Restore power and operate door.

PROCEDURE FOR ADJUSTING RECLOSE TIMER:

1. Press ENTER key.
2. Use UP key to scroll to “Set Close Timer”.
3. Press ENTER key.
4. To increase reclose time, press UP key.
5. To decrease reclose time, press DOWN key.
6. Press ENTER when complete.
7. Scroll to EXIT.
8. Press ENTER to save changes.

PROCEDURE FOR CHECKING FAULT HISTORY:

1. Press ENTER key.
2. Use UP / DOWN keys to scroll to “Fault History”.
3. Press ENTER key.
4. This displays the last 5 faults in numerical code.
5. For a detailed view, press the UP key to scroll through the fault codes.
6. Press ENTER when complete.
7. Scroll to EXIT.
8. Press ENTER, operate door.

CHAPTER 4 - I-COMM DISPLAY MESSAGES

Default Value for Output (Factory Configuration)							Default Value for Input (Factory Configuration)							
Model:	YK2	YK3	YDC0	YDC1	YDC2	YDC3	X0	X1	X2	X3	X4	X5	X6	X7
Iso-Tek	n/a	0	2	20	20	20	n/a	n/a	n/a	2	n/a	3	2	2
n/a = Not available for change														

Valid Values for Output Settings	
Value	Function
0	On when door closed (Interlock Out)
1	On when door Not Closed
2	On during preannounce to close
3	On when door full open
4	On when door not full open
5	On when door faulted
6	On when door not faulted
7	On when activation command
8	On during run Open
9	On during run Close
10	On during run (Open or Close)
11	On when door on limit (open or close)
12	On when I-Zone alarm
13	On when door open for 30 seconds
14	On when door open for 60 seconds
15	On when door open for 120 seconds

Valid Values for Output Settings	
Value	Function
16	On during sequential activation
17	On when not running open
18	On when not running close
19	On when not running (open or close)
20	Output Disabled
21	Flash 3Hz (=/> Version 2.2.5)
22	Flash 2Hz (=/> Version 2.2.5)
23	Partial Timer
24	Act rev I-Zone Pass
25	Door Open Alarm
26	Interlock Out N.O.
27	Interlock Out N.C.
28	Preannounce and Close
29	Photoeye Test

Valid Values for Input Settings:		
Value	Function	Description
0	Interlock In	Allows door to open (Only Available for inputs X2, X3 & X5) (Note: Interlocking is disabled if no inputs are defined as interlock)
1	Stop	Stops door (Normally-Closed)
2	Activation	Opens Door
3	Toggle	Opens/Closes Door
4	Close	Closes door
5	Sequential Act.	Opens Door
6	Reverse	Reverses or Holds open door
7	Stop	Stops door (Normally-Open)
8	Manual Open	Opens door (used for open-close-stop, normal activation will not resume from stop)
9	Auto/Man	Places Door in Toggle Mode when input is on.
10	Partial Open Activation	(8000/CL/XL/8900) (=/> Version 2.2.5)
11	Partial Open Toggle	(8000/CL/XL/8900) (=/> Version 2.2.5)
12	Toggle / Auto	Toggle with Automatic close (=/> Version 2.2.5)
13	Hand / Auto	Consult Customer Service
14	Disable	Disables Input
15	Reverse N.C.	Reverses or Holds open door using normally close contacts
16	Clean	n/a

CONNECTOR TABLE

CONNECTOR	PIN #	This table shows the function of each of the connectors on the i-COMM controller. The voltages listed for each pin assume that either the input or output is activated.				
J3	1	FLASHING LAMP OUT	UNUSED OUTPUT	FLASHING LAMP OUT	FLASHING LAMP OUT	FLASHING LAMP OUT
	2	I-ZONE ALARM OUT	I-ZONE ALARM OUT	UNUSED	UNUSED	UNUSED
	3	DC POWER OUT	DC POWER OUT	DC POWER OUT	DC POWER OUT	DC POWER OUT
	4	RESET INPUT (X12)	RESET INPUT (X12)	RESET INPUT (X12)	RESET INPUT (X12)	RESET INPUT (X12)
J4	1	UNUSED	UNUSED	UNUSED	UNUSED	UNUSED
	2	DC COMMON INPUT	DC COMMON INPUT	DC COMMON INPUT	DC COMMON INPUT	DC COMMON INPUT
	3	DC POWER INPUT	DC POWER INPUT	DC POWER INPUT	DC POWER INPUT	DC POWER INPUT
	4	24VAC INPUT	24VAC INPUT	24VAC INPUT	UNUSED	24VAC INPUT
	5	24VAC COMMON (N)	24VAC COMMON (N)	24VAC COMMON (N)	UNUSED	24VAC COMMON (N)
	6	OPEN/CLOSE CO	OPEN/CLOSE COM	OPEN/CLOSE COM	OPEN/CLOSE COM	OPEN/CLOSE COM
	7	CLOSE OUTPUT (K1)	CLOSE OUTPUT (K1)	INVERTER OUT 2(K1)	CLOSE OUTPUT (K1)	CLOSE OUTPUT (K1)
	8	OPEN OUTPUT (K0)	OPEN OUTPUT (K0)	INVERTER OUT 1 (K0)	OPEN OUTPUT (K0)	OPEN OUTPUT (K0)
J5	1	LOOP INPUT 2	LOOP INPUT 2	LOOP INPUT 2	LOOP INPUT 2	LOOP INPUT 2
	2	LOOP INPUT 1	LOOP INPUT 1	LOOP INPUT 1	LOOP INPUT 1	LOOP INPUT 1
	3	DC POWER OUT	DC POWER OUT	DC POWER OUT	DC POWER OUT	DC POWER OUT
	4	DC COMMON OUT	DC COMMON OUT	DC COMMON OUT	DC COMMON OUT	DC COMMON OUT
	5	DC POWER OUT	DC POWER OUT	DC POWER OUT	DC POWER OUT	DC POWER OUT
	6	LOOP INPUT (X13)	LOOP INPUT (X13)	LOOP INPUT (X13)	LOOP INPUT (X13)	LOOP INPUT (X13)

CHAPTER 4 - 230/460V INVERTER (VFD) PROGRAMMING

To set a parameter:

1. Press the [FUNC] key until CP. 1 appears on the display.
2. Use the [o] & [-] keys to select the parameter, then press the [FUNC] key.
3. Display will now show the current value for the parameter you selected in step 2.
4. Use the [o] & [-] keys to set the parameter value.
5. Press and the [FUNC] key to return to parameter selection
6. When finished return to parameter CP. 1 and press [FUNC].
7. Continue with step 6.
8. This unit has been preprogrammed with a specific download list.
9. The unit may or may not perform as described in the standard product manual.
10. The CP parameters may or may not match the standard product manual descriptions.
11. Consult any additional documentation supplied with this unit or other previously supplied documentation for correct unit operation and/or CP parameter definitions.

Parameter #	Name	Resolution	Units	
CP00	Password Input	1		
CP01	Actual Frequency Display	0.0125	Hz	
CP02	Set Frequency Display	0.0125	Hz	
CP03	Inverter Status Display	-		
CP04	Apparent Current Display	0.1	A	
CP05	Apparent Current Peak Value	0.1	A	
CP06	Utilization	1	%	
CP07	DC Bus Voltage	1	V	
CP08	DC Bus Peak Value	1	V	
CP09	Output Voltage	1	V	
CP10	Output Terminal State	1		
CP11	Active Parameter Set	1		
CP12	Input Terminal State	1		
CP13	Power Module Temperature	1	oC	
CP14	Active Current	0.1	A	
CP15	Operating Hours	1	H	
CP20	Torque Detection Level A - Domestic (230V)	1.10	0.01	A
	Torque Detection Level A - Domestic (460V)	0.80		
CP21	Torque Detection Level B - European	0.90	0.01	A
CP22	Level Change Time - European-Bi-Part	3.00	0.01	sec.
CP23	Level Change Time - European-S.S.	6.00	0.01	sec.
CP24	Fast Open Speed	60	0.0125	Hz
CP25	Fast Closing Speed - Bi-parting Door	15	0.0125	Hz
CP26	Fast Closing Speed - Single Slide Door	30		
CP27	Acceleration Time - Fast Open	0.20	0.01	sec.
CP28	S-Curve Time - Fast Open	0.50	0.01	sec.
CP29	Acceleration Time - Fast to Slow Open	0.20	0.01	sec.
CP30	S-Curve Time - Slow Open	0.50	0.01	sec.
CP31	Auto Boost Gain	0.20	0.01	sec.
CP32	Decel Time Close to Open	0.20	0.01	sec.
CP33	S-Curve Time - Close to Open	0.20	0.01	sec.

CHAPTER 5 - START-UP PROCEDURES

INITIAL START-UP PROCEDURES

It is important that the installer follow these procedures before applying power in order to prevent damage to the door control systems.

NOTE:

If the door is, or will be equipped with an activation device do not connect the device until after the door start-up has been completed.

1. Verify that all wires pre-coded wires are connected according to the wiring diagram.

NOTE:

Electrical prints included in the control box supersede any prints included in this manual on ***Pages 30 - 34****. Always check parts or control box for prints.*

2. Make sure the door is barricaded and clear of any obstructions.
3. Position door between the open and closed limit switches and not on the approach open limit switch, ***Figure 23.1.***

CHECKING MOTOR ROTATION

1. Turn on the power from the disconnect box and then the disconnect on the front of the control box. Press the open button or wait 5 seconds for automatic door start-up.
2. The door should run in the open direction, if it runs in the closed direction, turn disconnect off and lock-out and tag-out the main power supply to the door and reverse the motor wires at terminals T2 and T3. Reconnect the power and repeat the test to verify operation.
3. If the door runs in the open direction it must stop on the open limit switch, observe that the input X0 illuminates when activated. When the door runs in the close direction it must stop on the close limit switch, observe that the input X1 illuminates, if not, check the wiring to the terminals and the plug-in connectors.

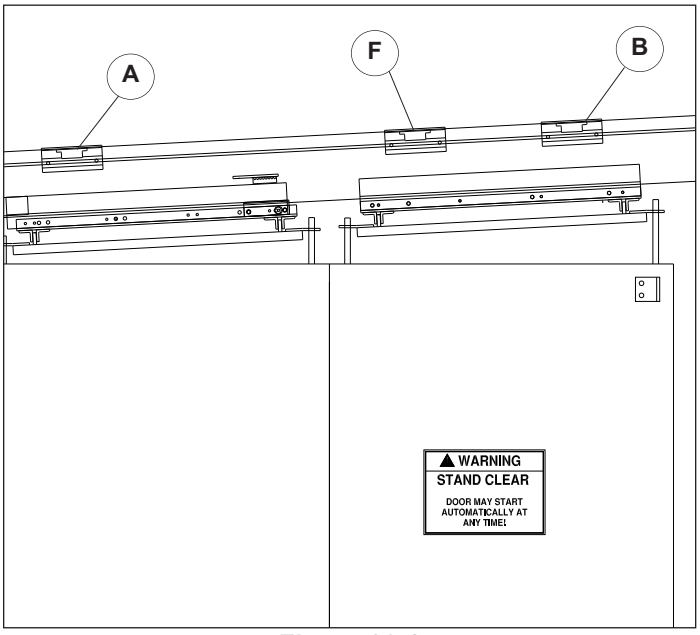


Figure 23.1

LIMIT SWITCHES

1. Limit switches (C) are preset at the factory, but may need to be adjusted, refer to ***Figure 23.2***.
2. To adjust limit switches turn off power, loosen screws (D), slide to the correct position to align with magnet (E), and retighten, ***Figure 23.2.***
3. If the closed limit switch (A) is not adjusted properly and the door overtravels the Torque Detect System can be triggered and the door may cycle 3 times and go into fault. After the problem has been corrected, press the open/reset button to clear the fault.
4. If the open limit switch (B) is adjusted in any direction, the approach limit switch (F) must adjusted accordingly. A distance of approximately:

   4P - 26” [660]
   2P - 20” [508]
   SS - 56” - 60” [1422 - 1524]

   must be maintained between them. Adjust so lead panel does not throw the follower panel when opening. If this happens increase distance between switches until the panels open smoothly.

NOTICE

If lag panel is thrown against the support post, adjust approach open limit switch to slow door down before lead panel picks up lag panel. Failure to do this may result in damage to the panel or the post-voiding the warranty.

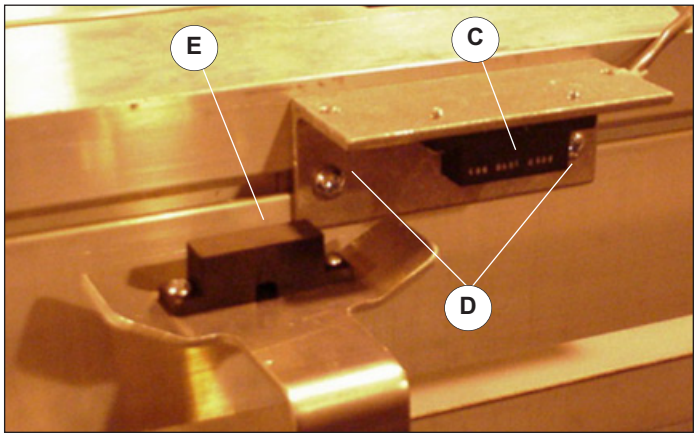


Figure 23.2

CHAPTER 5 - FAN INSTALLATION

FAN INSTALLATION

1. The fans (A) are mounted to the header (B) wired directly into the control box and match the voltage of the door.
2. Adjust the fan by loosening hardware (C) and rotating bracket (D) to blow the greatest amount of air on the lowest 4' [1219] of the wall seal to minimize moisture, ice or frost buildup, ***Figure 24.1.***
3. Secure fan wires away from all moving parts.
4. See ***Pages 30 - 34*** for wiring diagram.
5. Observe air flow out of the fan when power is applied. If significant air does not flow outward from the fan face, check phasing by removing power and reverse the fan leads in terminals "FN2" and "FN3" in the control box.
6. If switching fan voltage refer to ***Figure 24.2.***
7. 35" [889] Radius Maximum Fan Clearance Projection

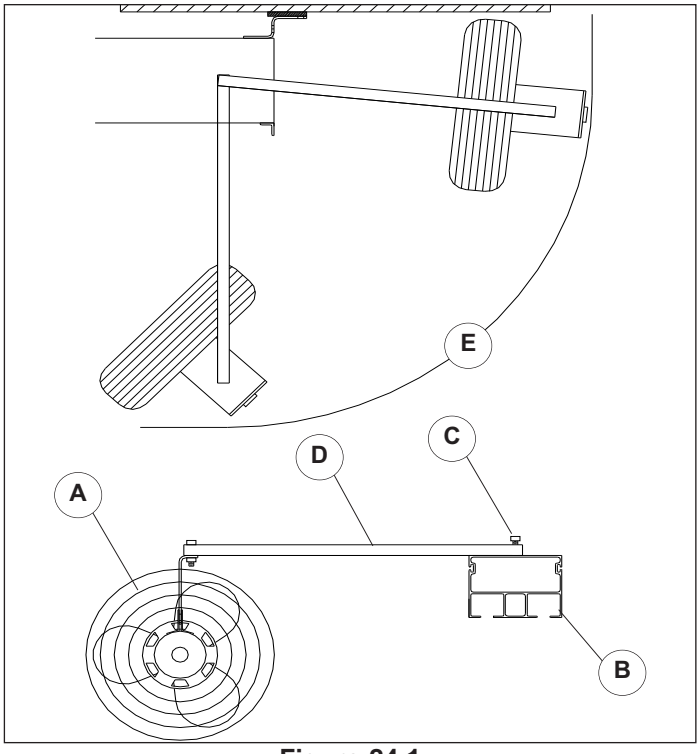


Figure 24.1

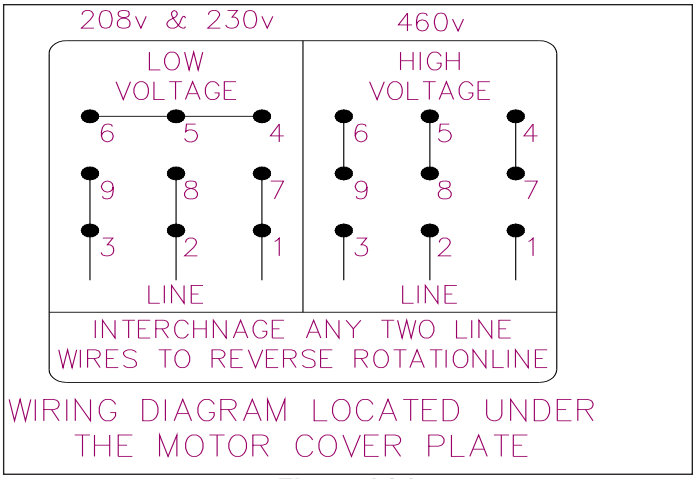


Figure 24.2

FINAL PANEL ADJUSTMENT

1. Turn power on and place door in the close position.
2. Make sure that the nose is tight and no light can be seen.
3. If adjustments are necessary, adjust close limit switch as needed, or tighten and loosen upper (A). center (B), lower (C) panel hanger nuts on panel hanger (D) as required, ***Figure 24.3.***
4. If all seals are tight and door closes properly, place any remaining screws in the lintel and perimeter seals.
5. Operate door and stand on opposite side of door to look for light at the seal areas and adjust as necessary.

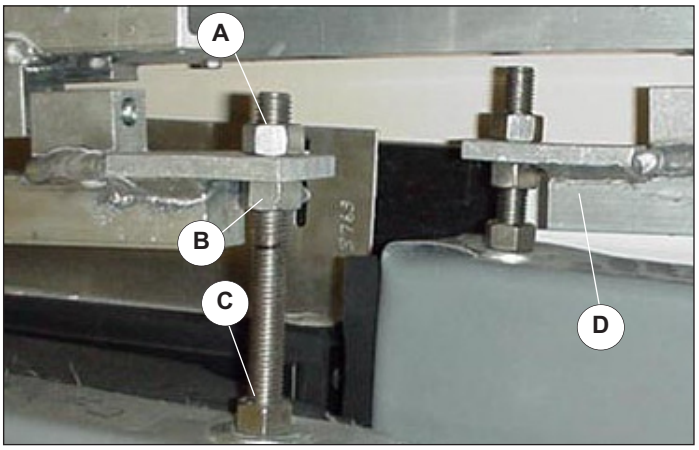


Figure 24.3

NOTICE

Panel hanger nuts must be tightened after all panels have been adjusted and sealed to the wall. Failure to do so may result in panels coming loose and poor sealing capability.

NOTICE

Blow air across the door opening, but never into the opening.

CHAPTER 5 - MAINTENANCE PROCEDURES

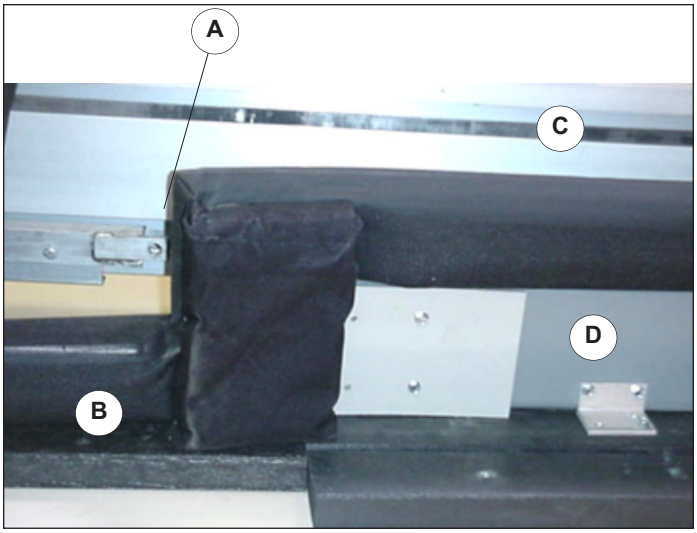


Figure 25.1

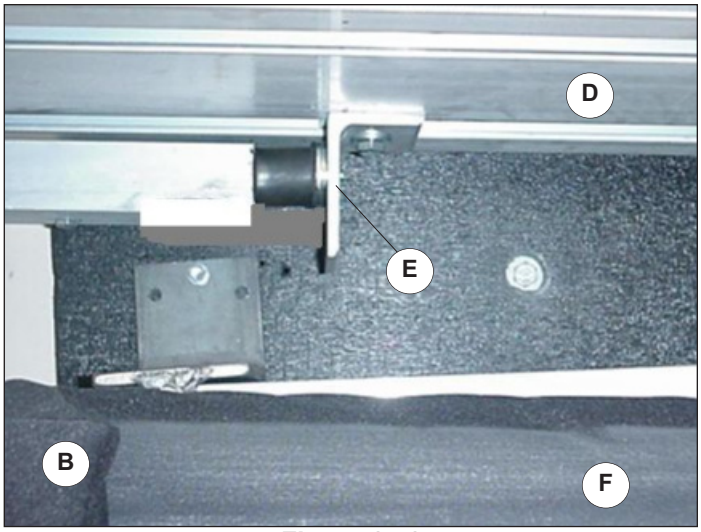


Figure 25.2

1. Adjust Follower Panel Lintel Seal (A) such that when the door is closed, the follower panel is tight to the foam pad and the air-seal (B) air flow is not restricted, ***Figure 25.1.***
2. Bottom of Header (C), Bottom of Lintel Seal (D).
3. Adjust follower panel stop bracket (E) so the follower panel does not compress the air bag and restrict the air flow, ***Figure 25.2.***
4. Front of Lintel Seal (F).

RITE-HITE DOORS, INC. PLANNED MAINTENANCE
Model 8600 ISO-TEK

CUSTOMER:	JOB#	SERIAL#	DATE:

Periodic Cycle Check: Planned Maintenance	Recommended P.M. Intervals (Time Shown In Months)								Inspect and Perform the Following (See Manual)
	1	4	8	12	18	24	30	36	
Activation				•		•		•	Check all devices for proper operation.
Bearing (Pillow Block)				•				•	Grease as required.
Belting (Drive & Flat)		•		•		•		•	Check drive belt tension. Check belt tracking, should be centered, not wearing on the sides. If cracked or > 25% worn, replace.
Bumpers						•		•	Inspect to make sure bumpers are in place, if missing or compressed, replace.
Control Box				•				•	Make sure all connections are tight and box is clean.
Door Assembly				•				•	Perform visual inspection for damage. Tighten all hardware. Use air hose to remove dust and debris. Replace any worn labels.
Door Operation				•				•	Operate door and make sure all operations are functioning properly.
Fans				•		•		•	Inspect fans for proper operation, adjust as required. Do not blow fan into freezer.
Ice or Frost Buildup		•	•	•		•		•	Remove any ice or frost buildup, adjust panel to seal on floor and at the nose.
Limit Switches		•		•		•		•	Check open and close positions, door should not slam open and should fully close.
Motor, Brake, Clutch and Reducer				•		•			Inspect hardware, electrical connections and listen for grinding or odd noises.
Panels		•		•	•	•		•	Inspect for wear or damage, clean with isopropyl alcohol or similar product. Repair any tears imeadiatly, use duct tape temporarily. Hanger nuts should be tight.
Pulleys & Sprockets				•				•	Inspect hardware and belt tracking.
Retention System		•		•		•			Check rope and spring tension. Adjust or repair as required.
Seals		•		•		•		•	Make sure panels are tight against air bag. Panels are sealed at the floor and at the nose. Exhaust holes are open and there are no other holes. Repair all tears to avoid ice buildup and temperature loss.
Trolleys				•		•		•	Make sure trolleys are riding smoothly and not damaged.

CHAPTER 5 - MAINTENANCE PROCEDURES

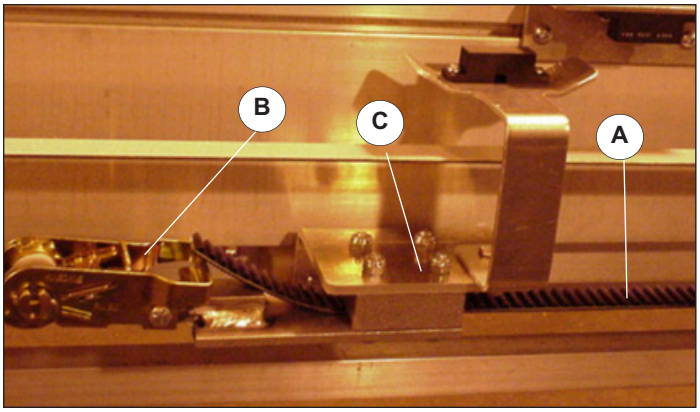


Figure 26.1

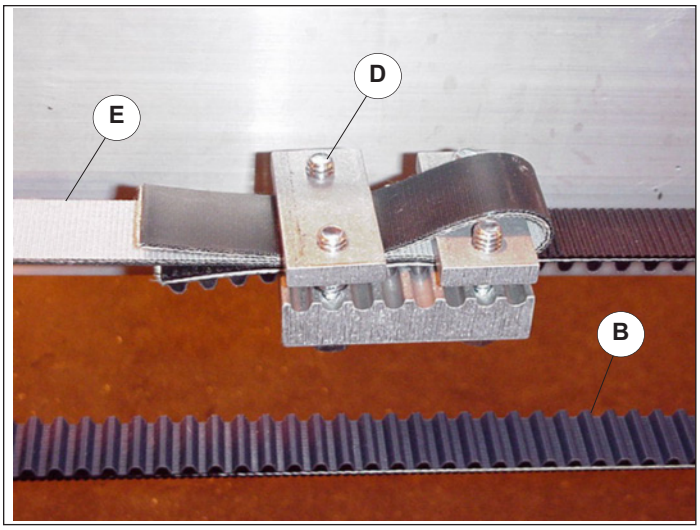


Figure 26.2

BELTING INSTRUCTIONS

1. If slipping is noticed on turnaround, tighten belt (A) with the ratchet (B) and pressure plate (C), approximately 180 ft/lbs [244 nm]. DO NOT overtighten, as premature pulley wear may occur, ***Figure 26.1.***
2. If replacing non-drive belt (E), loosen the belt from the ratchet, and the bolts from the compression plate (D) and remove the belt. Make sure the white side of the belt is to the outside of the pulley when assembled, ***Figure 26.2.***

TORQUE DETECT SYSTEM

1. To test reversing function of door, place an object (pallet, box) in the jamb at the center of the opening. When impacted, door will reverse open.
2. After door has reached the open limit switch, it will time out and close according to the preset time.
3. If object remains in the door path and the door cannot close it will repeat this process three times, and then go into fault with the green open/reset button flashing until it is depressed and reset.
4. Before pressing reset button, check doorway for obstructions, to prevent damage to the door.

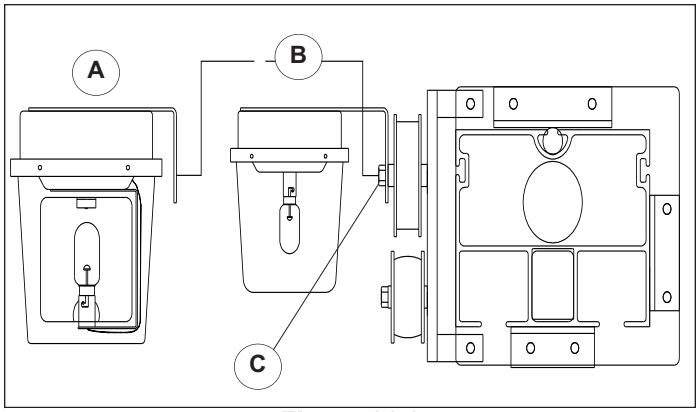


Figure 26.3

ACTIVATION DEVICE INSTALLATION

1. Proceed to install activation devices.
2. Verify operation of all activation devices.
3. For Strobe (A) or Beacons (B), wire per electrical drawings on ***Page 34.*** To replace the bulb. Remove power from the door.

   Remove four phillips screws from cover, DO NOT drop cover. Use caution not to break bulb when removing. Insert new bulb, be careful NOT to touch bulb. Replace cover and restore power to the door.
4. Remove the top bolt (C) in pulley bracket and install the strobe or beacon. Reinstall the bolt and torque to 33lb-ft, [45nm], ***Figure 26.3.***

NOTE: *Electrical prints included in the control box, supersede any prints included in this owners manual on* ***Pages 30 - 34.*** *Always check parts or control box for prints.*

CHECKLIST:

NOTE: *After the door installation is complete, the following MUST BE confirmed before the door is ready for operation.*

1. The bottom panel seal should be touching the floor with no visible light showing.
2. 6” [152] of pre-tension should have been applied to the spring by pulling out the cord, inserting the eyebolt insert and tying a knot to keep the insert in place and maintain the proper 3 1/2” [89] distance from panel to wall.
3. Air bag should be tight to the floor, exhaust hole clear and free of obstructions and a screw placed in the pre-drilled holes in the aluminum retainer to prevent from sliding.
4. Air bag pulled up to remove any twists or wrinkles and a screw placed in the pre-drilled holes in the aluminum retainer to prevent from sliding.
5. Aluminum retainer caulked to prevent cold air infiltration and frost or ice developing.
6. Panel hanger nuts tightened to prevent them from loosening up, resulting in seal loss.

CHAPTER 5 - TROUBLESHOOTING

DEFINITION	FUNCTION
F1, F2 and F3 Fuses	F1, F2 and F3 Fuses are fuses for the incoming power and they supply voltage to the inverter, which supplies voltage to the motor. See chart on ***Page 31*** for fuse sizing table.
F4 and F5 Fuses	F4 and F5 Fuses supply voltage to the transformer and protect the transformer and control box. The fuse is a 1 amp KLDR slow blow.
F6 Resetting Fuse	F6 Fuse is for 120VAC devices and receives power from the X1 transformer tap. The 2.5 amp PTC resettable fuse protects the clutch and strobes.
F7 Resetting Fuse	F7 Fuse is for 24VAC devices and receives power from the X2 transformer tap. The F7 fuse protects the photoeyes, relays and all 24VAC activation devices. The fuse is a 1 amp PTC resettable F6 fuse.
K6 Relay	K6-24VAC double pole relay is the brake relay and both sets of contacts are energized when the door is running open or close.
K7 Relay	K7-24VAC double pole relay is the clutch relay and both sets of contacts are energized when the door is operational.
K8 Relay	K8-24VDC single pole relay is an optional relay that is required when the pre-announce to close option is chosen.
Activation Devices	Operate the door using the activation devices to make sure that the door fully opens and closes after the time set on the re-close timer has expired. If the devices are wired in toggle mode, operate the device twice to verify that the door will open with an activation, and then close with an activation. For activation questions, refer to the Activation Manual.
Belting	The drive belting is a timing belt and the non-drive is a flat belt and are connected together with belt clamps. Check the following: a) If the drive belt is walking across the pulleys, check pulley bracket for squareness or a possible bent tab and align it such that the belt tracks properly. b) Reposition belt on the pressure plates to align. c) The tension is adjusted via a tensioner ratchet, and should be tensioned to 180 ft/lbs [244 nm].
Brake	If the brake is not functioning properly, check the following: a) Check terminals 120 and N for 120VAC. b) Brake wiring at terminals BRK and N and in motor junction box. c) The brake rectifier should put out 90-110VDC. d) Brake will have 750-760 ohms on normal readings, checked on the + and - terminals. e) The brake is approximately 95VDC and is released when the door is running and engaged when the door is open or closed or the power is off.
Clutch	If the clutch is not functioning properly, check the following: a) Check terminals 120 and N for 120VAC. b) Check rectifier-replace. c) Clutch wiring at terminals CL1 & CL2 and plug in connections. d) The clutch rectifier should put out 90-110VDC, between terminals CL1 and CL2. e) Clutch will have 227 ohms on normal readings. (must be checked after the rectifier). f) The clutch is supplied with 90VDC and is disengaged when the power is off and engaged when power is applied.
Control Box	The control box is NEMA 4X fuse protected. Standard controls include open/reset button with a disconnect switch. Voltages can be 208V, 230V, 400V, 460V, 575V 3-phase and 220V single phase.
Disconnect Q1 & Q2	Power for the fans are controlled by Disconnects Q1 & Q2.
Disconnect Switch	The large red button on the front of the control box, ***Figure 16.1*** may also be called the E-Stop. If it is required to stop the door at any time during its operation rotate the disconnect switch to the OFF position. This will disconnect power to the control circuit for the door. To return the door to normal operation, rotate the disconnect switch to the ON position, wait approximately 2 seconds and then press the OPEN/RESET button. The door will also automatically operate 5 seconds after power up. The disconnect switch is in line with terminals L1, L2, L3, and removes power from the entire control box, except for terminals L1, L2, L3 and on the incoming side of the switch.
D.O.H / D.O.W.	Door Opening Height or Width
Door does not stop when impacted	Check the following items for troubleshooting: a) Make sure door reverses when impacted between the noses. b) Inverter settings incorrect-consult factory.
Door Operation and Controls	The door operations are controlled by an i-COMM Universal Controller. The i-COMM is set-up and programmed during testing at the factory. Unless you are a RITE-HITE DOORS, INC. authorized service technician, you should not attempt to change the factory set program. A quick way of determining that the door is ready to operate normally is to open the control box and look for the green LED lights to be ON (Illuminated) at the X INPUTS and the Y OUTPUTS. Refer to the Input/Output logic table located on ***Page 18*** of this manual. If the door fails to function, contact your local RITE-HITE DOORS, INC. representative or Technical Support.
Door reversal	If the door reverses when reaching the closed limit switch, check the following: a) Move closed limit switch to prevent door from closing to far. b) Make sure the limit switch wires are shielded.
End Cap Option	The door can be equipped with a drive and non-drive end cap.
Facade	The door can be equipped with a front Facade that will cover the face of the header and still allow for access to limit switch and belt adjustment.
Fans	Two fans are standard on all doors and are mounted from the top of the header, outside of the opening. The airflow is directed toward the wall seals and the panels at the floor to prevent moisture from freezing. The fans are supplied with 3-phase power directly from the control box.
Fault Conditions	The ISO-TEK door will enter into a fault condition and the green light will flash if: a) Motor runs for more than 8 seconds: 1-2 seconds for opening time and 3-6 seconds for closing. b) Open and Closed limit switches are on at the same time. c) Motor Torque Detect system has been activated three times d) There is a power outage-Light will flash for 5 seconds then auto-reclose.
Fault Reset	When a fault situation has occurred the system needs to be reset by pressing the OPEN/RESET button. The door will fully open and after the door has opened, it will time out and close automatically.

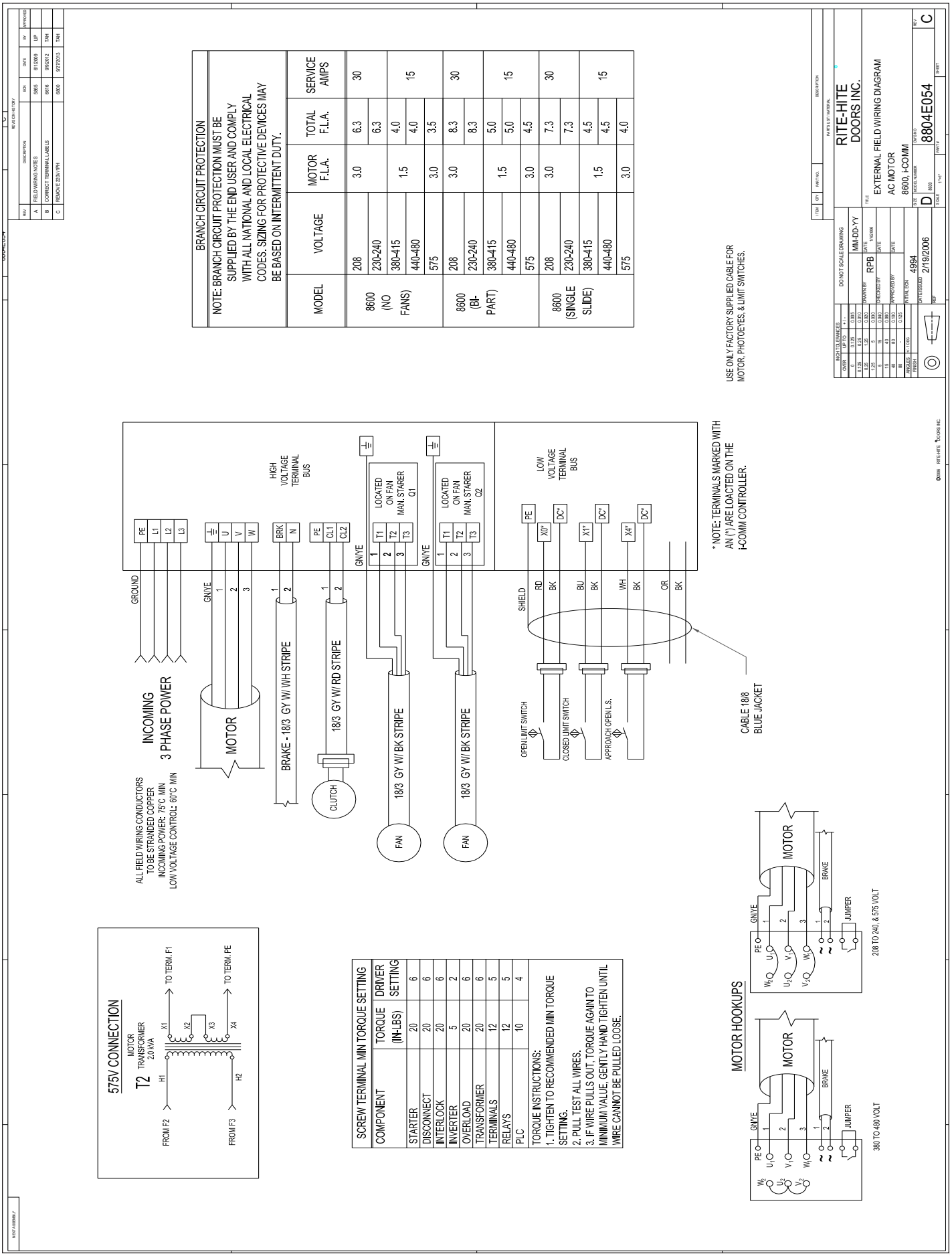
CHAPTER 5 - TROUBLESHOOTING

DEFINITION	FUNCTION
Header	The door has a unique sloped header design that will allow the panels to slide to the closed position in the event of a power outage, thereby maintaining room temperature.
i-COMM Controller™	The i-COMM controller is a circuit board that controls the actions of the door. There is a digital display that shows the cycles, status and position of the door at any time during its travel. For input and output function signals, refer to chart on ***Page 18.*** Settings can be changed for re-close or pre-announce timers, interlocks, special activation commands, among many others, refer to instructional manual included.
Ice or Frost	If the door is not sealing properly, the door panels or seals may start to develop ice or frost. High humidity or a vast difference in temperature from side to side may be the cause of the ice or frost buildup. Adjust panels and seals after removing the ice and frost to maintain a tight seal.
Jumper JU1	The JU1 jumper **MUST BE** in place for door to operate, unless the door is interlocked.
Limit Switches	The Open, Closed, Approach Open and optional Alternate open limit switches are normally open and should only be closed when the magnet is lined up with the switch, if switch is closed,replace.
Manual Door Opening	When required, the door can be opened without electrical power. Separate panels at the middle and push or pull panels toward the open position. The clutch releases when power is removed from the door. When the power is restored press the OPEN/RESET button on the control box to open the door and reset the system. After 5 seconds the door will automatically reset.
Motor	The motor is a 1 HP 50/60Hz 208/230/380/415/460/575VAC motor. The 380/415/575V motor requires an extra transformer in the control box. If the door will not run when given an activation command, check the following: a) Check for loose wires at terminals, T1, T2, and T3 and wires on the inverter @ T1, T2, and T3. b) 208V-240V motor will have approx. 10.4 ohms on normal readings. c) 380V-480V motor will have approx. 20.7 ohms on normal readings.
Reducer	The reducer provides the ratio from the motor to the door.
Inverter	The Inverter controls the speed of the door, Torque Detect system, along with several other items. The inverter is powered from the F1, F2, and F3 fuses. A red light indicates that the unit has power. A blinking red light indicates the unit is in a fault mode. If the red light is not on, that would indicate no power to the unit. To reset the door, turn off the disconnect on the front of the box, wait 30 seconds, then restore power and reset by pushing the green reset button.If the inverter is not powered or functioning properly, check the following settings: a) Check fuses F1-F3 b) Check plug in connections and wiring terminations. c) Inverter must have red run light on, if not cycle power for 30 seconds, restore power, press green reset button to see if red light comes on. If the red light does not come on, consult your local representative or RITE-HITE DOORS, INC. The inverter can be equipped with a parameter unit that can assist in troubleshooting and monitoring the activities of the door. a) noP = No Operation: output voltage = 0V b) LS = Low Speed: output voltage = 0V c) FAcc = Forward Acceleration d) FdEc = Forward Deceleration e) rAcc = Reverse Acceleration f) rdEc = Reverse Deceleration g) Fcon = Forward constant speed h) rcon = Reverse constant speed i) E.OP = Error overpotential: Input voltage too high j) E.UP = Error underpotential: Input voltage too low or unstable k) E.OC = Error overcurrent: Too much load l) E.OL = Error overload: Excessive load applied for longer than permissible m) E.PU = Power unit has failed-replace unit.
Motor phasing	If open button is pressed when the door is in the closed position and the door closes, check following. a) Confirm that the motor lead wires are in the proper terminals: 1-T1, 2-T2, 3-T3. b) Phasing is reversed, reverse wires in terminals, T2 and T3.
O.D.H / O.D.W.	Ordered Door Height or Width
Open Push Button	Located on the front of the control box, ***Figure 16.1.*** When powered up, the green light will flash for 5 seconds then start to run. The first cycle will run slow and after that the door will run at the preset factory speeds. The open push button when pressed, gives a command to open the door, if the door closes see Motor phasing. The second function is to reset the door when the Torque Detect System has been initiated 3 times. When the door is in the fault mode the light will flash and the door will not operate from an activation command. The light will continue to flash until the open/reset button is pushed.
Panel (Follower) 4P and SS only	The follower panel is the rear or panel nearest to the wall. The panel seals the opening at the wall, the floor and to the lead panels. The panels can be raised or lowered by adjusted the nuts on the panel hanger. Upon an impact, the panels will flex.
Panel Bracket (Follower) 4P and SS only	The follower panel is equipped with a bracket that allows the lead panel to push the follower panel when the door is opening and holds it in place while the door is open. When the door closes the follower panel will slide closed.
Panel (Lead)	The lead panels seal the opening at the nose, the floor and wall or to the follower panel. The panels can be raised or lowered by adjusting the nuts on the panel hanger bracket. Upon an impact, the panels will flex. There is an option available for a vision window and an accent wear panel.
Plumb	Leveling an object to make true vertical.

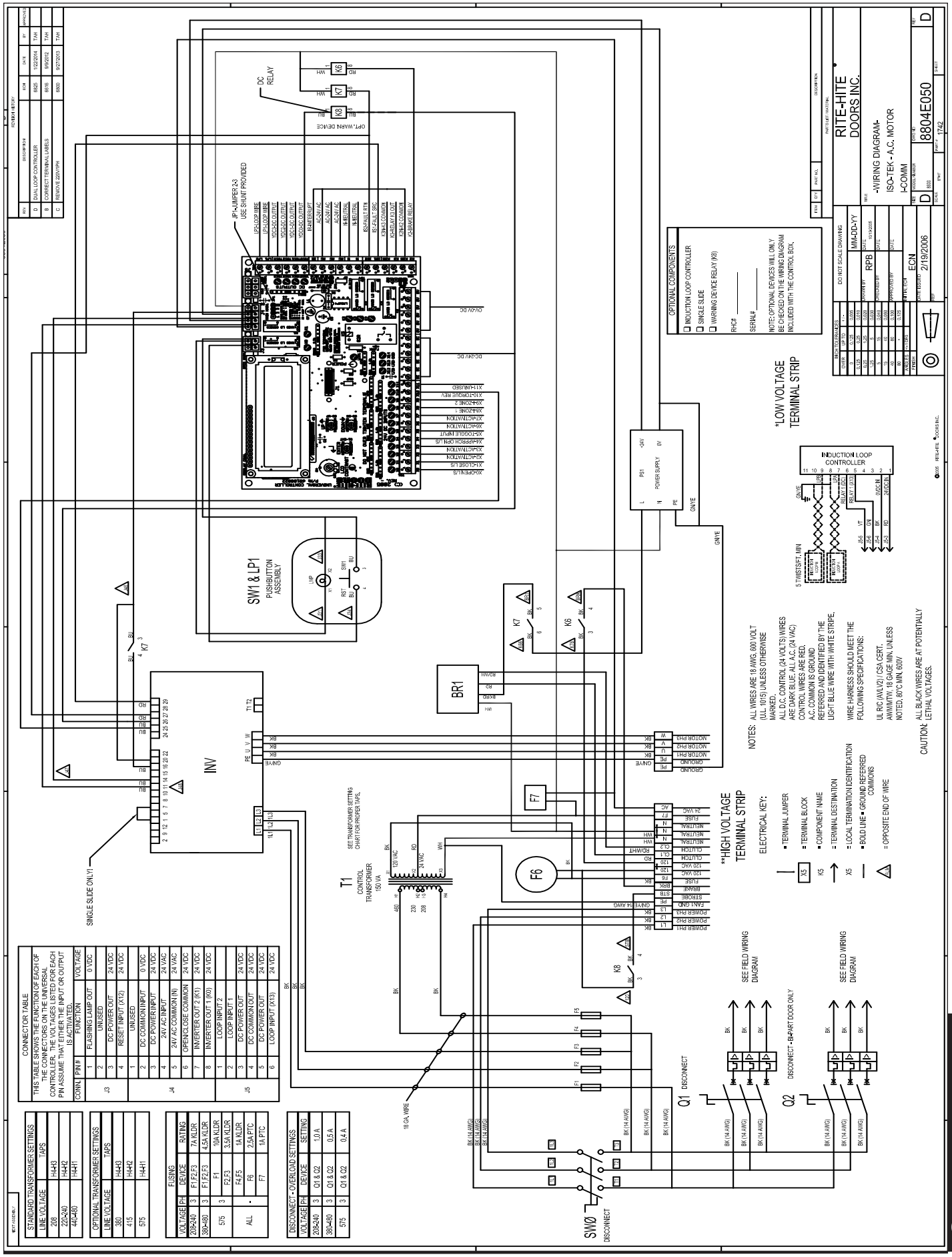
CHAPTER 5 - TROUBLESHOOTING

DEFINITION	FUNCTION
Poly Lumber Kit two	The poly lumber kit is optional, notice wall surface criteria found on ***Page 5 & 6.*** The kit consists of vertical, one horizontal and one or two 15” [381] pieces of poly lumber for mounting the header and wall seals. Also included in the kit are four 1/2” x 24” [13 x 610] threaded rods for thru-bolting the header, four 3/8” x 2 3/4” [10 x 70] concrete anchors, four 6” x 6” [152 x 152] backer plates, 6’ [1829] of 5/8”Ø [16] foam, hardware for mounting the poly lumber to the wall and the seals to the poly lumber.
Retention Straps	The retention cord is designed to provide a superior seal by keeping the panels tight against the seals and to the wall. When the door is impacted, cord will flex and allow the door to breakaway.
Seals	The door is equipped with the Thermal Air Sealing System.
Shim	Add layers of solid material to make an object level or plumb.
Torque Detect System	The Torque Detect system will detect an object that is in the opening. When the door is closing and impacts the object, the door will reverse and go open. If this process happens 3 times, the door will go open and stay open and the green open/reset button will flash. The light will flash until the button is de-pressed to reset the door. Must be on for door to run. If the door still will not close, check to make sure none of the limit switches are stuck on. Check reasons below why door will reverse. a) Object in the opening. b) Closed limit switch set too far, door not reaching limit and noses impact. c) Perimeter seals are not adjusted properly, either the sides or the top are too tight. A squeaking noise will be heard as the door closes, indicating too tight of a seal.
Transformer control	The transformer is a tri-volt transformer that takes an incoming voltage of 208V, 230V, 380V, 415V and 460V and converts it to 110VAC and 24VAC. An optional transformer is available for 575V doors. a) 208V (Taps H3-H4) 6-7 Ohms b) 230V (Taps H2-H4) 6-7 Ohms c) 380V (Taps H3-H4) 15.6 Ohms d) 460V (Taps H1-H4) 18.2 Ohms e) 415V (Taps H2-H4) 16.1 Ohms f) 120V (Taps X1-X3) 1.4-2.5 Ohms g) 24V (Taps X1-X2) 1.5-2.4 Ohms
Transformer step down	The step down transformer is for 575V applications only. It reduces the inverter input voltage to 230V.
Voltage Change	To change voltage in the field, the following will need to be done. Replace inverter, motor, rewire transformer taps and fans per electrical drawing.
2P, 4P, 2PN, SS	2 Panel, 4 Panel, Narrow 2 Panel and Single Slide

CHAPTER 6 - MANDATORY FIELD WIRING DIAGRAM



CHAPTER 6 - ELECTRICAL WIRING DIAGRAM



CONNECTOR TABLE			
CONN.	PIN #	FUNCTION	VOLTAGE
J3	1	FLASHING LAMP OUT	0 VDC
	2	UNUSED	
	3	DC POWER OUT	24 VDC
	4	RESET INPUT (X12)	24 VDC
J4	1	UNUSED	
	2	DC COMMON INPUT	0 VDC
	3	DC POWER INPUT	24 VDC
	4	24V AC INPUT	24 VAC
	5	24V AC COMMON (N)	24 VAC
	6	OPEN/CLOSE COMMON	24 VDC
	7	INVERTER OUT 2 (K1)	24 VDC
	8	INVERTER OUT 1 (K0)	24 VDC
J5	1	LOOP INPUT 2	
	2	LOOP INPUT 1	
	3	DC POWER OUT	24 VDC
	4	DC COMMON OUT	24 VDC
	5	DC POWER OUT	24 VDC
	6	LOOP INPUT (X13)	24 VDC

STANDARD TRANSFORMER SETTINGS	
LINE VOLTAGE	TAPS
208	H4-H3
220-240	H4-H2
440-480	H4-H1

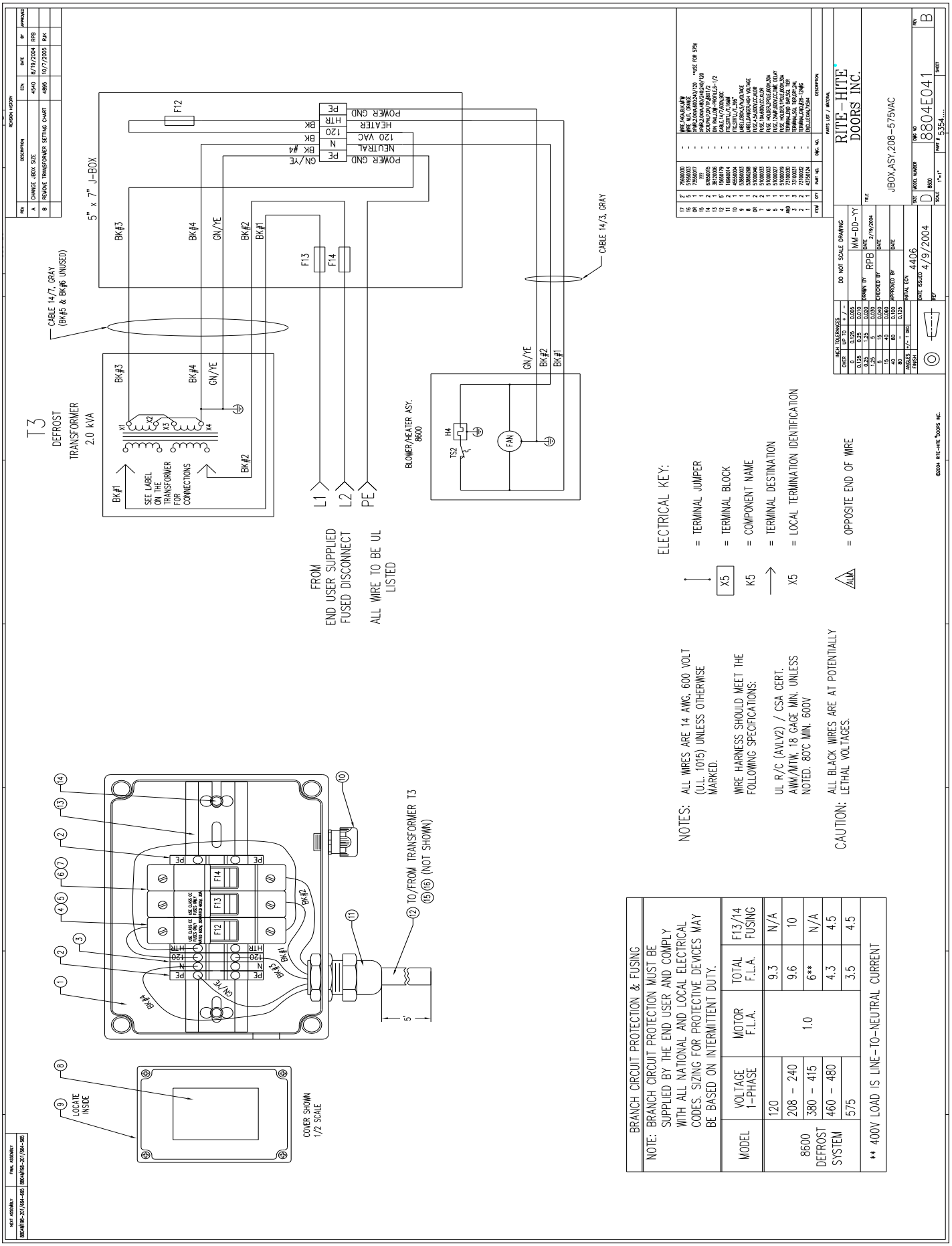
OPTIONAL TRANSFORMER SETTINGS	
LINE VOLTAGE	TAPS
380	H4-H3
415	H4-H2
575	H4-H1

FUSING			
VOLTAGE PH	DEVICE	RATING	
208-240	3	F1,F2,F3	7A, KLDR
380-480	3	F1,F2,F3	4,5A KLDR
575	3	F1	10A KLDR
		F2,F3	3,5A KLDR
ALL	-	F4,F5	1A KLDR
		F6	2,5A PTC
		F7	1A PTC

DISCONNECT - OVERLOAD SETTINGS			
VOLTAGE	PH	DEVICE	SETTING
208-240	3	Q1 & Q2	1,0 A
380-480	3	Q1 & Q2	0,5 A
575	3	Q1 & Q2	0,4 A

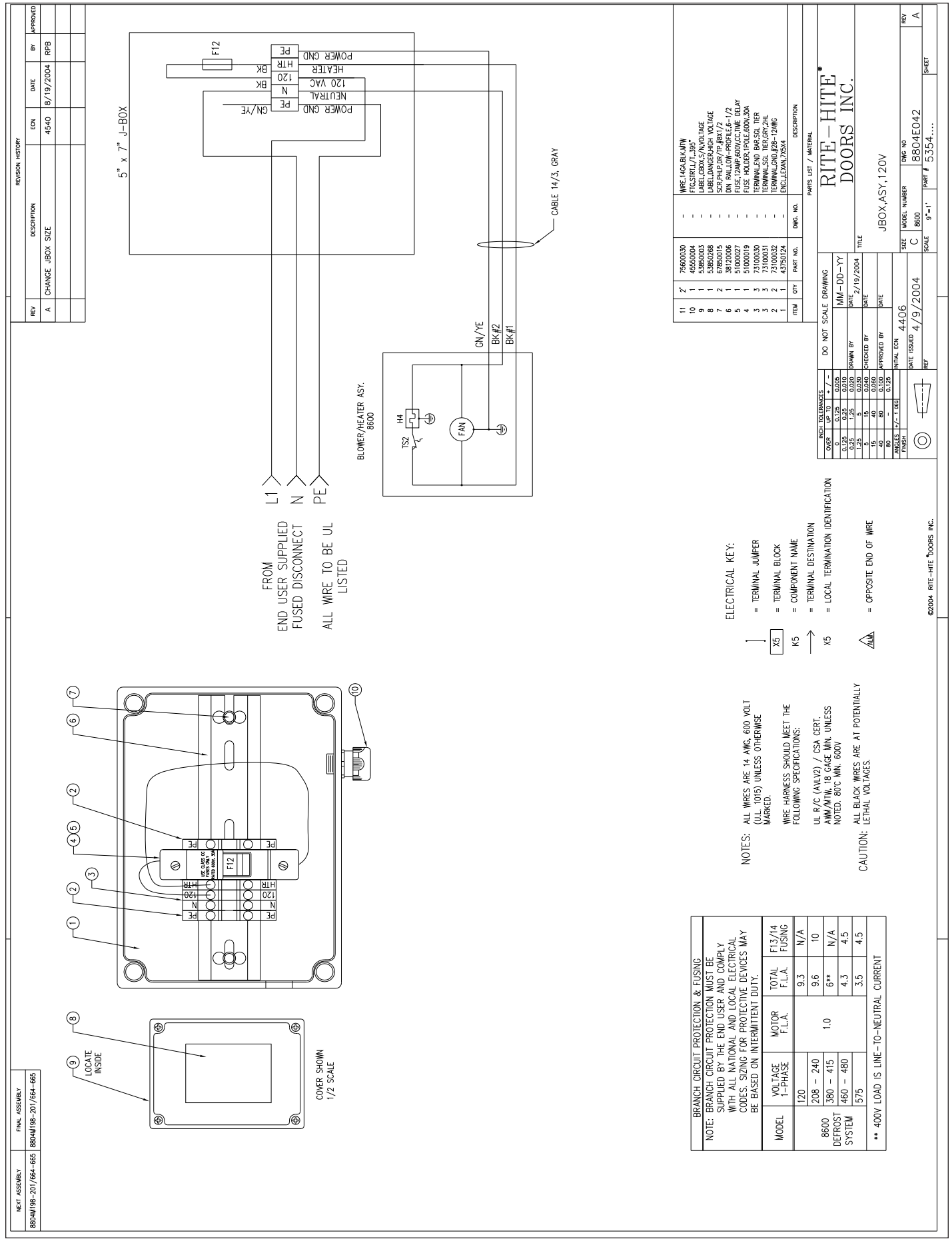
Electrical Drawings

CHAPTER 6- JBOX WIRING 208 - 575V (W/STEP DOWN TRANSFORMER)

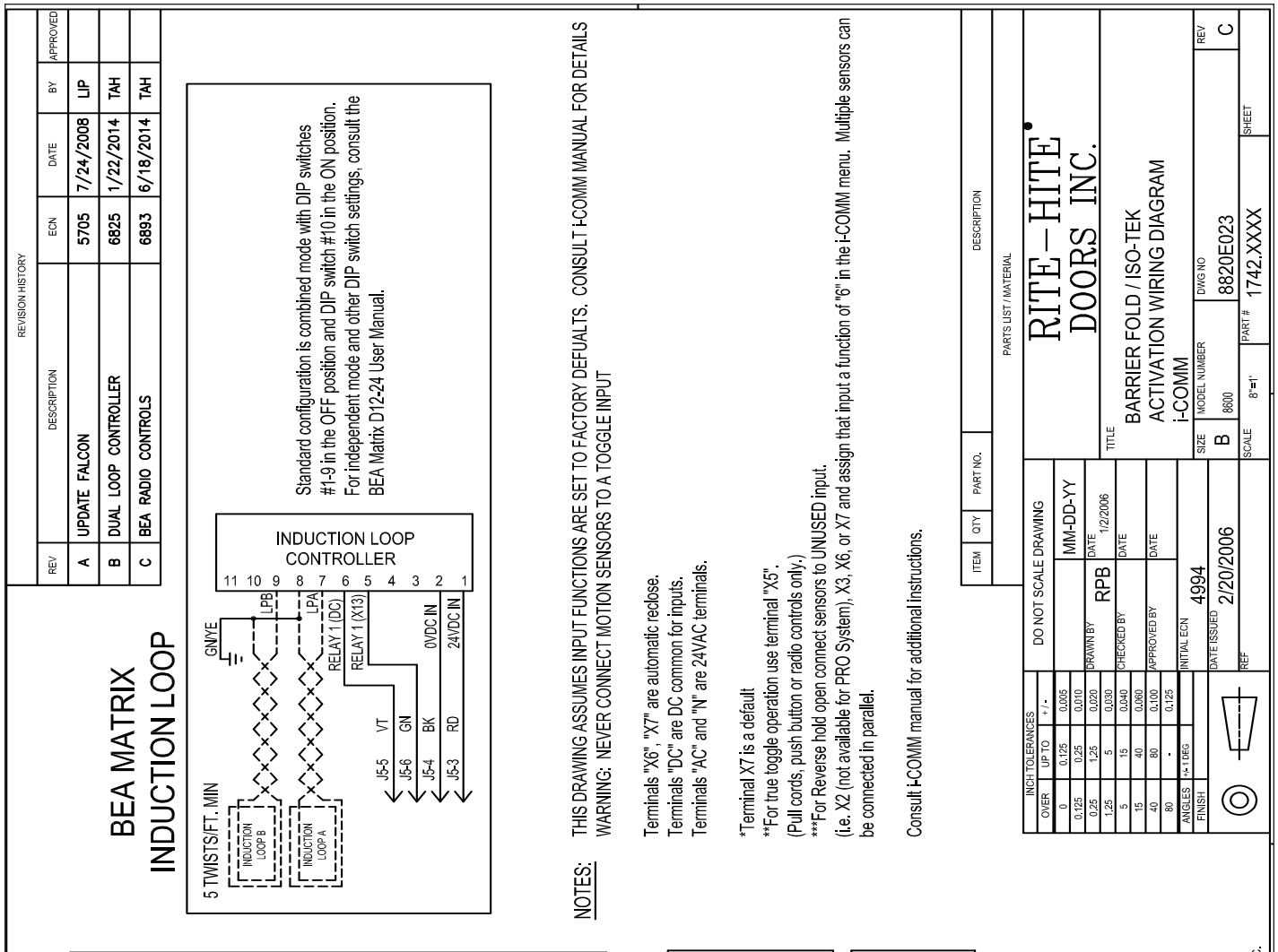


BRANCH CIRCUIT PROTECTION & FUSING					
NOTE: BRANCH CIRCUIT PROTECTION MUST BE SUPPLIED BY THE END USER AND COMPLY WITH ALL NATIONAL AND LOCAL ELECTRICAL CODES. SIZING FOR PROTECTIVE DEVICES MAY BE BASED ON INTERMITTENT DUTY.					
MODEL	VOLTAGE 1-PHASE	MOTOR F.L.A.	TOTAL F.L.A.	F13/14 FUSING
8600 DEFROST SYSTEM	120	1.0	9.3	N/A
	208 – 240		9.6	10
	380 – 415		6**	N/A
	460 – 480		4.3	4.5
	575		3.5	4.5
** 400V LOAD IS LINE-TO-NEUTRAL CURRENT				

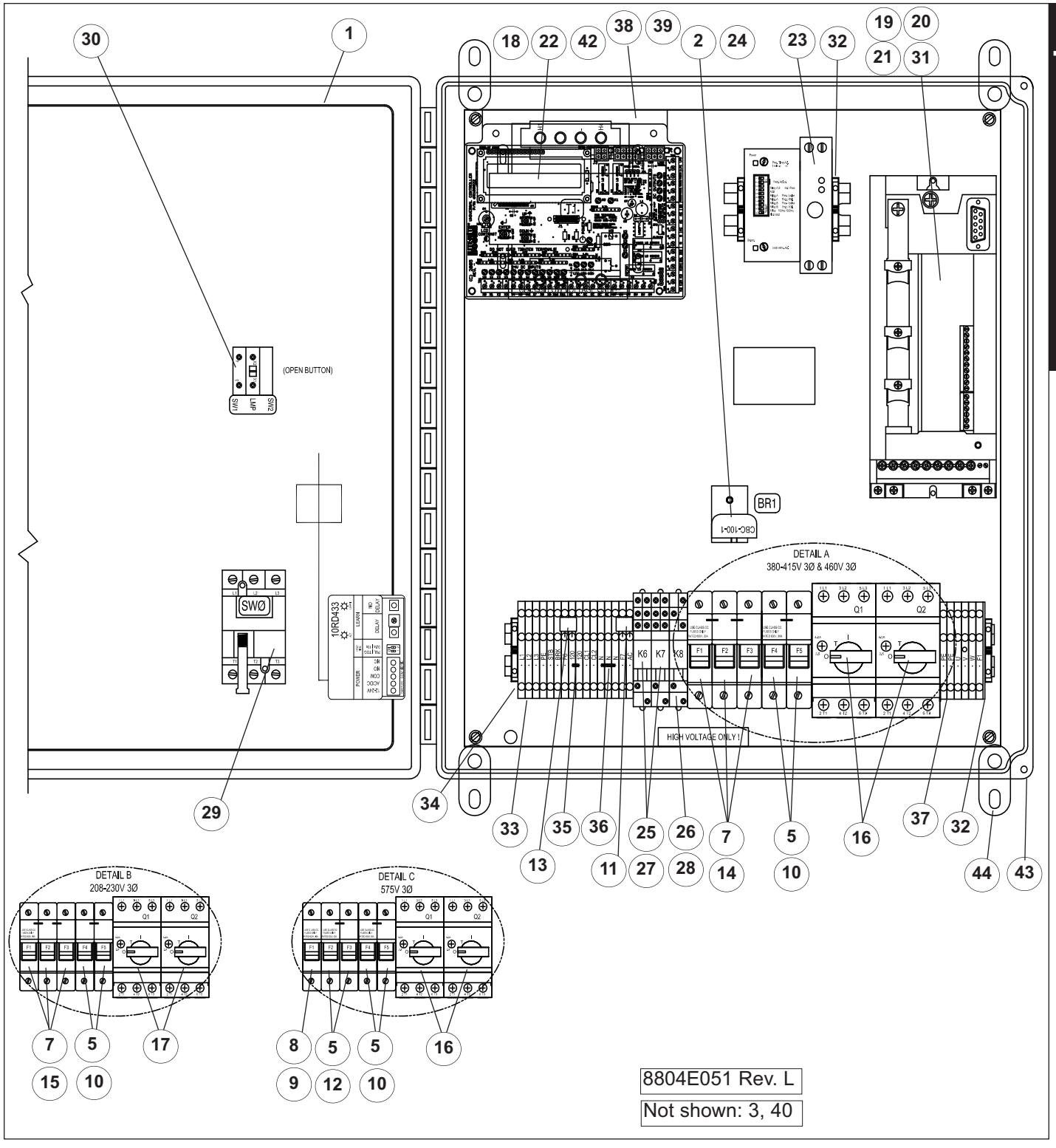
CHAPTER 6 - JBOX WIRING 120V



CHAPTER 6 - ACTIVATION WIRING DIAGRAM



CHAPTER 7 - CONTROL BOX PARTS



8804E051 Rev. L

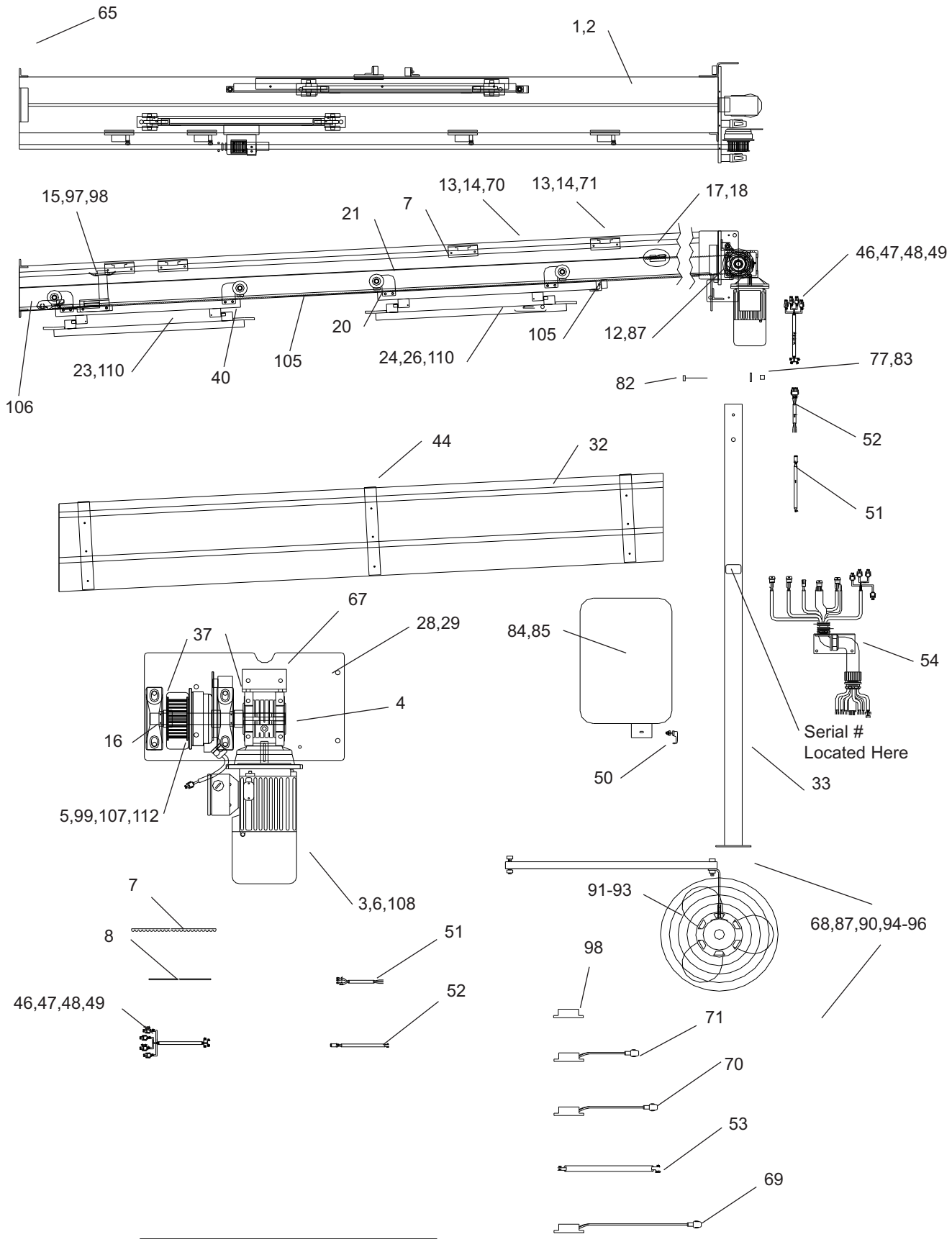
Not shown: 3, 40

CHAPTER 7 - CONTROL BOX PARTS LIST

ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Control Box (specify Enclosure, Backpanel or Assembly)	1742....
2	1	Rectifier Mounting Bracket	14500454
3	1	Kit, 8600, Resistor, KEB, 460V (not shown)	53700420
3	1	Kit, 8600, Resistor, KEB, 230V (not shown)	53700421
4	-		
5	1/2/3	Fuse Holder 2 Pole 600V 30 Amps (220V 1PH or 575V 3PH)	51000003
6	-		
7	1	Fuse Holder 3 Pole 600V 30 Amps (208-230V & 380-460V only)	51000013
8	1	Fuse Holder 1 Pole 600V 30 Amps (575V only)	51000019
9	2	Fuse 10 Amp 600V CC KLDR	51000033
10	2	Fuse 1 Amp 600V CC KLDR	51000034
11	1	Fuse 2.5 Amp 30V Re-settable	51000035
12	2	Fuse 3.5 Amp 600V CC KLDR (575V only)	51000038
13	1	Fuse, Resettable, 120V 1 Amp	51000039
14	3	Fuse 4.5 Amp 600V CC KLDR (400-460V)	51000046
15	3	Fuse 7 Amp 600V CC KLDR (208-230V)	51000047
16	1/2	Motor Starter, Manual, 0.4-0.63A (380-575V 3Ø only) (1-S.S.;2-B.P.)	51950030
17	1/2	Motor Starter, Manual, 0.63-1A (208-230V 3Ø only) (1-S.S.;2-B.P.)	51950031
18	1	Kit, Display, LCD, 2-Line w/CONN	53700529
19	1	Inverter KEB Keypad	53300018
20	1	Inverter KEB 1HP 230V USA 3Ø Type B (> 3/27/2002)	53300019
21	1	Inverter KEB 1HP 460V USA 3Ø Type B (> 3/27/2002)	53300021
22	1	Kit, Controller, i-COMM	53700528
23	1	Power Supply, DIN, 24VDC, 18W	65700006
24	1	Rectifier Clutch	66270004
25	2	Relay DPDT, 24VAC 5 Amp (1 optional for pre-announce)	66450003
26	1	Relay SPDT, 24VDC 10 Amp	66450014
27	2	Relay Socket 2 Pole 5 Amp (1 optional for pre-announce)	70350001
28	1	Relay Socket 1 Pole 250V, 10A	70350002
29	1	Kit, Disconnect Switch, w/ Handle	53700567
30	1	Open/Reset Button	72700107
31	1	Inverter KEB 1HP 400V European 3Ø Type G (> 3/27/2002)	53300020
32	4	Terminal End Stop Screwless	73100024
33	18	Terminal WA, Cage, 20 Amp, 3 Hole	73100085
34	1	Terminal WA, Cage, 20 Amp, 3 Hole, Bar	73100086
35	1	Terminal WA, Cage, 20 Amp, Jump, 2P	73100081
36	1	Terminal WA, Cage, 20 Amp, Jump, 3P	73100082
37	3	Terminal WA, Cage, 20 Amp, 3 Hole, Gnd	73100087
38	1	Transformer 150VA 208/230/460V 24/120	73550009
39	1	Transformer 150VA 380/415/575V 24/120	73550010
40	1	Transformer 575V (not shown)	73550017
41	-		
42	1	DCC, Loader, i-COMM	65100023
43	2	Latch, Quick Release, Kit, Fiberglass	51950021
44	4	Enclosure, Mounting Foot	51950018
		Refer to ***Page 48*** for Activation Parts List	

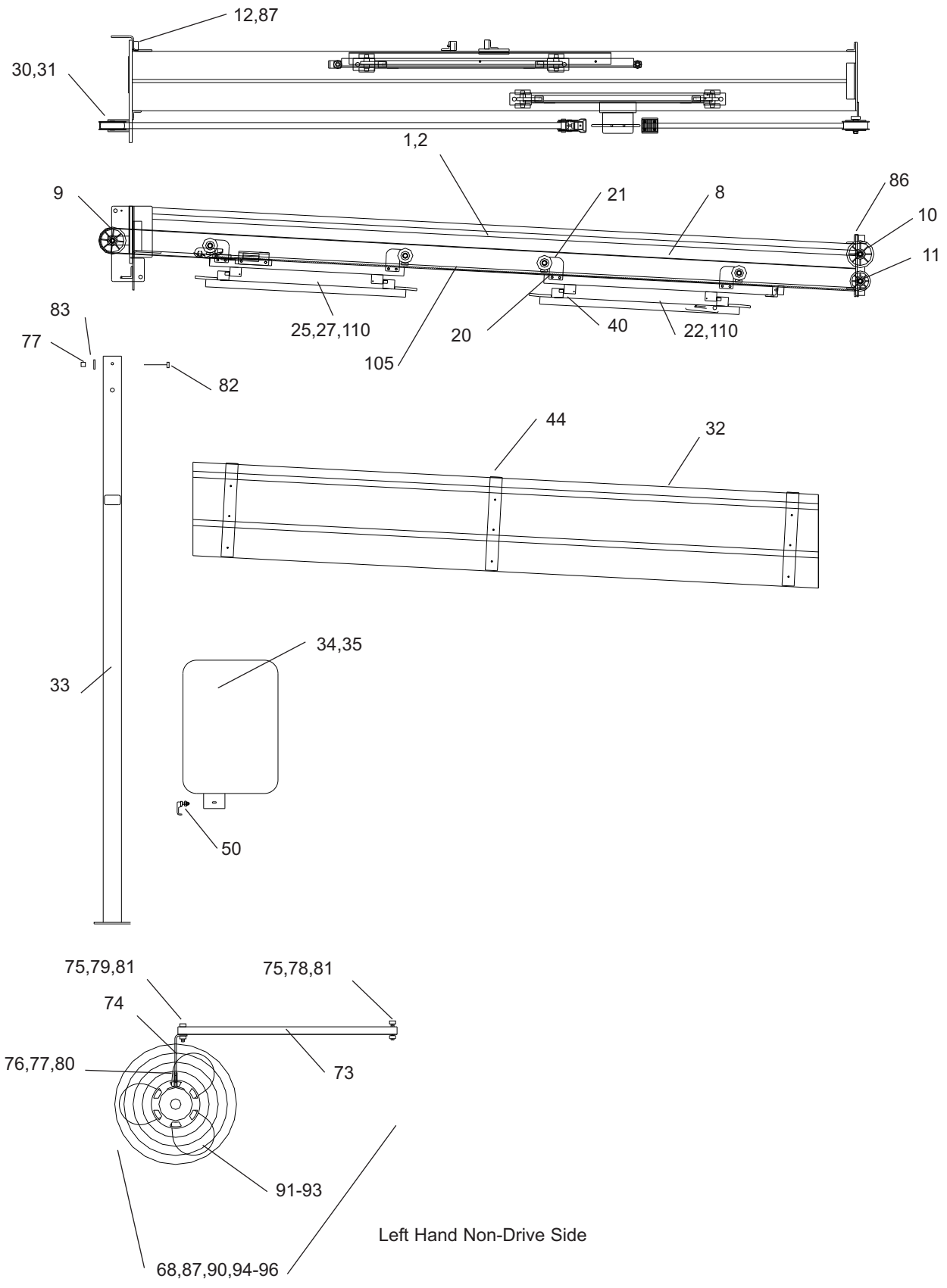
REFER TO PARTSLIST MANUAL FOR DOORS PRIOR TO 2/20/06

CHAPTER 7 - 4P DRIVE DOOR FRAME SERVICE PARTS

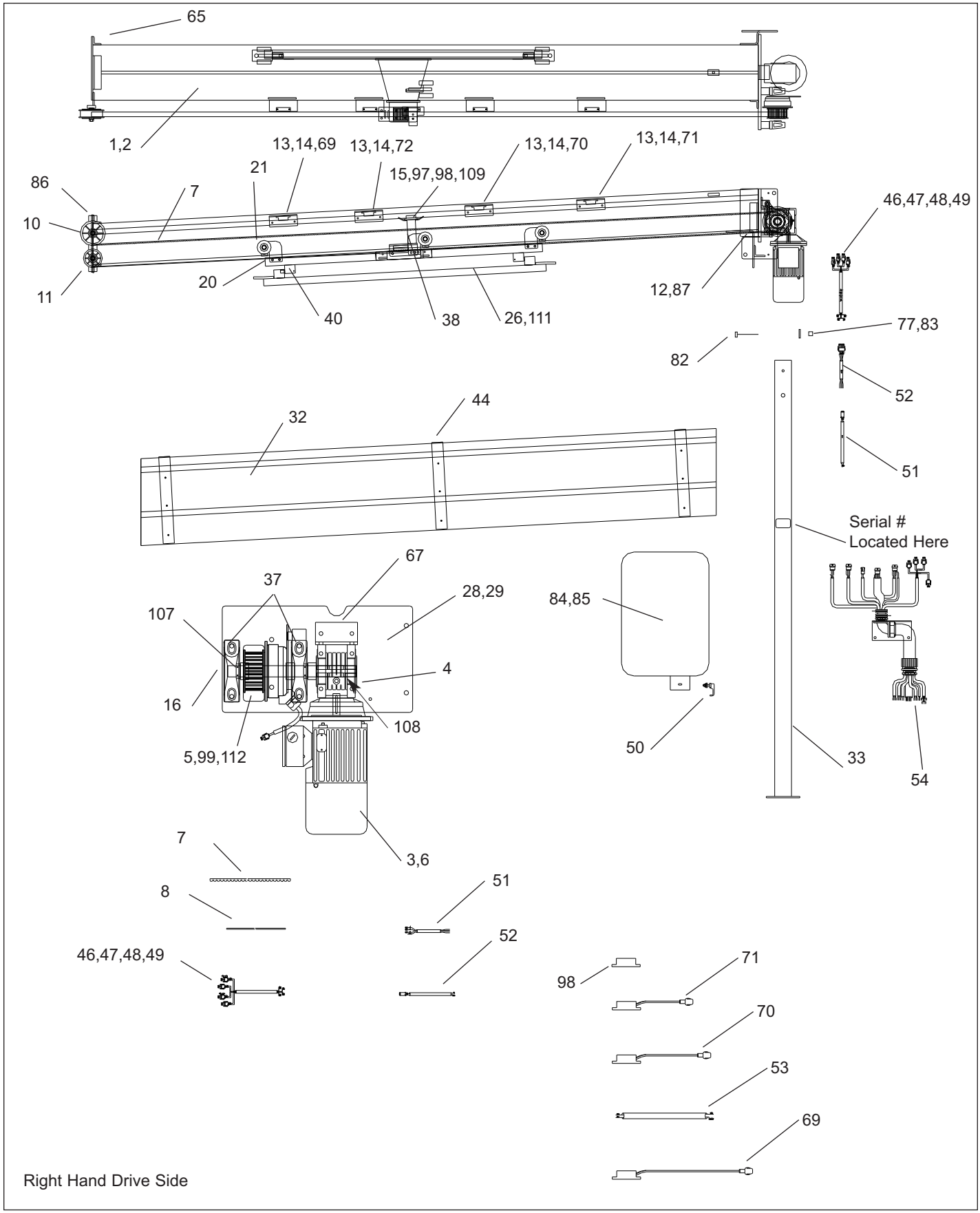


Right Hand Drive Side

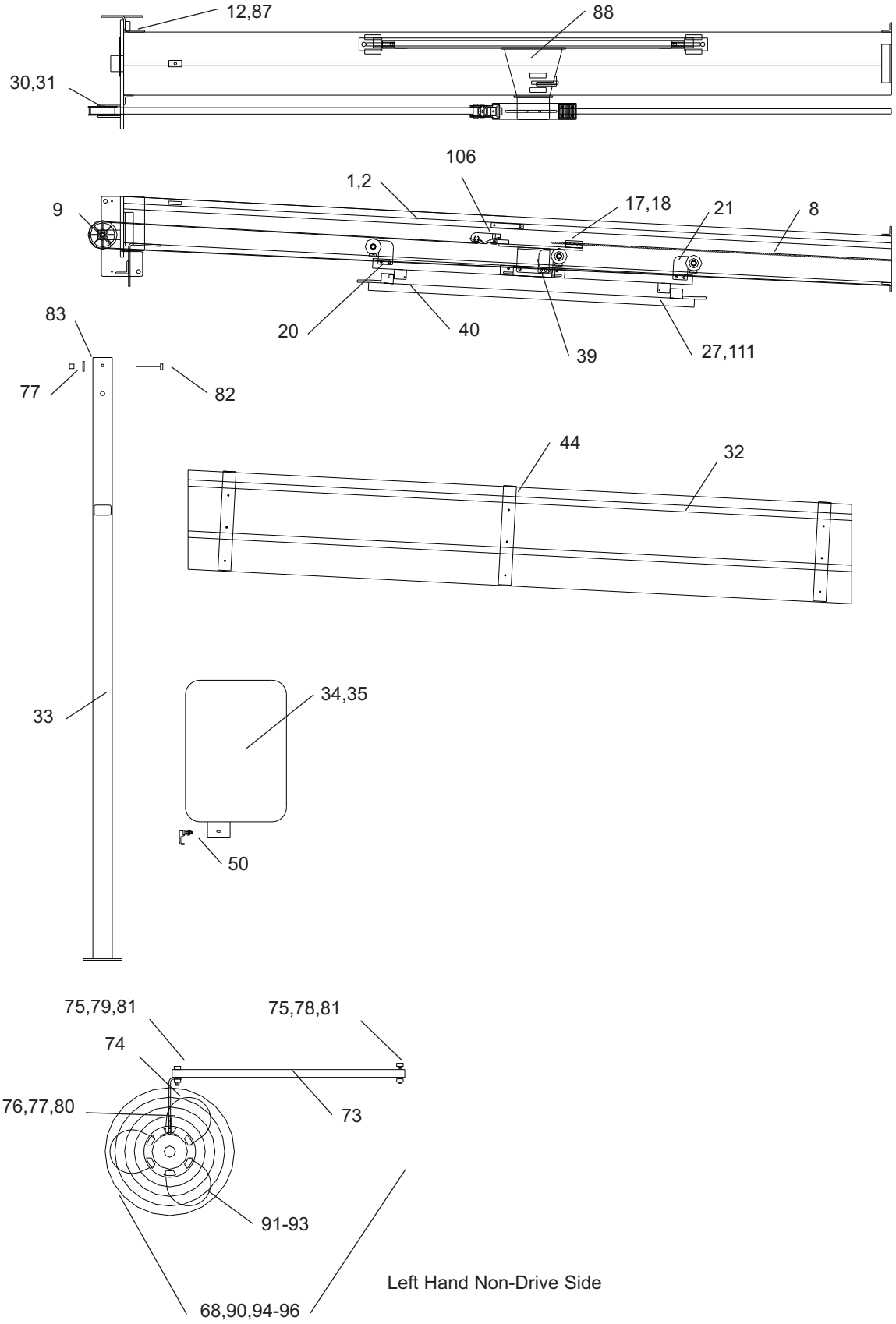
CHAPTER 7 - 4P NON-DRIVE DOOR FRAME SERVICE PARTS



CHAPTER 7 - 2P DRIVE DOOR FRAME SERVICE PARTS



CHAPTER 7 - 2P NON-DRIVE DOOR FRAME SERVICE PARTS

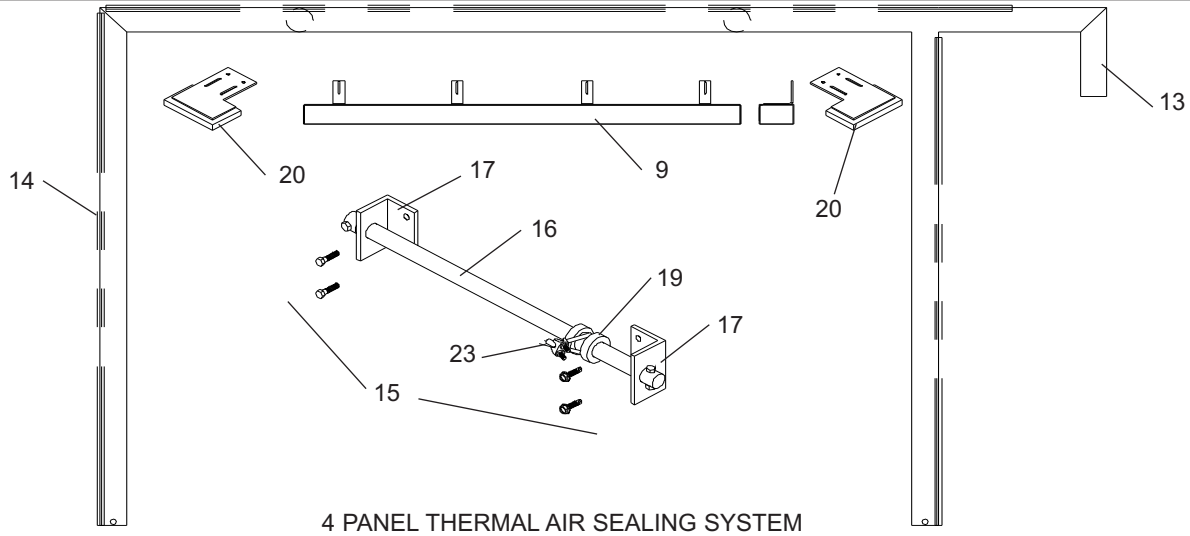


CHAPTER 7 - BP DOOR FRAME SERVICE PARTS LIST

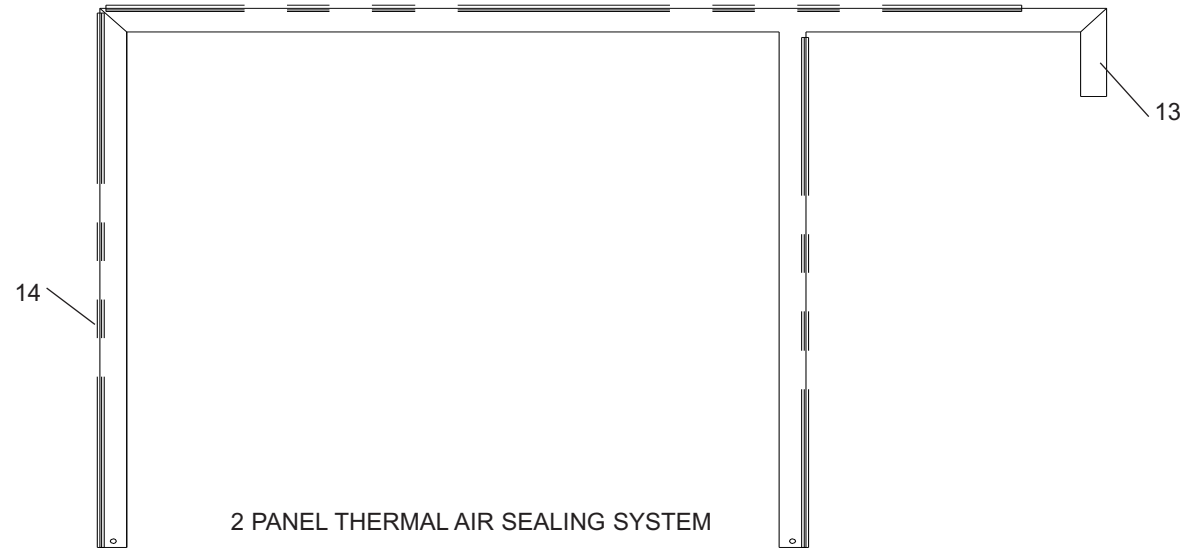
ITEM	QTY	DESCRIPTION	P/N
1	1	Header Assembly	5214....
2	1	Header Weldment	4639....
3	1	Motor Assy (Specify RHD/LHD) (> 3-30-2001-serial#17998) (includes clutch,reducer, bearings,shaft,hdw)	5532....
3	1	Motor/Brk 208/230-460V (>3-30-2001-s/n17998)	55250059
4	1	Gearbox	51250014
5	1	Clutch Electromagnetic 90V,UL,CE,AC (>2-28-01)	55150030
6	1	Brake (included w/# 3)	n/a
7	a/r	Belt Timing Drive Side (4 Panel D.O.W. +10') (2 Panel D.O.W. +12')	1258....
8	a/r	Belt Flat Non-Drive Side (4 Panel D.O.W. +10') (2 Panel D.O.W. +12')	1259....
9	1	Pulley, Flatbelt 4.5" OD w/Crown-Non Drive	65750027
10	1	Pulley, Flatbelt 4.5" OD w/No Crown-Middle	65750028
11	1	Pulley, Flatbelt 3" OD-Middle	65750029
12	2	Bumper Stud Mount	15250003
13	3	Plate Limit Switch Adjustment	65000265
14	4	Plate Limit Switch	14500604
15	1	Limit Switch Trip Plate	65000320
16	1	Drive Shaft	68950106
17	1	Clamp Base Belting Tapped-Drive Side	16700028
18	2	Plate Belting Clamp	65000250
19	1	Clamp Base Belting-Non Drive Side	16700027
20	4/8	Side Roller	67200033
21	4/8	Trolley Assembly 2 or 4 Panel	53700153
22	1	Hanger Assembly 4-Panel Lead Non-Drive	53700302
23	1	Hanger Assembly 4-Panel Lead Drive	53700301
24	1	Hanger Assembly 4-Panel Follower Right	53700299
25	1	Hanger Assembly 4-Panel Follower Left	53700300
26	1	Hanger Assembly 2-Panel Right Hand	53700174
27	1	Hanger Assembly 2-Panel Left Hand	53700175
28	1	Plate Weldment Motor/Bearing RH	53700205
29	1	Plate Weldment Motor/Bearing Lh	53700206
30	1	Plate Weldment Non-Drive RHD w/o Defrost	obsolete
30	1	Plate Weldment Non-Drive RHD w/ Defrost	53700226
31	1	Plate Weldment Non-Drive LHD w/o Defrost	obsolete
31	1	Plate Weldment Non-Drive LHD w/ Defrost	53700225
32	1	Facade, Header (1 or 2 Pieces)	6929....
33	2	Side Support Post Weldment	7263....
34	1	End Cap, Non-Drive RH Side (For LHD door)	69200044
35	1	End Cap, Non-Drive LH Side (For RHD door)	69200051
36	2	Ratchet Non-Drive	15200003
37	2	Pillow Block Bearing	12500018
38	1	Kit, Bracket Assembly 2-Panel Drive-Magnet	53700298
39	1	Kit, Bracket Assembly 2-Panel Non-Drive	53700169
40	4/8	Hanger Support Bolts	67880089
41	1	Bracket Weldment, Panel Connector Left	14500474
42	1	Bracket Weldment, Panel Connector Right	14500473
43	2	Ratchet-Hanger Panels w/10' belting (4P) (<3/30/01)	66200001
44	6	Screw, FHSS, #14 x 1 3/4, ZNC	67850003
45	a/r	Strobe/Beacon Bracket	14500493
46	1	C-Box Cable Ass'y, L/S, 3 Conn Magnet 10'	15650168
47	1	C-Box Cable Ass'y, L/S, 3 Conn Magnet 20'	15650169
48	1	C-Box Cable Ass'y, L/S, 3 Conn Magnet 30'	15650170
49	1	C-Box Cable Ass'y, L/S, 3 Conn Magnet 40'	15650171
50	2	Latch, Endcap	54150003
51	1	Cable Assembly, Motor AC 10'	15650172
51	1	Cable Assembly, Motor AC 20'	15650173
51	1	Cable Assembly, Motor AC 30'	15650174
51	1	Cable Assembly, Motor AC 50'	15650175
52	1	Cable Assembly, Clutch 10' (<2-28-01-diff. plug)	15650125
52	1	Cable Assembly, Clutch 20' (< 2-28-01-serial#17621-has diff. plug)	15650126
52	1	Cable Assembly, Clutch 30' (<2-28-01-serial#17621-has diff. plug)	15650127
52	1	Cable Assembly, Clutch 50' (<2-28-01-serial#17621-has diff. plug)	15650128

ITEM	QTY	DESCRIPTION	P/N
53	1	Brake Cable, 10', 20', 30' or 50' Lengths	15650161
54	1	Cable, Control Box Conduit	1588....
55	1	n/a	
56	1	n/a	
57	1	n/a	
58	1	n/a	
59	1	n/a	
60	1	n/a	
61	1	n/a	
62	1	n/a	
63	1	n/a	
64	1	n/a	
65	1	Kit, 8600, Center Wall Support	53700875
66	1	n/a	
67	1	Kit, Bracket "L" Gearbox Torque Arm	53700426
68	1	Kit, 8600 Fan Tri-Volt 208/230V-460V (<4-22-02-serial#17330)	53700293
69	1	Limit Switch Cable Assembly, Magnet, Black Connector, Closed-16' (>1/9/2001)	72700117
70	1	Limit Switch Cable Assembly, Magnet, White Connector, Approach Open-10' (>1/9/2001)	72700118
71	1	Limit Switch Cable Assembly, Magnet, Red Connector, Open-6' (>1/9/2001)	72700119
72	1	Limit Switch Cable Ass'y, Magnet, (>1/9/2001) Orange Connector, Close-15' (Euro only)	72700123
73	1	Fan Header Mounting Bracket	14500598
74	1	Fan Pivot Bracket	14500597
75	4	1/2" x 2" Hex Hd Bolt	67900008
76	1	3/8" x 1 1/4" Hex Head Bolt	67880004
77	1	3/8" Hex Lock Nut	55630005
78	1	Plate Fan Adjustment	65000315
79	2	1/2" Hex Lock Nut	55620002
80	2	3/8" Lock Washer	74130007
81	2	7/16" Flat Washer	74140001
82	2	3/8" x 3" Hex Hd Bolt	78880028
83	2	3/8" Flat Washer	74130001
84	1	End Cap, RH Drive Side	69200061
85	1	End Cap, LH Drive Side	69200060
86	1	Bracket, Guide Pulley	14500457
87	2	Screw, HHMS, 1/4-20 x 1", GRD 5, znc	67860025
88	2	Kit, 2 Panel Trolley Plate	53700351
89	1/2	Kit, Pressure Wheel Assembly (BP/SS/R,LD)	53700367
90	1/2	Kit, 8600 Fan 575V *(was 53700346)*	obsolete
91	1/2	Fan 575V (motor, blades and cage)	53700379
92	1/2	Fan 208-230/460V (motor, blades and cage)	53700380
93	1/2	Fan 115/220V Single Phase	53700381
94	1/2	Kit, 8600 Fan 575V *(was 53700382)*	obsolete
95	1/2	Kit, 8600 Fan 460V (> 4-22-02-serial#17330)	53700383
96	1/2	Kit, 8600 Fan 115/220V Single Phase (>4-22-02)	53700384
97	2	Screws	67850028
98	1	Magnet (included with 69 - 72)	72700116
99	3	Clutch Spacer	70450066
100	a/r	n/a	
101	1/2	Follower Panel Stop Angle	14500860
102	1/2	Follower Panel Stop Bumper	15250057
103	1/2	Screw, HHMS, 3/8-16 x 1 1/4, GR5, znc	67880004
104	1/2	Washer, Flat, 3/8 x 1 x .063, znc	74130001
105	2	Kit, 8600, Follower Stop/Bracket, 4 Panel	53700474
106	1	Ratchet	15200003
107	1	Clutch Key	53550017
108	1	Gearbox Key	53550010
109	1	Limit Switch Trip Plate, (<1-19-01)	65000256
110	a/r	Hanger, Weldment, 4P/NRW	53700648
111	a/r	Hanger, Weldment, 2P	53700649
112	1	Clutch Electromagnetic 90V,UL,DC (<2-28-01)	55150027

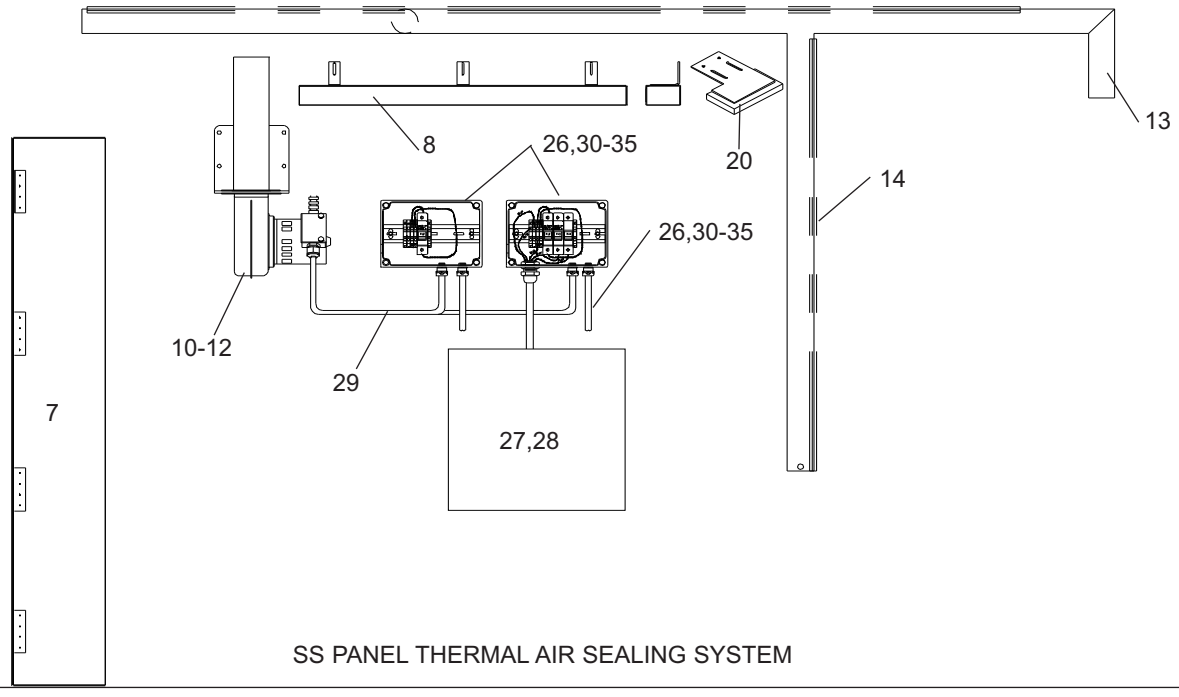
CHAPTER 7 - THERMAL AIR SEAL SERVICE PARTS (> 4/26/04)



4 PANEL THERMAL AIR SEALING SYSTEM

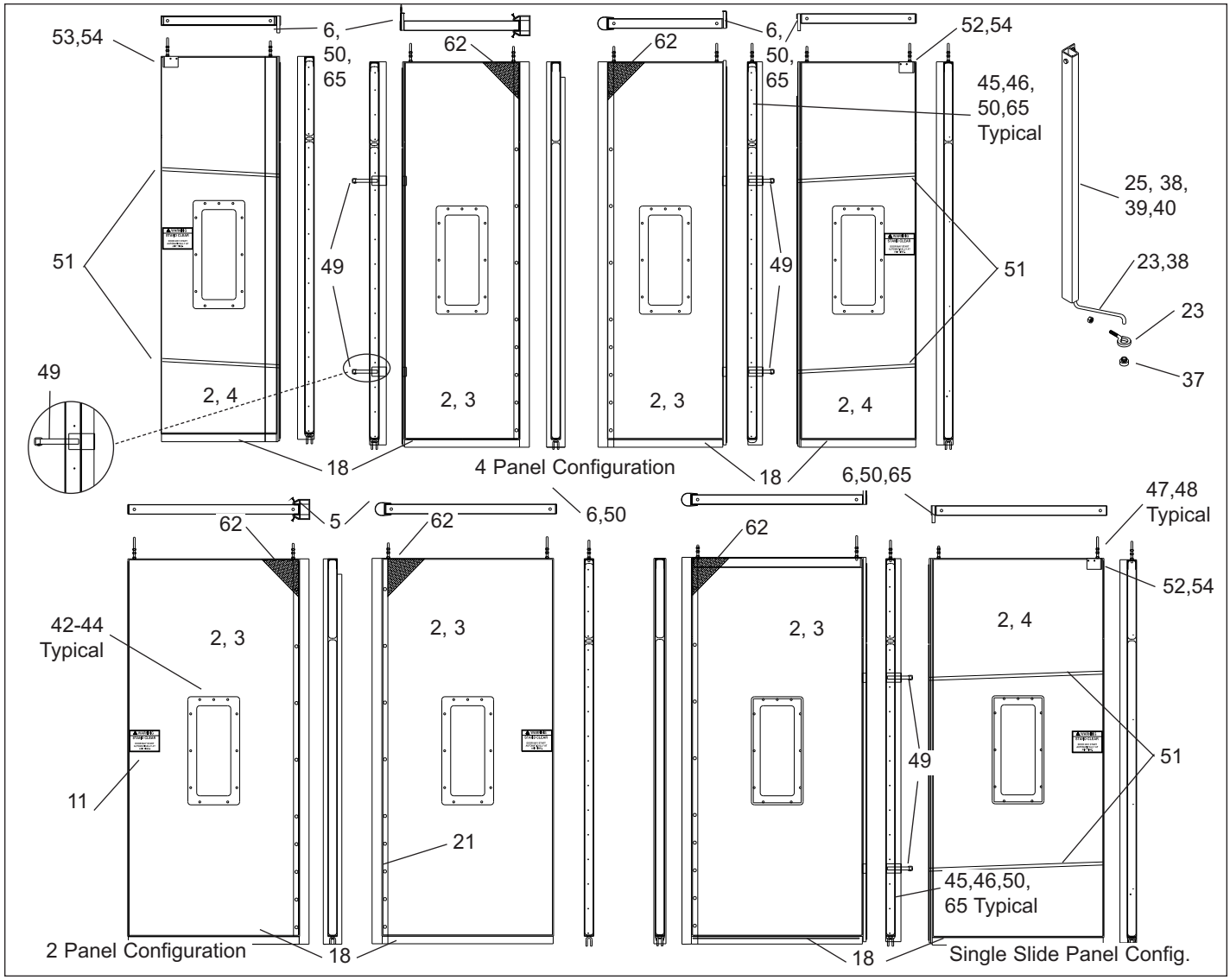


2 PANEL THERMAL AIR SEALING SYSTEM



SS PANEL THERMAL AIR SEALING SYSTEM

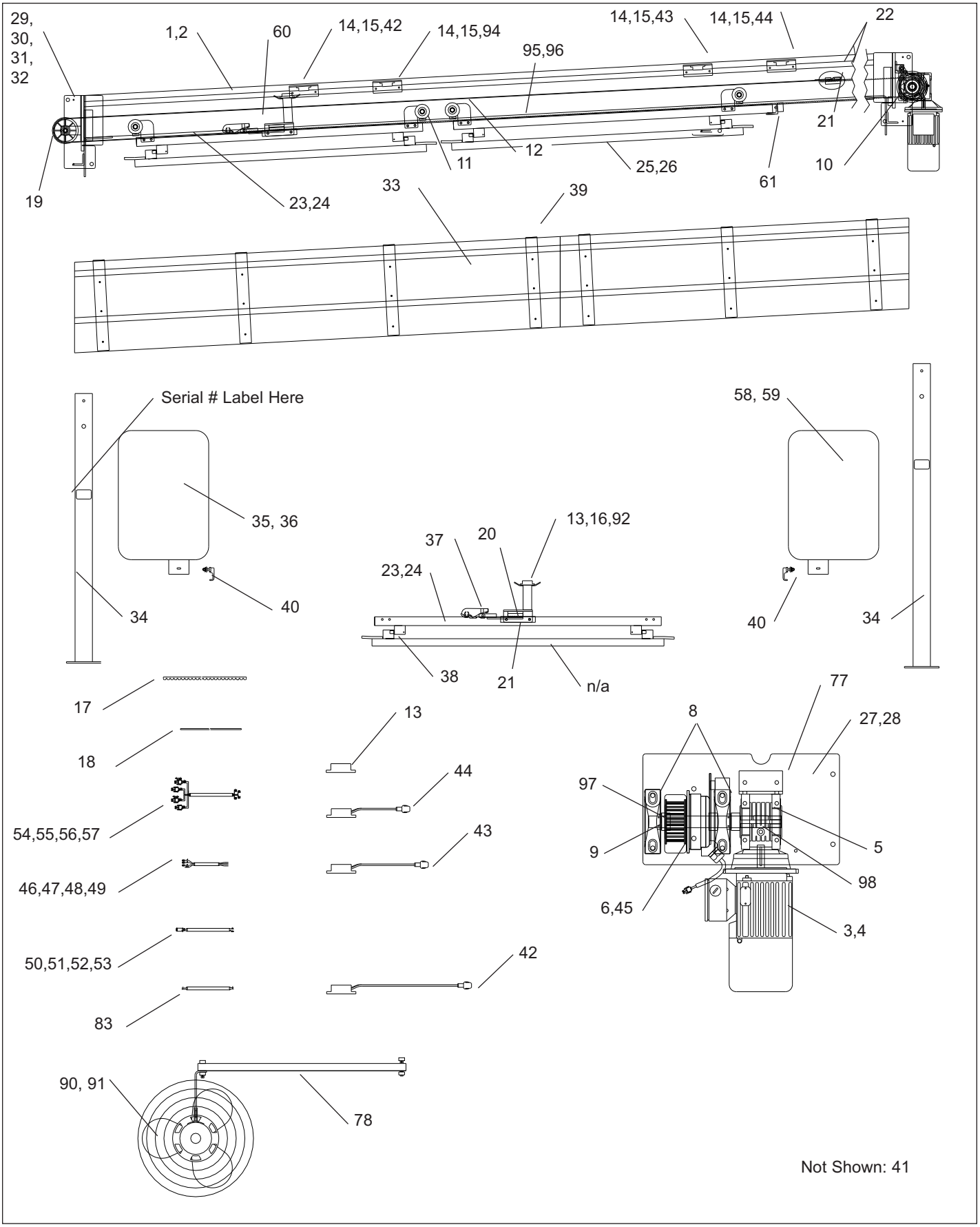
CHAPTER 7 - PANEL & THERMAL AIR SYSTEM SERVICE PARTS LIST (>4/26/04)



ITEM	QTY	DESCRIPTION	P/N
2	1	Panel Assembly, Set	6352....
3	1	Panel Assembly, Lead	6350....
4	1	Panel Assembly, Follower	6349....
5	1	Seal, Nose, Panel	6880....
6	1	Seal, Panel	6864....
7	1	Panel, Ass'y, End, SS	6353....
8	1	Kit, 8600, Seal, Lintel, SS	53700295
9	1	Kit, 8600, Seal, Lintel, 4 Panel	53700158
10	1	Kit, Blower, Heater, Air seal, PTC, 110V	53700760
11	a/r	Label, Stand Clear	53850263
12	1	Kit, Blower, Heater, Air seal, PTC, 230V	53700761
13	1	Thermal Air Sealing System	6884....
14	1	Retainer	73400002
15	2	Retention System, Panel	6791....
16	2/4	Fiberglass Rod, 13/16" OD	45400007
17	4/8	Bracket, Rod Mount, Panel Retention	14501077
18	1-4	Seal, Bottom (S.S. & 2P)	53700160
18	1-4	Seal, Bottom (4P)	53700159
19	2	Slide, Roller, Panel Retention	70150009
20	1	Stop, Lintel Follower Panel RH (not shown)	72050019
20	1	Stop, Lintel Follower Panel LH (not shown)	72050020
21	20	Plastic Rivet	16800014
22	1/2	Screw, Eyebolt, 1 5/6" Shaft	67850134
23	2	Clamp, Cable, 1/8"	16700008
24	10'	Rope, Nylon, 3/16", Poly Coat	67600008
25	6	Spring, Extension	70700042
26	1	Junction Box	5354....
27	1	Transformer, 2.0 KVA, 600: 240/120	73550017
28	1	Transformer, 2.0 KVA, 480/240: 240/120	73550024
29	5'	Cable, 14/7, 600V, 90C	15650179
30	1	Fuse, Holder 2 Pole, 600V, 30A	51000003
31	1	Fuse, 6AMP, 600V, CC	51000016
32	1	Fuse, Holder 1 Pole, 600V, 30A	51000019
33	1	Fuse, 12AMP, 600V, Time Delay	51000027
34	2	Fuse, 10AMP, 600V, CC KLDR	51000033

ITEM	QTY	DESCRIPTION	P/N
35	2	Fuse, 4.5AMP, 600V, CC KLDR	51000046
36	1	Fabric Patch Kit (not shown)	53700186
37	2	Eyebolt Ring, Retention System	67020048
38	2	Kit, Panel Retention (rope, spring)	53700460
39	1	Kit,8600,Panel Retention,Ass'y,Retro,RH	53700477
40	1	Kit,8600,Panel Retention,Ass'y,Retro,LH	53700482
41	1	Crate (not shown)	2791....
42	a/r	Window Back w/Holes	74080013
43	a/r	Window Front w/o Holes	74080014
44	0/2	Window 4 Pane Polycarbonate 16"x34" (OD)	74080009
45	a/r	Screw, HH, Lag, 1/4 x 2, znc	67860009
46	a/r	Fender Washer #10ID x 1" OD S.S.	74100019
47	12	5/8" Stainless Steel Hex Nut	55660002
48	4	Stud, Outside, Long 8"	67910025
49	2/4	Panel Retention Strap Elastic (w/d-ring) (2 <10' d.o.h. or 4 =/>10'd.o.h.)	72200028
50	2	Pressure Strap Seal Lead & Follower Panels	7225....
51	2/4	Follower Panel Retention Strap (belt only) 46 1/2" (2 <10' d.o.h. or 4 =/>10'd.o.h.)	53700488
51	2/4	Follower Panel Retention Strap (belt only) 65" long (1 <10' d.o.h. or 2 =/>10'd.o.h.)	53700487
52	1	Follower Panel Bumper Assembly-RH	53700289
53	1	Follower Panel Bumper Assembly-LH	53700290
54	2	FHMS 1/4-20 x 3/4"	67860069
55	-	n/a	
56	-	n/a	
57	-	n/a	
58	-	n/a	
59	-	n/a	
60	-	n/a	
61	-	n/a	
62	a/r	Kit, 8600 Panel Repair	53700514
63	1	Kit, Air Seal Upgrade	5371....
64	a/r	Button Tie (2 per - repair nose seal)	73250017
65	a/r	Seal Cover	1844....

CHAPTER 7 - SS DOOR FRAME SERVICE PARTS



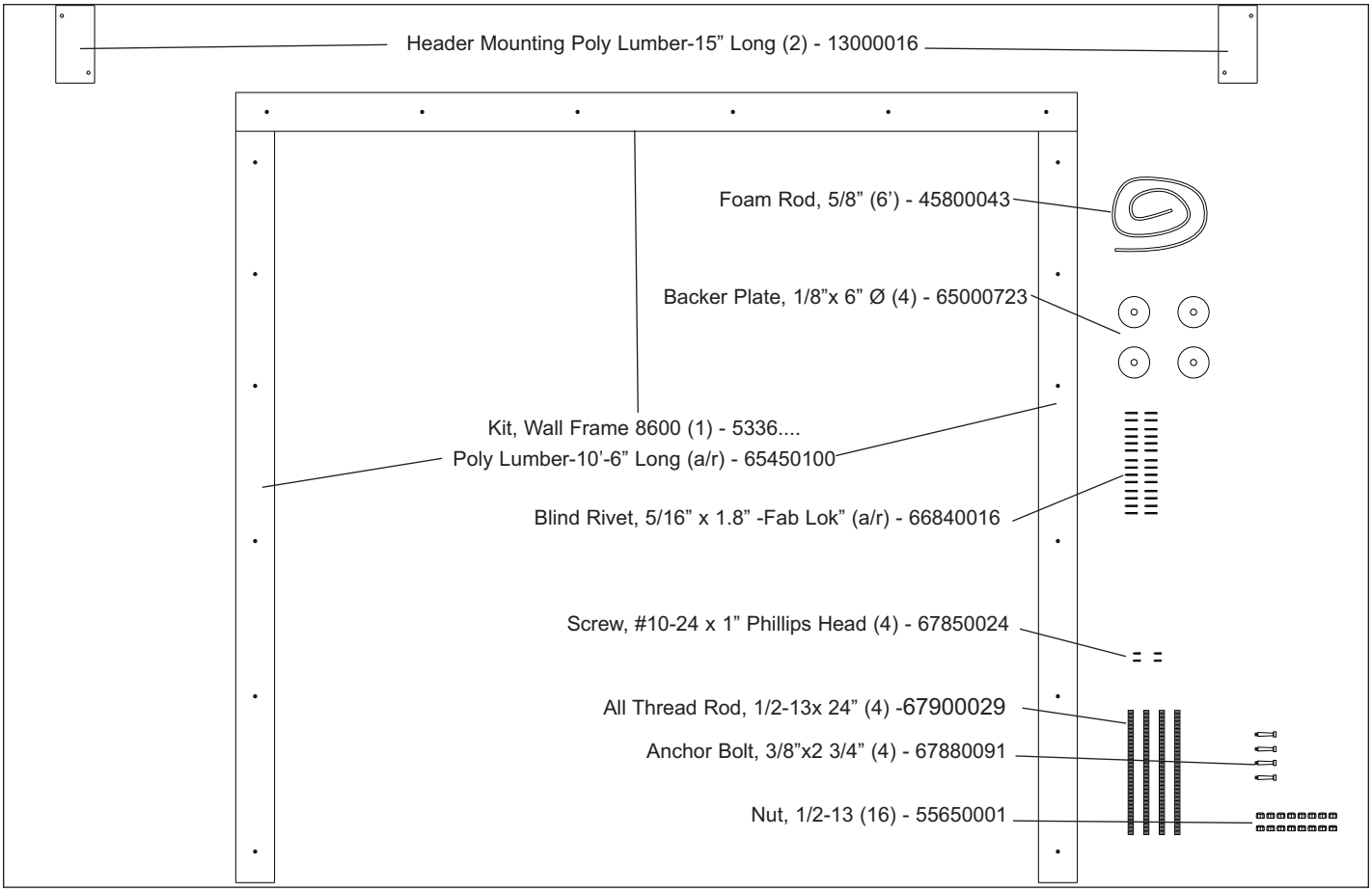
CHAPTER 7 - SS DOOR FRAME SERVICE PARTS LIST (>4/26/04)

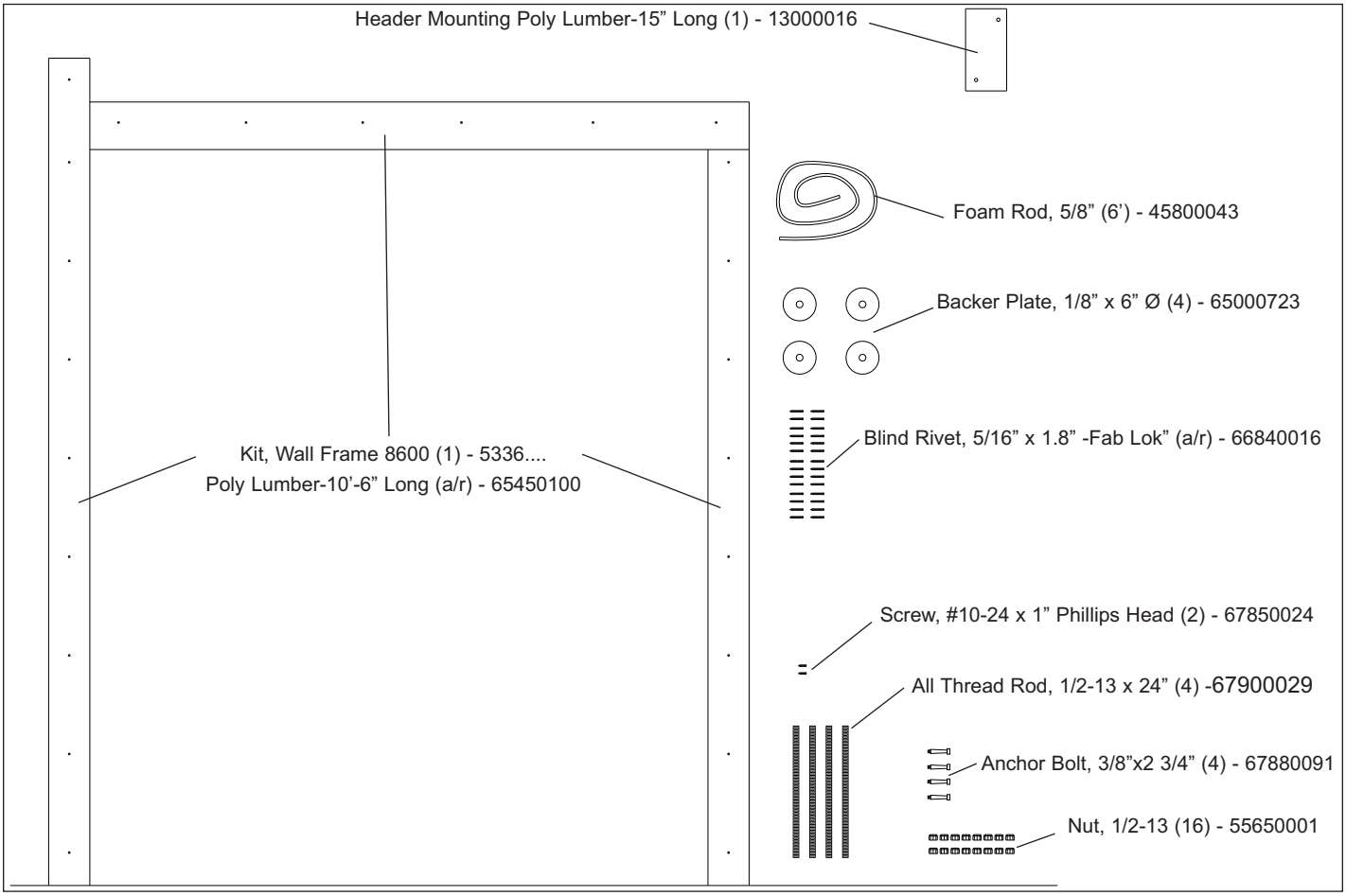
ITEM	QTY	DESCRIPTION	P/N
1	1	Entire Door Assembly	8600....
1	1	Header Assembly	5214....
2	1	Header Weldment	4639....
3	1	Motor Assembly (Specify RHD/LHD) (includes clutch, reducer, bearings,shaft,hdw)	5532....
4	1	Motor/Brake 208/230-460V	55250059
5	1	Gearbox	51250014
6	1	Clutch Electromagnetic 90V, UL, DC (< 2-28-01-serial#17621)	55150027
6	1	Clutch Electromagnetic 90V, UL, CE, AC (> 2-28-01-serial#17621)	55150030
7	1	Brake (included w/# 3)	n/a
8	2	Pillow Block Bearing	12500018
9	1	Drive Shaft	68950106
10	1	Bumper Stud Mount	15250003
11	4	Side Roller	67200033
12	4	Trolley Assembly	53700153
13	1	Magnet (Included w/ # 42-44)	72700116
14	4	Plate Limit Switch Adjustment	65000265
15	4	Plate Limit Switch	14500604
16	1	Limit Switch Trip Plate	65000320
17	a/r	Belt Timing Drive Side (D.O.W. plus 7'-4")	1258....
18	a/r	Belt Flat Non-Drive Side (D.O.W. plus 7'-6")	1259....
19	1	Pulley, Flatbelt 4.5" OD w/Crown-Non Drive	65750027
20	1	Clamp Base Belting Tapped-Drive Side	16700028
21	2	Plate Belting Clamp	65000250
22	3	Plate, Belting Pressure, Single Slide	65000325
23	1	Kit, Hanger Assembly Lead RHD-Single Slide	53700281
24	1	Kit, Hanger Assembly Lead LHD-Single Slide	53700282
25	1	Kit, Hanger Assembly Follower Panel RHD-SS	53700283
26	1	Kit, Hanger Assembly Follower Panel LHD-SS	53700284
27	1	Plate Weldment Motor/Bearing RHD	obsolete
28	1	Plate Weldment Motor/Bearing LHD	obsolete
29	1	Plate Weldment Non-Drive RHD w/o Defrost	53700203
30	1	Plate Weldment Non-Drive RHD w/ Defrost	53700226
31	1	Plate Weldment Non-Drive LHD w/o Defrost	53700204
32	1	Plate Weldment Non-Drive LHD w/ Defrost	53700225
33	1	Facade, Header (2 pieces)	6929....
34	2	Support Post Weldment	7263....
34	2	Support Post Weldment-European	7263....
35	1	End Cap, RH Side Non-Drive (LH Drive)	69200044
36	1	End Cap, LH Side Non-Drive (RH Drive)	69200051
37	2	Ratchet Non-Drive	15200003
38	4/8	Hanger Support Bolts	67880089
39	6	Screw, FHSS, #14 x 1 3/4, ZNC	67850003
40	2	Latch, End cap	54150003
41	a/r	Strobe/Beacon Bracket	14500493
42	1	Limit Switch Cable Assembly, Magnet, Black Connector, Closed-16'	72700117
43	1	Limit Switch Cable Assembly, Magnet, White Connector, Approach Open-10'	72700118
44	1	Limit Switch Cable Assembly, Magnet, Red Connector, Open-6'	72700119
45	3	Clutch Spacer	70450066
46	1	Control Box Cable Assembly, Motor AC 10'	15650172
47	1	Control Box Cable Assembly, Motor AC 20'	15650173
48	1	Control Box Cable Assembly, Motor AC 30'	15650174
49	1	Control Box Cable Assembly, Motor AC 50'	15650175

ITEM	QTY	DESCRIPTION	P/N
50	1	Control Box Cable Assembly, Clutch 10' (< 2-28-01-serial#17621-has diff. plug)	15650125
51	1	Control Box Cable Assembly, Clutch 20' (< 2-28-01-serial#17621-has diff. plug)	15650126
52	1	Control Box Cable Assembly, Clutch 30' (< 2-28-01-serial#17621-has diff. plug)	15650127
53	1	Control Box Cable Assembly, Clutch 50' (< 2-28-01-serial#17621-has diff. plug)	15650128
54	1	Cbox Cable Ass'y, L/S, 3 Conn Mag 10' (>1-19-01)	15650168
55	1	Cbox Cable Ass'y, L/S, 3 Conn Mag 20' (>1-19-01)	15650169
56	1	Cbox Cable Ass'y, L/S, 3 Conn Mag 30' (>1-19-01)	15650170
57	1	Cbox Cable Ass'y, L/S, 3 Conn Mag 50' (>1-19-01)	15650171
58	1	End Cap, RH Drive	69200061
59	1	End Cap, LH Drive	69200060
60	1	Bracket, Belt Tension-LHD only	14500571
61	1	Bracket, Follower Panel Bumper	14500601
62	1	n/a	
63	1	n/a	
64	1	n/a	
65	1	n/a	
66	1	n/a	
67	1	n/a	
68	1	n/a	
69	1	n/a	
70	1	n/a	
71	1	n/a	
72	-	n/a	
73	-	n/a	
74	-	n/a	
75	-	n/a	
76	1	n/a	
77	1	Kit, Bracket "L" Gearbox Torque Arm	53700426
78	2	Kit, 8600 Fan Tri-Volt S.S. *(was 53700297)*	obsolete
79	1	Kit, 8600 Fan 575V S.S. *(was 53700347)*	obsolete
80	2	Blockout Bracket (optional)	65000298
81	a/r	Square Tubing For Blockout Support Posts	71560055
82	2	Offset Support Post Plugs	65300008
83	1	Brake Cable, 10', 20', 30' or 50' lengths	15650161
84	a/r	Cable, Control Box w/Conduit	1588....
85	1	n/a	
86	1	Fan 575V	53700379
87	1	Fan 460V	53700380
88	1	Fan 115/220V Single Phase	53700381
89	1	Kit, 8600 Fan 575V *(was 53700382)*	obsolete
90	1	Kit, 8600 Fan 460V (> 4-22-02-serial#17330)	53700383
91	1	Kit, 8600 Fan 115/220V Single Phase (> 4-22-02-serial#17330)	53700384
92	2	Screws	67850028
93	1	n/a	
94	1	Limit Switch Cable Ass'y, Magnet, Orange Connector, Close-15' (Euro only)	72700123
95	1	Kit, 8600, Follower Stop/Bracket, SS, RH	53700475
96	1	Kit, 8600, Follower Stop/Bracket, SS, LH	53700476
97	1	Clutch Key	53550017
98	1	Gearbox Key	53550010

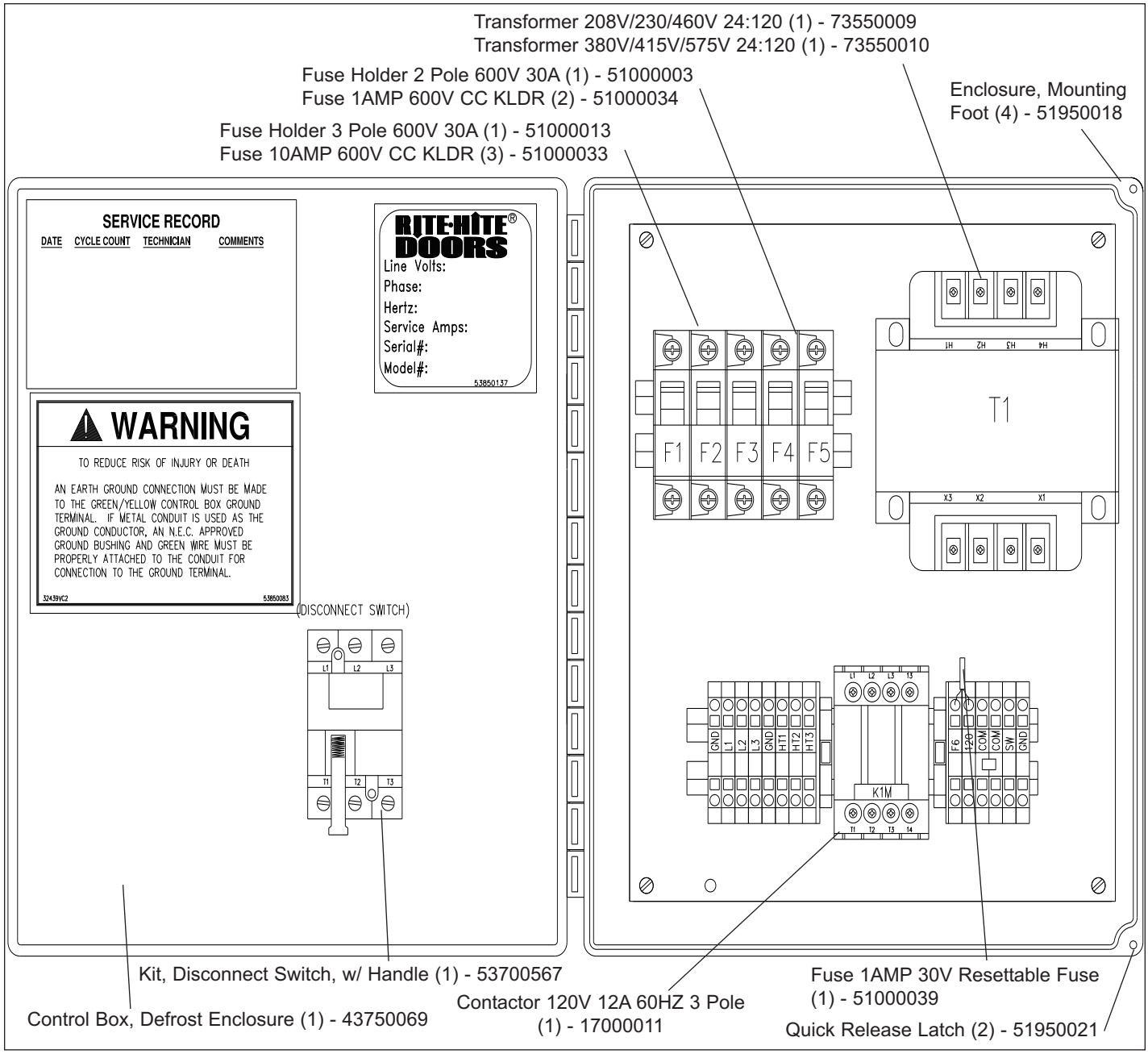
REFER TO PARTSLIST MANUAL FOR DOORS PRIOR TO 4/26/04

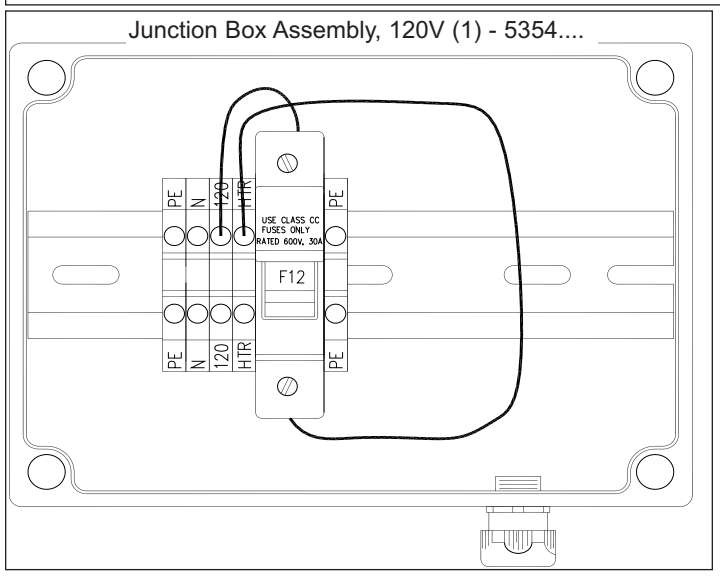
CHAPTER 7 - BP/SS POLY LUMBER SERVICE PARTS

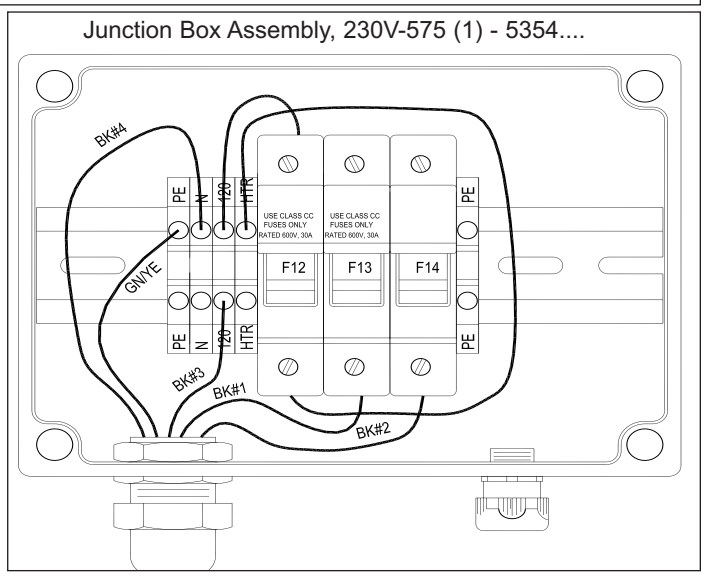




CHAPTER 7 - DEFROST / JUNCTION BOX







CHAPTER 7 - ACTIVATION PARTS LIST

#	Part #	Description	5700	7100	8000	8600	8900	FSTX	FSTXCL	FSTXFR	FSTXFRLD	FSTXXL	LTSPD	Split2nd
1	11050007	Alarm, Audible, 24AC/DC, 22.5 (I-Zone)	N	N	Y	N	Y	Y	Y	Y	Y	Y	Y	N
2	11050010	Alarm, Audible, 120VAC,10-TONE, AB	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
3	17500025	Controller, Wireless, Act, BTR, 12-24V	N	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y
4	17500001	Induction Loop Board, 24VDC (<5/28/14)	N	Y	Y	Y	Y	Y	Y	Y	N	Y	N	N
5	17500010	Induction Loop Board, 12/24VDC (=>6/20/12)	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
6	52000037	Induction Loop Board Harness (<5/28/14)	N	Y	Y	Y	Y	Y	Y	Y	N	Y	N	N
7	52000056	Induction Loop Board Harness (=>6/20/12)	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
8	53700552	Induction Loop, Kit, Single (<5/28/14)	N	Y	Y	Y	Y	Y	Y	Y	N	Y	N	N
9	53700864	Induction Loop, Kit, Dual	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
10	55150279	i-COMM ii LCD Interface	N	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y
11	7622	I-Zone Kit	N	N	Y	N	Y	Y	N	Y	Y	Y	Y	N
12	7636	I-Zone Upgrade Kit, Non FasTrax	N	N	Y	N	Y	N	N	N	N	N	Y	N
13	7637	I-Zone Upgrade Kit, FasTrax	N	N	N	N	N	Y	N	Y	Y	Y	N	N
14	14500774	I-Zone Sensor Bracket Black	N	N	Y	N	Y	Y	N	Y	Y	Y	Y	N
15	14500775	I-Zone Sensor Bracket Gray	N	N	Y	N	Y	Y	N	Y	Y	Y	Y	N
16	14500783	I-Zone Sensor Bracket Stainless	N	N	Y	N	Y	Y	N	Y	Y	Y	Y	N
17	17900110	I-Zone Cover Gray	N	N	Y	N	Y	Y	N	Y	Y	Y	Y	N
18	17900111	I-Zone Cover Black	N	N	Y	N	Y	Y	N	Y	Y	Y	Y	N
19	17900112	I-Zone Cover Stainless	N	N	Y	N	Y	Y	N	Y	Y	Y	Y	N
20	14501212	Motion Sensor, Mounting Bracket	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
21	55200012	Motion Sensor, Remote Programmer	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
22	55200018	Motion Sensor, FalconXL < 11.5'H	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
23	55200019	Motion Sensor, Falcon >= 11.5'H	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
24	55200021	Motion Sensor, IS40, 12-24V	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
25	55200022	Motion Sensor, LZRI30, 12-35VDC	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
26	55200023	Motion Sensor, MS08,Touchless, 12-24V	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
27	55200024	Motion Sensor, IS40XL, 12-24V	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
28	14500024	Photoeye Mounting Bracket	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
29	53700053	Photoeye, 24V, Kit, Thru-beam	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
30	53700122	Photoeye, 24V, Kit, Retroreflective	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
31	66400001	Photoeye, Reflector, 2 3/4" x 2"	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
32	63900002	Photoeye, Retro-Reflective 20-40VAC/10-55VDC	N	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y
33	69300004	Photoeye, Thru-beam Source 20-40VAC/10-55VDC	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
34	63900005	Photoeye, Thru-beam Receiver 20-40VAC/10-55VDC	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
35	63900048	Photoeye, Light Curtain, Receiver, (CE)	N	N	N	N	N	Y	N	Y	Y	N	N	N
36	63900049	Photoeye, Light Curtain, Transmitter, (CE)	N	N	N	N	N	Y	N	Y	Y	N	N	N
37	72700213	Pull Cord, Assembly, w/Bracket, Standard	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
38	72700214	Pull Cord, Assembly, w/Bracket, Heated	N	Y	Y	Y	Y	N	Y	Y	Y	N	N	N
39	72700270	Pull Cord, Wireless	N	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y
40	72700030	Push Button Station Single Green	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
41	72700102	Push Button Station, Open/E-Stop/Close, Nema 4X	N	N	N	N	N	N	N	Y	Y	N	Y	Y
42	72700269	Push Button, Single, Wireless	N	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y
43	66250020	Radio Control, RCVR, BEA, 433, 12-24V, 1 FN (=>8/26/14)	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
44	73750078	Radio Control, Trans, BEA, 433, 1 BTN (=>8/26/14)	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
45	73750079	Radio Control, Trans, BEA, 433, 2 BTN (=>8/26/14)	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
46	73750080	Radio Control, Trans, BEA, 433, 3 BTN (=>8/26/14)	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
47	11280002	Radio Control Ant w/15' Cable, 318 MHZ (<8/26/14)	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
48	53700068	Radio Control, 24V, Kit, 318 MHZ (<8/26/14)	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
49	66250016	Radio RCVR, 24V 318 MHZ (<8/26/14)	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
50	66250017	Radio RCVR, 24V 300 MHZ (<8/26/14)	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
51	73750002	Radio TRANS, 300 MHZ, BTN, 4 (<8/26/14)	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
52	73750015	Radio TRANS, 318 MHZ, BTN, 1 (<8/26/14)	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
53	73750018	Radio TRANS, 318 MHZ, BTN, 3 (<8/26/14)	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
54	73750019	Radio TRANS, 318 MHZ, BTN, 2 (<8/26/14)	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
55	54270030	Strobe 120VAC Amber	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
56	54270031	Strobe 120VAC RedSwitch,	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
57	53700567	Disconnect w/Handle	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
58	72700011	Switch, Selector, 2 Pos, Key	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
59	72700072	Switch, Selector, 2 Pos (Socket p/n: 17200012)	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
60	72700144	Switch, Selector, 3 Pos, 3 Pole, 12A	Y	N	N	N	N	N	N	N	N	N	N	N
61	VRTLV	Virtual Vision, Kit, Stand Alone	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
62	7623	Virtual Vision, Kit, FSTX/FR/LTSPD	N	N	N	N	N	Y	N	Y	Y	N	Y	Y
63	7624	Virtual Vision, Kit, FSTXCL	N	N	N	N	N	N	Y	N	N	N	N	N
64	7628	Virtual Vision, Kit, FSTXXL	N	N	N	N	N	N	N	N	N	Y	N	N
65	53700862	Warning Device Kit, Relay, i-COMM	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
66	53700863	Warning Device Kit, Relay, PLC	N	N	Y	Y	Y	N	N	N	N	N	N	N
67	53700306	Kit, Activation Service Parts (loop, pe, pull, push)	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
#	Part #	Description	5700	7100	8000	8600	8900	FSTX	FSTXCL	FSTXFR	FSTXFRLD	FSTX	LTSPD	Split2nd

Last updated: 10.15.14

NEXT ASSEMBLY

REVISION HISTORY					
REV	DESCRIPTION	ECN	DATE	BY	APPROVED
		–			

SPECIFICATIONS:

DOOR SIZE: MINIMUM SIZE: 6' WIDE x 8' HIGH
MAXIMUM SIZE: 8'7" WIDE x 18' HIGH

PANEL DESIGN: ☐ STD. LEAD – 30 oz. POLYURETHANE: GRAY w/o VISION
☐ OPT. – VISION 16" x 34" NON-REMOVABLE

SAFETY FEATURES: FLEXIBLE PANEL, OBSTRUCTION SENSOR REVERSING SYSTEM. UPON INCIDENTAL CONTACT PANELS ARE ABLE TO SWING BUT ARE ALSO RETAINED BY PANEL RETENTION SYSTEM. PANELS RETENTION STRAPS PAY OUT UPON FULL IMPACT. PANELS CAN BE OPENED MANUALLY IF POWER OUTAGE OCCURS. OPTIONAL VISION AND ACCENT PANELS AVAILABLE.

PANEL SEALING: EACH HALF OF THE HEADER IS SLOPED 3° SO FLOOR SEALS ARE ENGAGED ONLY WHEN THE DOOR IS CLOSED, REDUCING SEAL WEAR.

HEADER EXTRUSION: HEADER IS CONSTRUCTED OF A 3/16" ALUMINUM EXTRUSION WITH TWO INTEGRAL TROLLEY PATHS. ONE FOR THE PANEL AND ONE FOR A STABILIZING TROLLEY. TWO TROLLEYS ARE ATTACHED TO EACH PANEL AND ONE TROLLEY IS USED ON EACH SIDE FOR STABILIZATION. A TOTAL OF 6 TROLLEYS ARE USED.

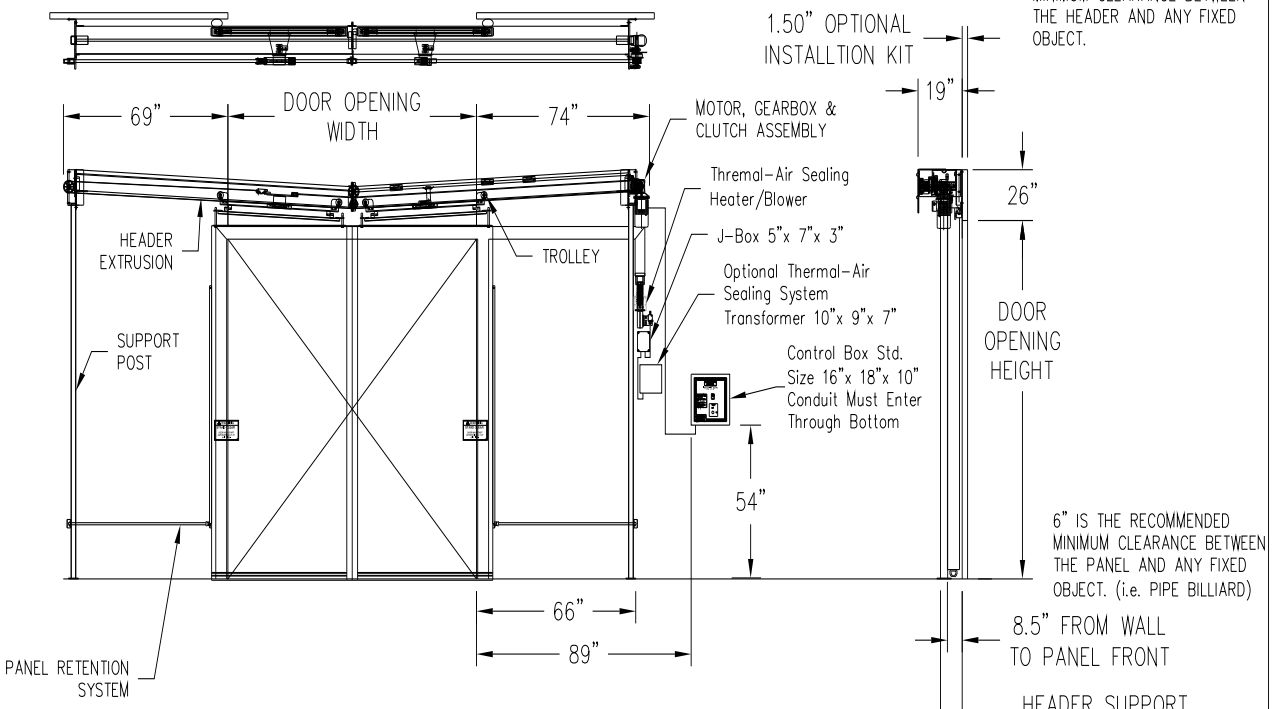
SUPPORT BEAMS: SUPPORT TUBES ARE CONSTRUCTED OF 2" x 3" x 1/8" ALUMINUM TUBING.

DRIVE SYSTEM: 3 PHASE MOTOR CONTROLLED BY AN A.C. INVERTER. DOOR COMMANDS ARE PROCESSED BY A RITE-HITE PROGRAMMABLE LOGIC CONTROLLER. THE PANELS ARE DRIVEN BY A GEARBOX CLUTCH BELT DRIVE SYSTEM.

CONTROL BOX: STANDARD CONTROLS INCLUDE AN "OPEN/RESET" BUTTON & POWER DISCONNECT. THE BOX IS NEMA 4X AND FUSE PROTECTED. THE BOX IS PREWIRED WITH EXTERNAL CONNECTIONS BROUGHT INTO PRE-CODED TERMINALS.

☐ 208-230 VAC, 3 PHASE, 60 HZ
☐ 380 VAC, 3 PHASE, 50/60 HZ
☐ 415 VAC, 3 PHASE, 50/60 HZ
☐ 460 VAC, 3 PHASE, 60 HZ
☐ 575 VAC, 3 PHASE, 60 HZ

THERMAL-AIR SEAL: (HEATER/BLOWER) ☐ STD. – 120 VAC, 1 PHASE, 50/60HZ
☐ OPT. – 3 PHASE TRANSFORMER (TO MATCH CBOX VOLTAGE)



SEE DRAWING 8804M773 FOR FAN CLEARENCE REQUIRED.

ITEM	QTY	PART NO.	DESCRIPTION
PARTS LIST / MATERIAL			

PROPERTY OF RITE-HITE ENGINEERING DEPT. PROVIDED FOR INFORMATIONAL PURPOSES ONLY SUBJECT TO CHANGE WITHOUT NOTIFICATION

APPROVED ☐YES ☐NO ☐AS MARKED
APP'D BY: _____
DATE: _____

INCH TOLERANCES		
OVER	UP TO	+ / –
0	0.125	0.005
0.125	0.25	0.010
0.25	1.25	0.020
1.25	5	0.030
5	15	0.040
15	40	0.060
40	80	0.100
80	–	0.125
ANGLES	+/– 1 DEG	
FINISH		

DO NOT SCALE DRAWING

	MM-DD-YY
DRAWN BY	DATE 3/31/2004
CHECKED BY	DATE
APPROVED BY	DATE
INITIAL ECN	4406
DATE ISSUED	3/30/2004
REF	

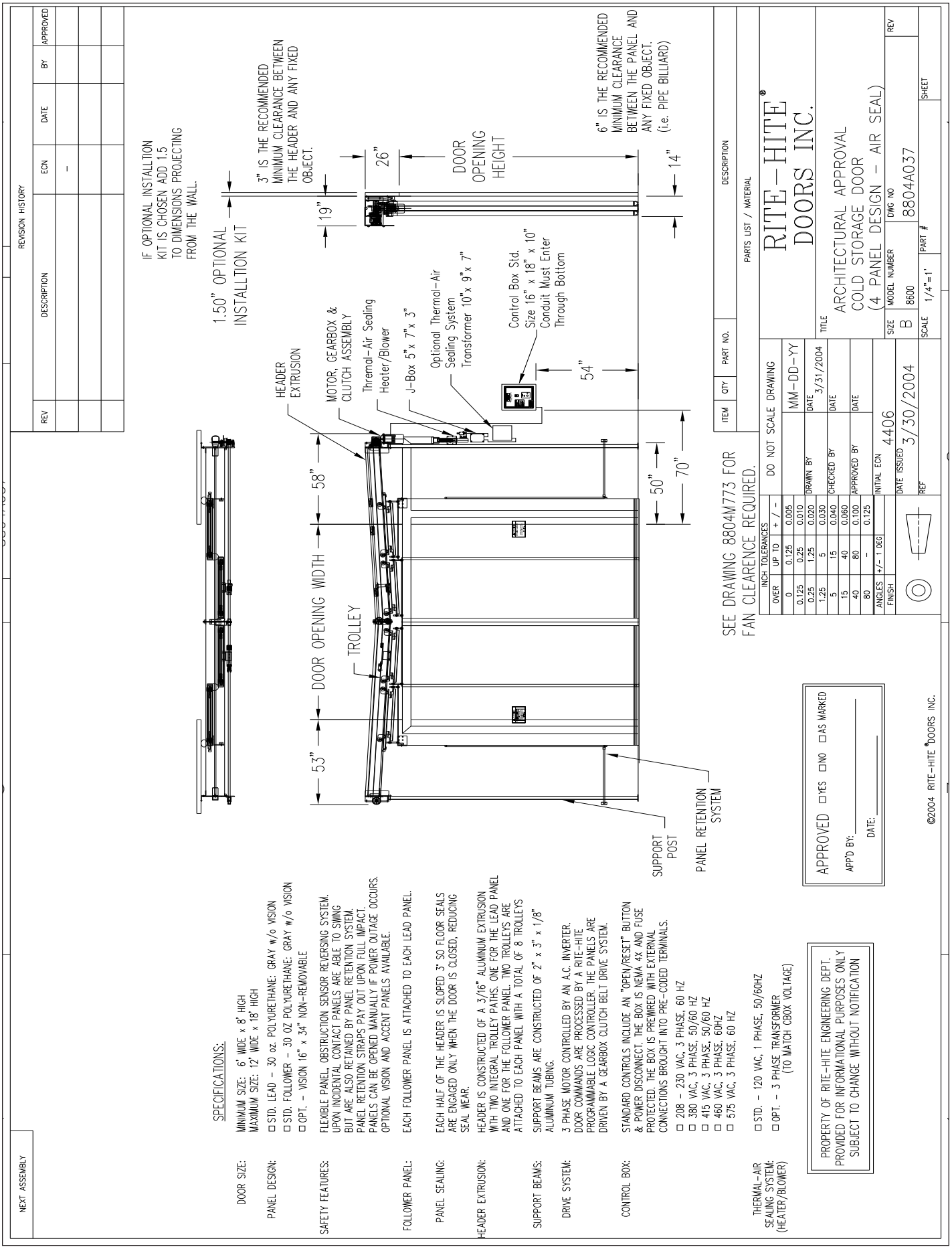
RITE-HITE® DOORS INC.

TITLE
ARCHITECTURAL APPROVAL
COLD STORAGE DOOR
(2 PANEL DESIGN – AIR SEAL

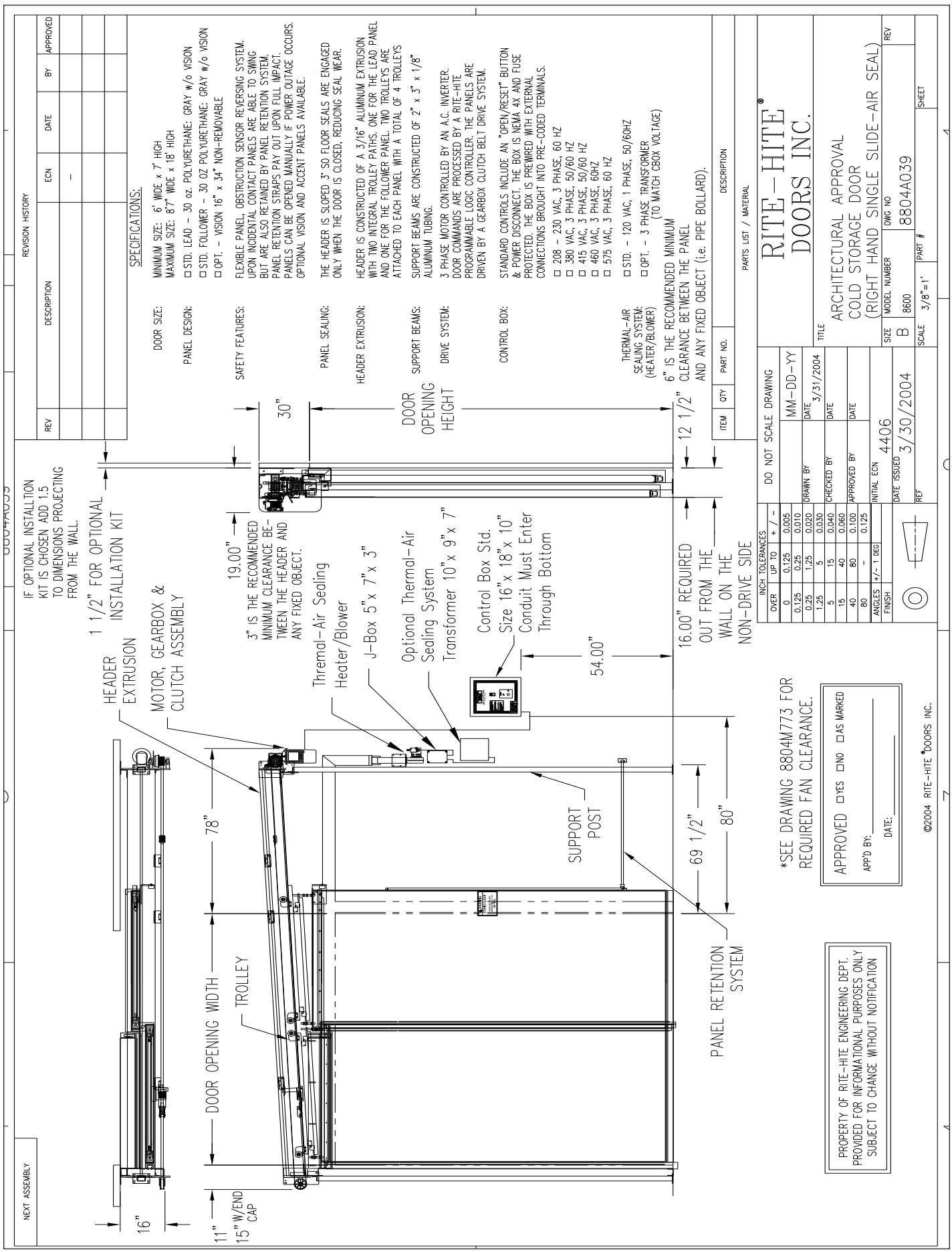
SIZE	MODEL NUMBER	DWG NO	REV
B	8600	8804A038	
SCALE 1/4"=1'	PART #		SHEET

Architectural Drawings

CHAPTER 8 - 4 PANEL ARCHITECTURAL DRAWING



CHAPTER 8 - SINGLE SLIDE ARCHITECTURAL DRAWING



RITE-HITE DOOR PRODUCT WARRANTY

RITE-HITE®
ALWAYS LOOKING AHEAD

LIMITED WARRANTY

RITE-HITE Company, LLC and its affiliates (collectively "RITE-HITE") warrants that the ISO-TEK Bi-Parting or Single Slide door sold to the Owner will be free of defects in design, materials and workmanship (ordinary wear and tear excepted) for the periods set forth below ("Limited Warranty").

One (1) Year on all mechanical and electrical parts.

One (1) Year labor, based on approved travel and labor repair times.

REMEDIES

Parts. RITE-HITE's obligations under this Limited Warranty is limited to repairing or replacing, at RITE-HITE's option, any part which is determined by RITE-HITE to be defective during the applicable warranty period. Such repair or replacement shall be RITE-HITE's sole obligation and the Owner's exclusive remedy under this Limited Warranty.

Labor. RITE-HITE will provide warranty service without charge for labor in the first year of the warranty period. Thereafter, a charge will apply to any repair or replacement under this Limited Warranty.

CLAIMS. Claims under this Limited Warranty must be made (i) within 30 (thirty) days after discovery and (ii) prior to expiration of the applicable warranty period. Claims shall be made in writing or by contacting the representative from whom the Product was purchased directly. Owner must allow RITE-HITE or its agent, a reasonable opportunity to inspect any Product claimed to be defective and shall, at RITE-HITE's option, either (x) grant RITE-HITE or its agent access to Owner's premises for the purpose of repairing or replacing the Product or (y) return of the Product to the RITE-HITE, f.o.b. RITE-HITE's factory.

NOT WARRANTED. RITE-HITE does not warrant against and is not responsible for wear items such as fuses, batteries, bulbs, vision and seals. No implied warranty shall be deemed to cover, damages that result directly or indirectly from: (i) the unauthorized modification or repair of the Product, (ii) damage due to misuse, neglect, accident, failure to provide necessary maintenance, or normal wear and tear of the Product, (iii) failure to follow RITE-HITE's instructions for installation, failure to operate the Product within the Product's rated capacities and/or specified design parameters, or failure to properly maintain the Product, (iv) use of the Product in a manner that is inconsistent with RITE-HITE's guidelines or local building codes, (v) movement, settling, distortion, or collapse of the ground, or of improvements to which the Products are affixed, (vi) fire, flood, earthquake, elements of nature or acts of God, riots, civil disorder, war, or any other cause beyond the reasonable control of RITE-HITE, (vii) improper handling, storage, abuse, or neglect of the Product by Owner or by any third party.

DISCLAIMERS. THIS LIMITED WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER REPRESENTATIONS AND WARRANTIES, EXPRESS OR IMPLIED, AND RITE-HITE EXPRESSLY DISCLAIMS AND EXCLUDES ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PURPOSE. RITE-HITE SHALL NOT BE SUBJECT TO ANY OTHER OBLIGATIONS OR LIABILITIES, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORIES OF LAW, WITH RESPECT TO THE PRODUCTS SOLD OR SERVICES RENDERED BY RITE-HITE, OR ANY UNDERTAKINGS, ACTS, OR OMISSIONS RELATING THERETO.

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5,579,820, 5,638,883, 5,794,678, 5,887,385, 5,915,448, 5,944,086, 6,089,305, 6,145,571, 6,148,897, 6,192,960, 6,212,826, 6,321,822, 6,325,195, 6,330,763, 6,360,487, 6,481,487, 6,560,927, 6,598,648, 6,612,357, 6,615,898, 6,688,374, 6,698,490, 6,837,296, 6,901,703, 6,942,000, 6,964,289, 7,034,682, 7,045,764, 7,111,661, 7,114,753, 7,151,450, 7,578,097, 7,699,089, 7,748,431, 7,757,437, 8,037,921, 8,167,020, 8113265.

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FCC COMPLIANCE

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

NOTE: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference
(2) This device must accept any interference received, including interference that may cause undesirable operation.

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