



GT1400 Standard Bi-Fold and Hurricane Bi-Fold Manual

P/N C-00176 Rev 2-9-18

Nabco Entrances Inc. 582 W18717 Gemini Drive Muskego, Wisconsin 53150
Phone: (877) 622-2694 Fax: (888) 679-3319 www.nabcoentrances.com

*Associated Manuals Part Numbers: Opus Control Wiring and Adjustment Manual (P/N C-00139)
Fold Door Owners Manual (P/N C-00111) for Decal Installation
NABCO Price Book" for Sensors, Switches, and Accessories (P/N 16-9244-30)*

WARNING

- Turn OFF all power to the Automatic Door if a Safety System is not working.
- Instruct the Owner to keep all power turned OFF until corrective action can be achieved by a NABCO trained technician. Failure to follow these practices may result in serious consequences.
- NEVER leave a Door operating without all Safety detection systems operational.

Table of Contents

CHAPTER 1: SCOPE 3

Section 1.1 To the Installer 3

Section 1.2 Objective. 3

CHAPTER 2: WARNING LABELS 3

CHAPTER 3: GENERAL SAFETY RECOMMENDATIONS 4

CHAPTER 4: GETTING STARTED. 4

Section 4.1 Parts of the Header 5

CHAPTER 5: INSTALL THE DOOR FRAME 5

Section 5.1 Prepare the Header 5

Section 5.2 Secure Jamb Tubes to Rough Opening 6

Section 5.3 Secure Header to Rough Opening. 6

CHAPTER 6: 120 VAC GENERAL WIRING 8

CHAPTER 7: HANDING 9

Section 7.1 How to Determine Handing 9

Section 7.2 The Handing Harness. 9

CHAPTER 8: INSTALL THE DOOR PANEL. 9

Section 8.1 Install the (Floor Portion) of Bottom Pivot. 9

Section 8.2 Install the Bottom Pivot (Door Portion) 10

Section 8.3 Secure Spindle Drive Bar to Folding Door 10

Section 8.4 Secure Folding Door to Frame. 11

Section 8.5 Secure Guide Channel to Folding Door 11

CHAPTER 9: ADJUST THE FOLDING DOOR..... 13

CHAPTER 10: INSTALL THE WEATHERING 13

SERVICE PARTS: BAG P/N A-00514..... 14

SERVICE PARTS: OPUS CONTROL 15

SERVICE PARTS: HEADER (TOP HALF)..... 16

SERVICE PARTS: HEADER (BOTTOM HALF) 18

SERVICE PARTS: BI-FOLD DOOR 20

SERVICE PARTS: RIGHT HAND BI-FOLD DOOR 21

SERVICE PARTS: LEFT HAND BI-FOLD DOOR..... 22

CHAPTER 1: SCOPE

Section 1.1 To the Installer

The purpose of this manual is to familiarize the installer and purchaser with the proper installation and operation of this system. It is essential that this equipment be properly installed and operational before the door is used by the public. It is the installer's responsibility to inspect the operation of the entrance system to be sure it complies with any applicable standards. In the United States, ANSI Standard A156.10 covers the GT-1400 Fold Door System. All automatic equipment complies with UL325 and CAN/CSA -C22.2 No 247-92. Other local standards or codes may apply. Use them in addition to the ANSI standard. The GT-1400 is listed with the Underwriters Laboratory and is identified as such on the label.

Instruct the building owners and operator on the essentials of the operation of the door and this device. The owner should follow these instructions to determine whether the door is operating properly and should immediately call for service if there is any malfunction. All installation changes and adjustments must be made by qualified, NABCO trained technicians.

Note: As an Option, the GT-1400 Fold door can be certified to have a "Hurricane High Impact Compliant Version" manufactured to meet the High Velocity Hurricane Zone (HVHZ) requirements of the Florida building codes.

Section 1.2 Objective

The GT-1400 Fold Door is designed to be installed within a Rough Opening of a Building. The door function is controlled by the Opus Control that offers many features to accommodate most installation options. This manual offers step by step instructions.

CAUTION

A pedestrian Door that does not have its glass sections installed at the Factory shall specify that the glazing material employed is to comply with the requirement in UL 325 par.29.5.1:

"The glazing material in both fixed and sliding panels of all sliding doors and in all unframed swinging doors shall comply with the requirements in the Performance Specifications and Methods of Test for Safety Glazing Material Used in Buildings, ANSI Z97.1. Glazing material for other pedestrian doors shall also comply with ANSI Z97.1, except that single strength or heavier glass may be used for those portions of doors involving a glazed area of less than 1ft² (0.9 m²) and having no dimension greater than 18 in (457 mm)".

CHAPTER 2: WARNING LABELS

Warning labels are universal and used to alert an individual of potential harm to one's self or to others. The following warning labels are listed in a hierarchy order that defines the most potential danger first, and the least potential danger last. Please refer to this page in the event that a warning label is displayed within this manual and further definition needs to be explained.

DANGER

Indicates potentially dangerous situations. Danger is used when there is a hazardous situation where there is a *high* probability of severe injury or death. It should not be considered for property damage unless personal injury risk is present.

WARNING

Indicates a hazardous situation which has some probability of severe injury. It should not be considered for property damage unless personal injury risk is present.

CAUTION

Indicates a hazardous situation which may result in a minor injury. Caution should not be used when there is a possibility of serious injury. Caution should not be considered for property damage accidents unless a personal injury risk is present.

Attention: A situation where material could be damaged or the function impaired.

Notice: This manual and the owner's manual must be given to and retained by the purchasing facility or end user.

Note: Indicates important information that provides further instruction.

CHAPTER 3: GENERAL SAFETY RECOMMENDATIONS

WARNING

Do Not install or service this product unless Safety Practices, Warning Labels, Installation Instructions, and Operating Instructions, have been read and fully understood. Failure to so do may result in bodily injury or property damage.

CAUTION

Handle Glass With Care!!! Use caution when moving and installing the glass panels. These panels are designed to be assembled with tempered glass. Any sharp objects that come in contact with glass may cause the glass to shatter. NABCO Entrances is not responsible for glass that is broken during the installation of this Unit.

Notice: Read, study and understand the operating instructions contained in, or referenced in this manual before operating. If you do not understand the instruction, ask the installing qualified technician to teach you how to use the door.

Notice: This manual and the owner's manual must be given to and retained by the purchasing facility or end user.

Notice: Advise the purchasing facility or end user to make regular safety checks and all other duties that may apply.

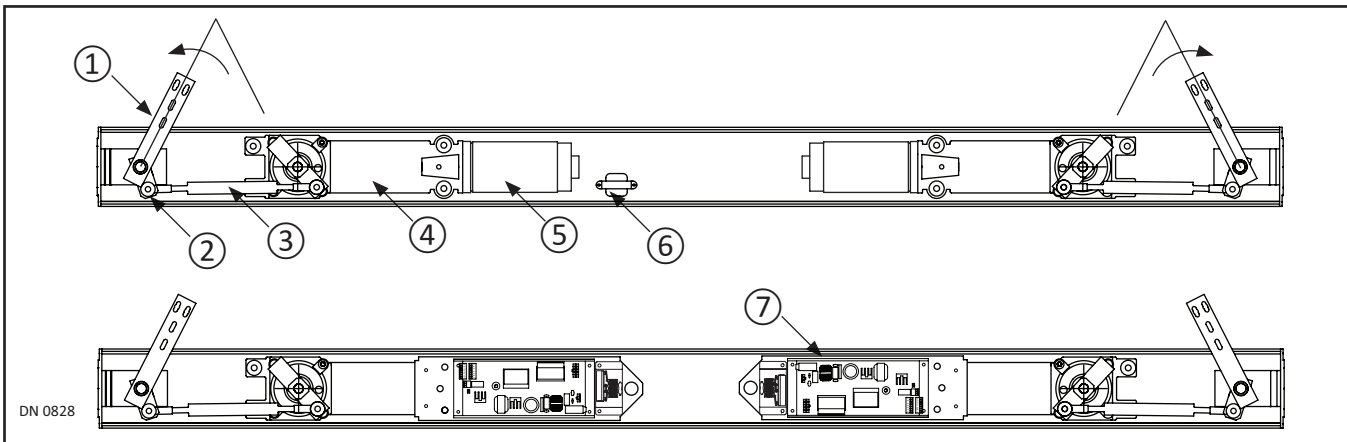
- ▶ If the door appears broken or does not seem to work correctly, it should be immediately removed from service until repairs can be carried out or a qualified service technician is contacted for corrective action.
- ▶ It is the responsibility of the purchasing facility or end user to keep warning and instructional labels and literature legible, intact and with the door. Replacement labels and literature may be obtained from local NABCO Entrances, Inc. distributors. If the name of the local distributor is unknown, contact NABCO Entrances, Inc. at 1-877-622-2694 for assistance.
- ▶ Do Not take shortcuts.
- ▶ Ensure that all safety devices provided by the manufacturer work as intended.
- ▶ Ensure that all safety decals are properly displayed on any/all swing doors.

CHAPTER 4: GETTING STARTED

GT-1400 Fold Door System is manufactured out of aluminum, and comes with the following:

- ▶ Installation Configurations:
 - Installed within Rough Opening of Building
 - Door Panel assemblies always fold toward the direction of breakout.
- ▶ Mechanical Configurations:
 - Bottom Load: Access Cover is located at the bottom of the Header.
 - Single Fold: (1) Door Leaf assembly slides to the right or left (FS - FX or FX - FS).
 - Bi-Part: (2) Door Leaf assemblies slide apart from the center (FS -FX - FX - FS).
 - FS = Swing Panel
 - FX = Slide Panel
- ▶ Extrusion Configurations:
 - Slick Jamb Tubes
- ▶ Emergency Egress:
 - Full Open: Door Panel assembly breaks out for emergency egress.

Section 4.1 Parts of the Header



- | | | |
|----------------------|-------------|--------------------------|
| 1. Spindle Drive Bar | 3. Push Rod | 5. Motor |
| 2. Rod End | 4. Operator | 6. Auxiliary Transformer |
| | | 7. Control |

CHAPTER 5: INSTALL THE DOOR FRAME

Section 5.1 Prepare the Header

1. Go to the non-breakout side of opening. Place Header so the Magnetic Latches are on the floor and the bottom is facing the breakout side of opening.
2. Go to the Guide Channel. Swing out the Guide Channel 90 degrees away from the Magnetic Latch.
 - a. Continue to manually hold the Guide Channel when taking off the Dress Plate and Lock Plates.

DANGER

Do not let go of the Guide Channel, it will spring back to its original location and can result in personal injury or damage.

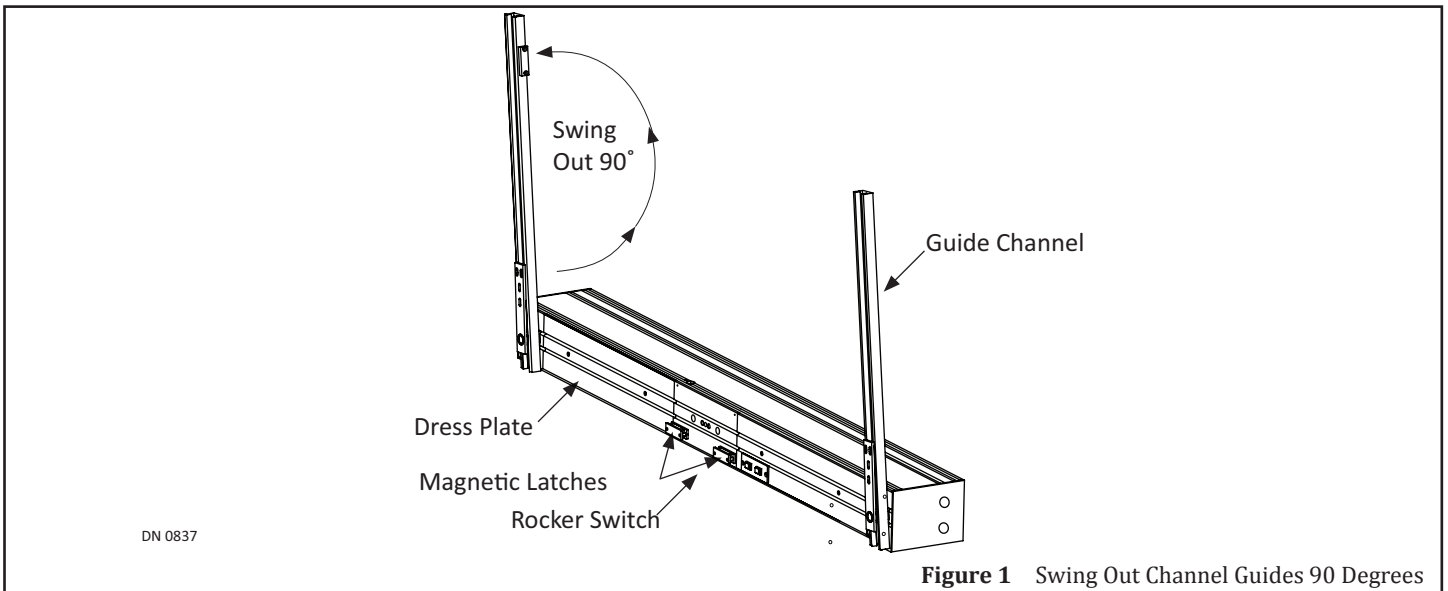


Figure 1 Swing Out Channel Guides 90 Degrees

3. Remove screws used to secure the Dress Plate.
4. Carefully lower the Dress Plate until the Rocker Switch wiring is exposed. Disconnect the Switch from the switch harness. Remove the Dress Plate and Lock Plates.
5. Manually return the Guide Channel to its original position, so that it butts up against the Magnetic Latch.
6. Go to the other Guide Channel. Repeat steps to remove the other Dress Plate and Lock Plates.

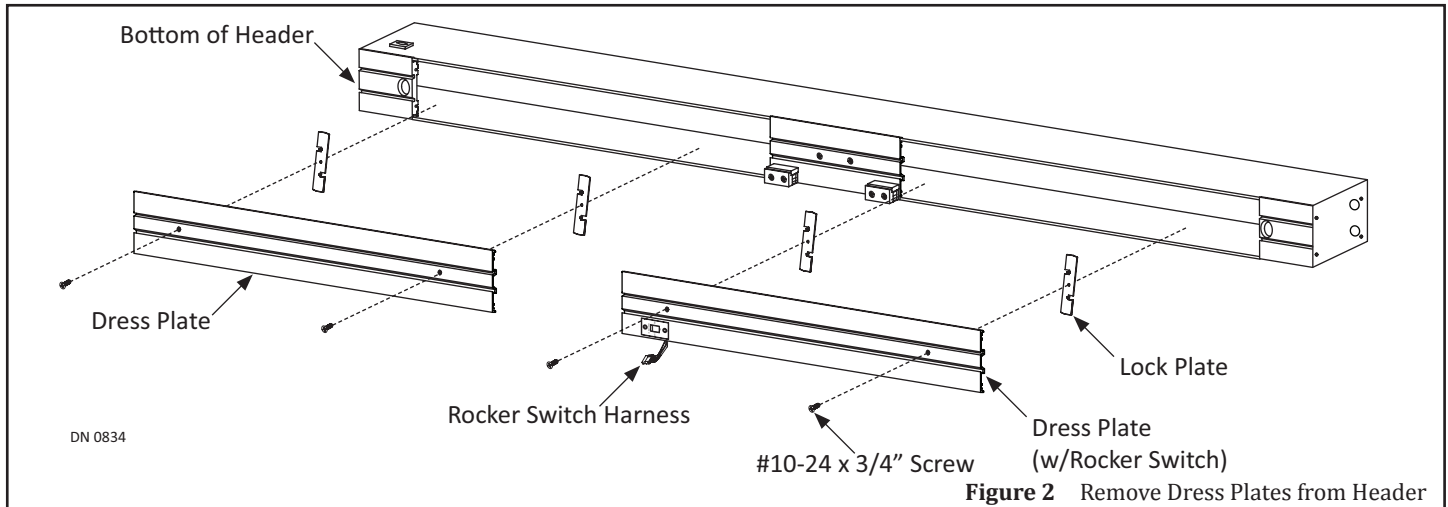


Figure 2 Remove Dress Plates from Header

Section 5.2 Secure Jamb Tubes to Rough Opening

1. Position Jamb tubes on either side of Header so the Weathering faces up, and the open end at the bottom of each Jamb Tube is facing the breakout side of opening.
2. Secure Jamb Tubes to Header with 1/4 inch Star Washers and 1/4-20 x 3/4 inch Bolts, provided by NABCO.

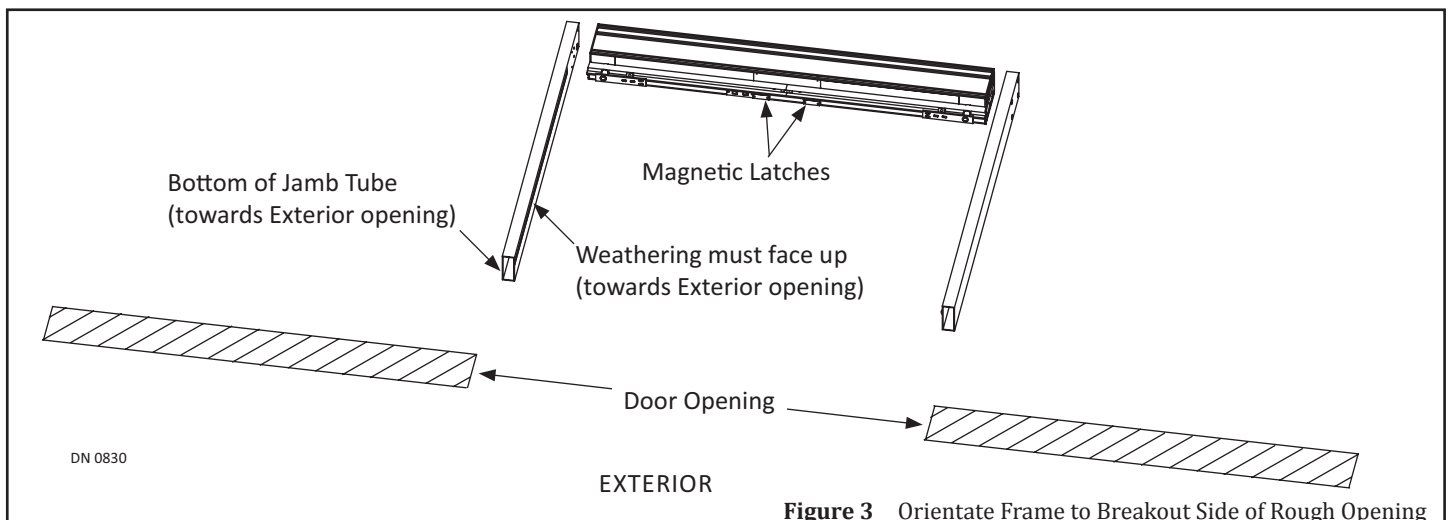


Figure 3 Orientate Frame to Breakout Side of Rough Opening

3. Lift to position the assembled Frame into the rough opening.
4. Plumb Jamb tubes in both planes to ensure the rough opening allows a 1/4 inch clearance. Shim back of Jamb as required.
5. Plumb the Header at the top to ensure the rough opening allows a 1/4 inch clearance. Shim top of Header as required.
6. Secure Jamb Tubes to Rough Opening accordingly.
 - ▶ Standard Fold Door
 - Use 1/4 inch diameter anchors with a minimum of 3 per Jamb tube, maximum is 48 inches on center. Drill 1/4 inch diameter holes in the face of Jamb and then countersink each hole. Secure with appropriate Fasteners.
 - ▶ Hurricane Fold Door
 - Screw in anchors to secure the Frame (per manufacturer's certification document(s)).

Section 5.3 Secure Header to Rough Opening

DANGER

Verify that each Motor is connected to the Opus Control before inserting Pin or 1/8" Allen Wrench into Lovejoy Coupling Access Hole via the Access Hole on the Opus Control. Failure to do so will allow the Fold Doors to slam shut without motor braking in the event the Pin or 1/8" Allen Wrench falls out.

DANGER

Do not let go of the Guide Channel if a Pin or 1/8" Allen Wrench has not been inserted into the Lovejoy Coupling Access Hole, it will spring back to its original location and can result in personal injury or damage.

1. Ensure each Motor is connected to each Opus Control.
2. Swing the Guide Channel out and away from the Magnetic Latch. It will be necessary to manually hold the Guide Channel in the 90 degree position until the Pin or 1/8 inch Allen Wrench is inserted into the Lovejoy Coupling Access Hole.

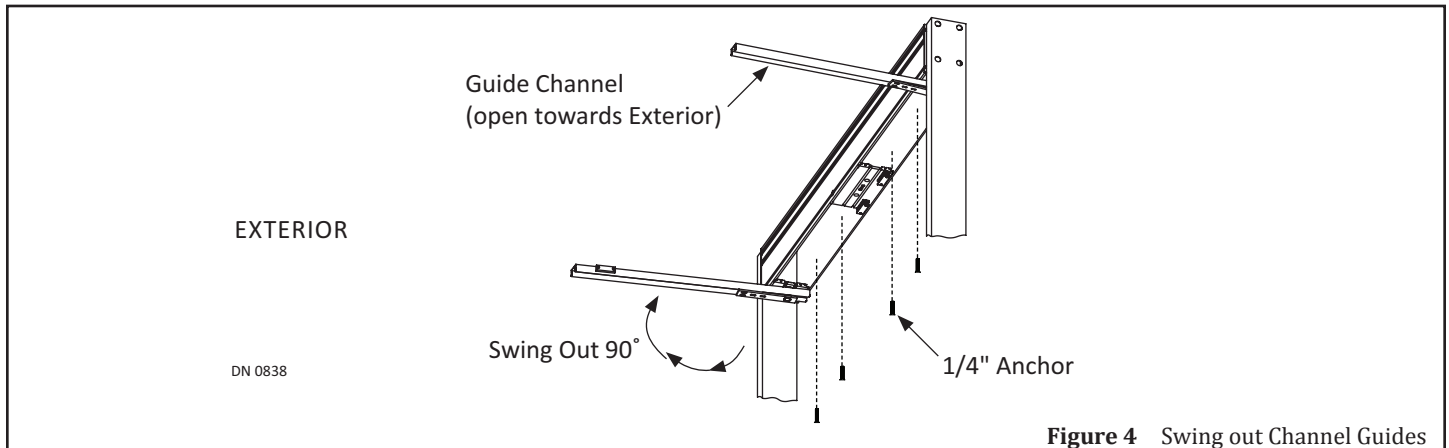


Figure 4 Swing out Channel Guides

3. Locate the access hole in the Opus Control mounting bracket which leads to the Lovejoy Coupling access hole in the Operator. The Opus Control is factory installed to lay on top of the Operator.
4. Insert a Pin or 1/8 inch Allen Wrench into both Access Holes.

DANGER

Do not allow the Pin or 1/8 inch Allen Wrench to drop out of the Access Hole at any time during installation. The Guide Channel will spring back to its original location and can result in personal injury or damage.

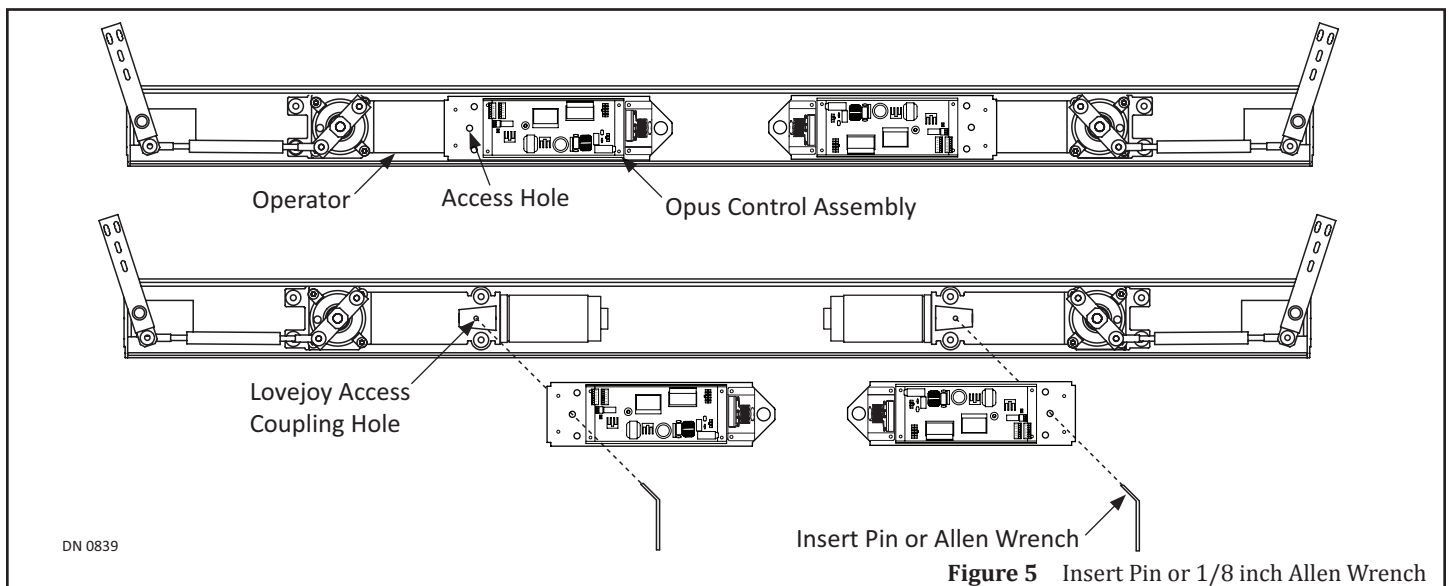


Figure 5 Insert Pin or 1/8 inch Allen Wrench

5. With the Guide Channel locked into the 90 degree open position, secure Header to the rough opening:
 - ▶ Standard Fold Door
 - Use 1/4 inch diameter anchors with a maximum 48 inches on center. First anchor maximum is 36 inches from each end of the Header. Secure with appropriate Fasteners.
 - ▶ Hurricane Fold Door
 - Screw in anchors to secure the Frame (per manufacturer’s certification document(s)).

CHAPTER 6: 120 VAC GENERAL WIRING

DANGER

Shut the installation site, branch Circuit Breaker OFF. Failure to do so may result in serious personal or fatal injury. When uncertain whether power supply is disconnected, always verify using a voltmeter.

WARNING

All high voltage electrical connections must be made by licensed electricians according to National and Local electrical codes/regulations.

CAUTION

Permanent wiring shall be employed as required by local codes.

CAUTION

Keep all Incoming 120 VAC wiring separate from low voltage wiring within Header. 120 VAC Power wires must be routed (separate from other wiring) located near the top of inside Header.

CAUTION

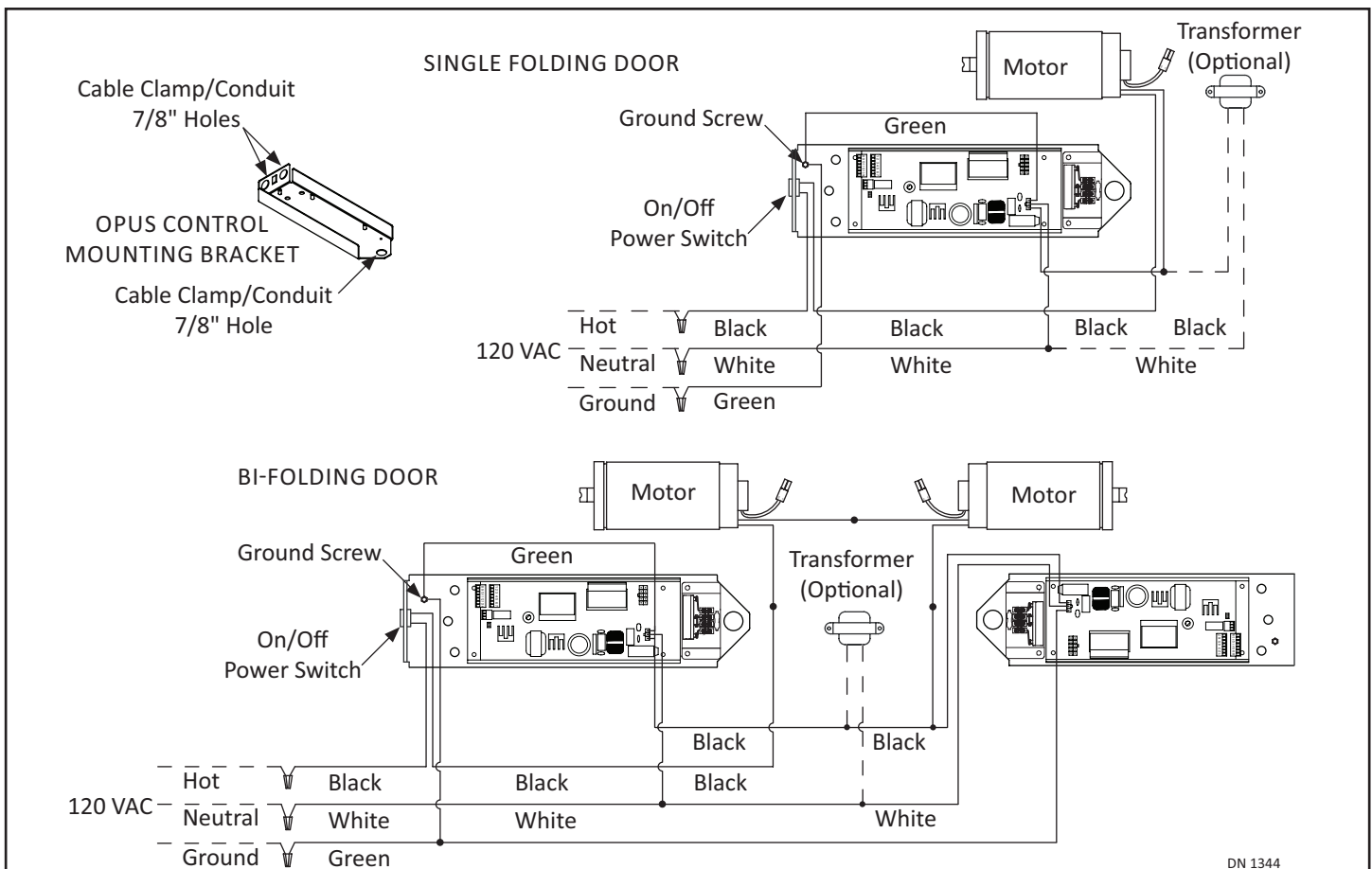
Ensure that the Grounding of the Electric Power Supply is installed/connected in a proper way (especially the PE Cable from the Building Side).

Attention: Insert all Incoming 120 VAC Power wires into the pre drilled Electric Service Access Hole located at the left or right side of Header End Cap.

Attention: Electrical circuit to Nabco operator must not be not shared with other equipment such as lighting, cash registers, or any device that might cause electrical interference on the circuit.

Attention: Any non-factory low voltage wiring added inside the Header must be Type CL2 wire or the equivalent in accordance with Article 725 of the NEC.

Note: It is recommended for the Installer to house all Incoming 120 VAC wires within an Electrical Conduit.



DN 1344

CHAPTER 7: HANDING

Section 7.1 How to Determine Handing

- ▶ Locate the Serial Number underneath the Operator.
 - The Letter (L) or (R) located in front of the Serial Number indicates the Handing.

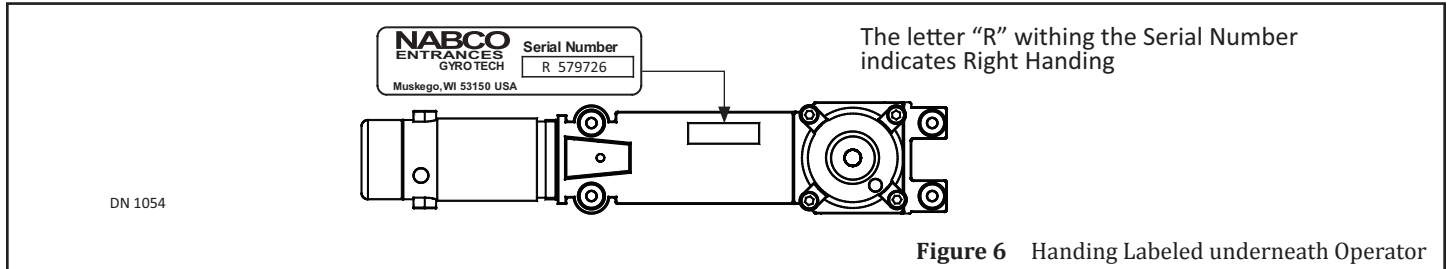


Figure 6 Handing Labeled underneath Operator

- ▶ Stand on the Exterior Side of Fold door, and then open the Fold door. If the Fold door opens to your Left it is Right Handed. If the Fold Door opens to your Right it is Left Handed.

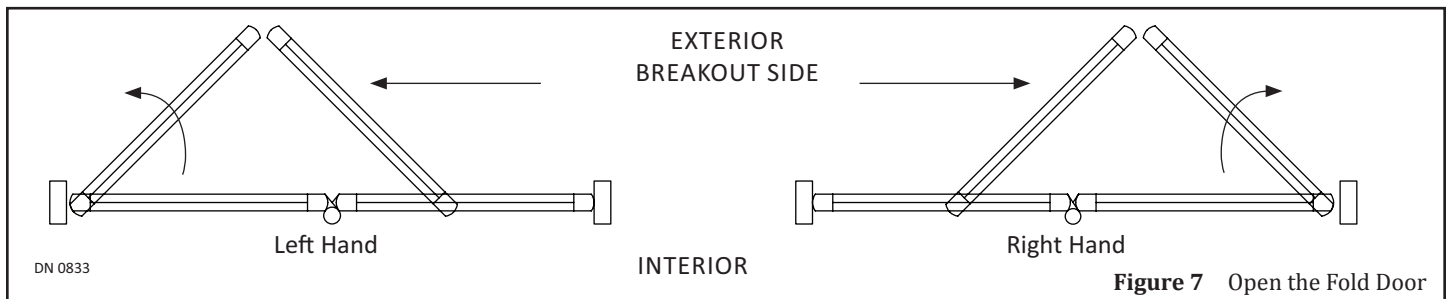


Figure 7 Open the Fold Door

Section 7.2 The Handing Harness

The Handing Harness is used for Right Handed Units only. Left Handed Units do not use a Handing Harness.

1. Obtain the Handing Harness.
2. Connect the (Break Module Harness) Female Pin to the Male Pin Housing (Handing Harness).
3. Connect the (Break Module Harness) Male Pin Housing to the Female Pin (Handing Harness).

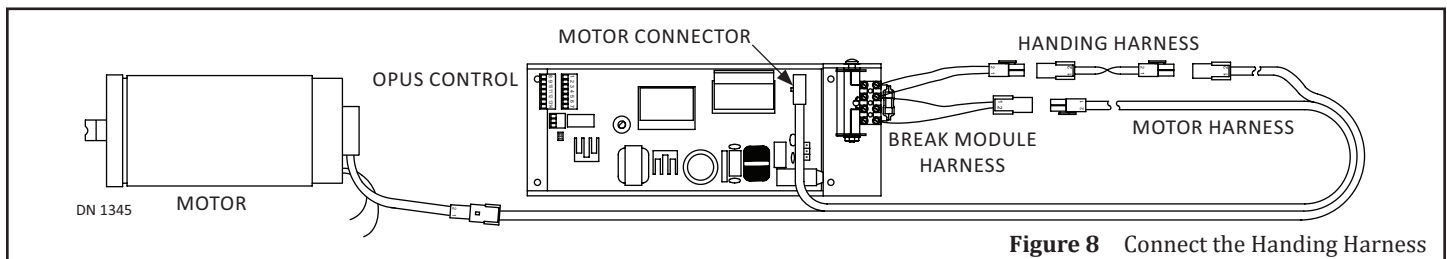


Figure 8 Connect the Handing Harness

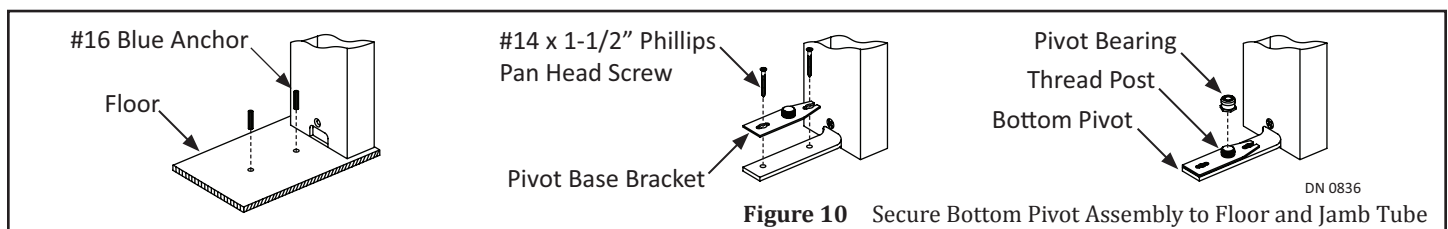
CHAPTER 8: INSTALL THE DOOR PANEL

Section 8.1 Install the (Floor Portion) of Bottom Pivot

1. Obtain the Bottom Pivot Parts Box (P/N 22-9643) provided by NABCO.
 - a. (2) 1/4 - 20 round head screws provided by the Pivot Manufacturer are not required.
2. Obtain the Bottom Pivot (Floor Portion) from the Parts Box.
3. Insert the Bottom Pivot into Notch located at the bottom of Jamb tube.
4. Secure the Bottom Pivot with (1) 1/4-20 x 7/8 inch Flat Head screw.

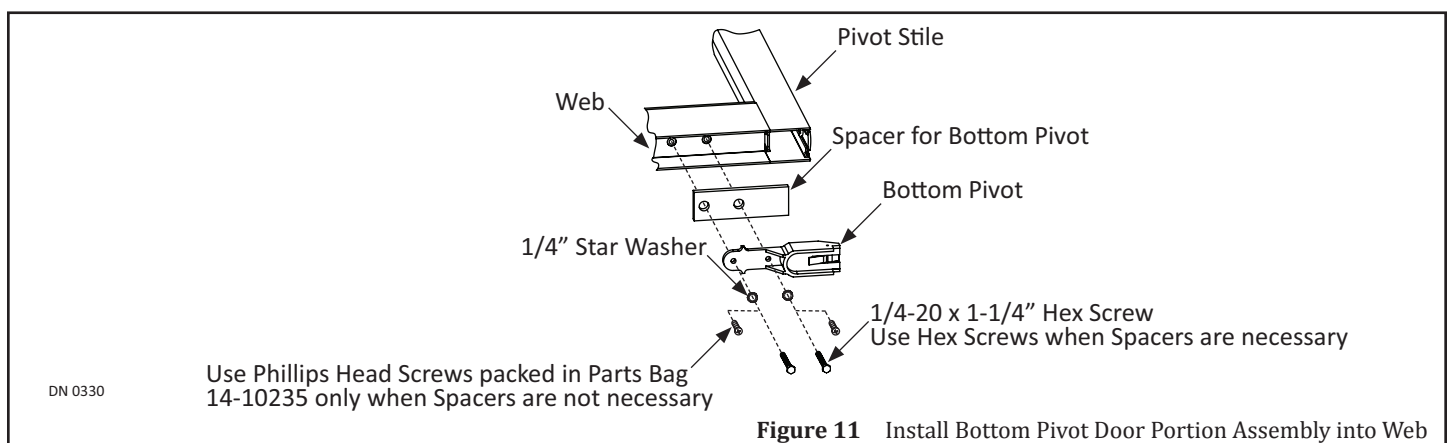


5. Using the Bottom Pivot as a template, drill down through (2) screw holes with a 1/4 inch Masonry drill bit at least 1-1/2 inches into the floor.
6. Insert (1) 1-1/2 inch Anchor into each drilled hole.
7. Obtain the Pivot Base Bracket from the Parts Box.
8. With the open end pointing to Jamb Tube, align screw holes with the Bottom Pivot (The Pivot Plate can be adjusted by sliding it in either direction).
9. Secure the Pivot Base Bracket to the Bottom Pivot with (2) #14 x 1-1/2 inch Phillips Head Screw.
10. Screw the Pivot Bearing onto the Thread Post.



Section 8.2 Install the Bottom Pivot (Door Portion)

1. Lay the Folding Door on a flat surface.
2. Go to the Bottom Rail. Locate (2) pre-drilled holes inside Web.
3. Lay the Bottom Pivot (Door Portion) onto the Spacer. Align screw holes to the Web.
4. Secure the Bottom Pivot Assembly to the Bottom Rail with (2) 1/4" Star Washers:
 - ▶ (2) 1/4 - 20 x 1-1/4" Hex Screws when Spacers are used.
 - ▶ (2) Phillips Head Screws (packed in Part Bag 14-102345) when Spacers are not used.



Section 8.3 Secure Spindle Drive Bar to Folding Door

Note: The Drive Bar is installed to the Channel Guide at the NABCO Factory for shipping purposes only and must be removed from the Channel Guide before the Folding Door can be installed.

1. Ensure the Pin or 1/8 inch Allen Wrench is still inserted into the Lovejoy Coupling Access Hole.
2. Go to the Spindle Drive Bar. Remove the Hex Bolt and Nut.
3. Release the Spindle Drive Bar from the Guide Channel. The Spindle Drive Bar can be pushed up toward the Header or down into the Top Web of the Folding door, but will remain at a 90 degree angle.
 - a. The Guide Channel can now freely swing closed or open.
4. Swing the Guide Channel up against the Magnetic Latch.

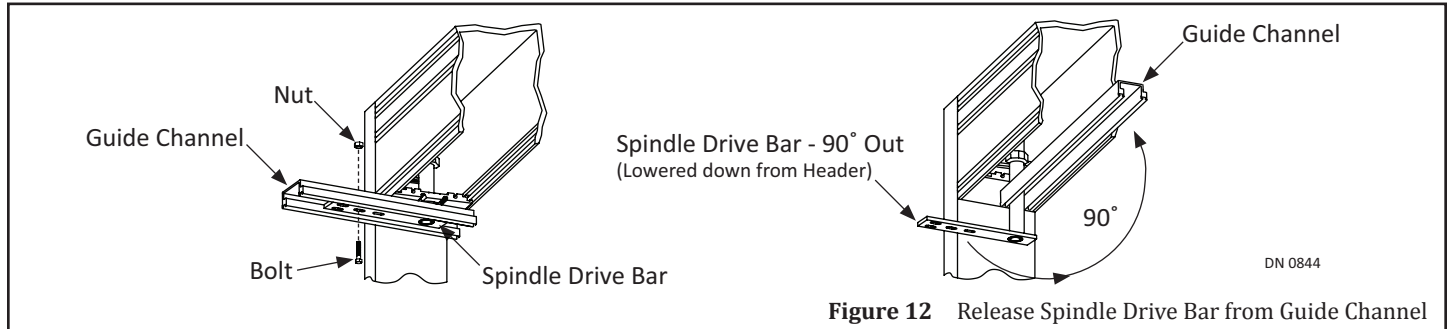


Figure 12 Release Spindle Drive Bar from Guide Channel

Section 8.4 Secure Folding Door to Frame

1. With the Folding Door still on a flat surface, go to the Pivot End of the Top Web.
2. Remove (4) 1/4-20 x 3/4 inch Hex Head Screws and (4) 1/4 inch Star Washers from Riv-nuts located inside the Web. Save hardware for reinstallation.

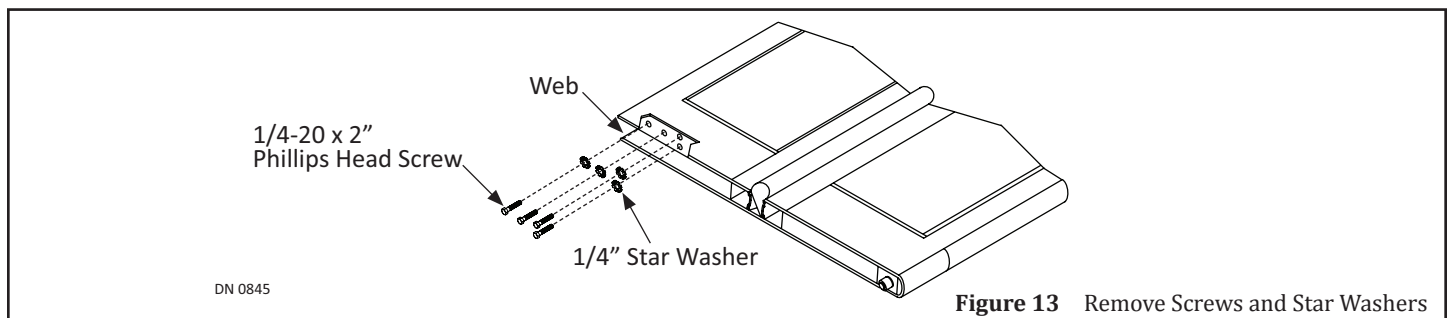


Figure 13 Remove Screws and Star Washers

3. Lift the Folding Door from the flat surface. Keep Door Panels loosely folded.
4. Tilt the Folding Door to slide the Spindle Drive Bar into the Pivot end of Top Web. The Spindle Drive Bar can be pushed up toward the Header to allow clearance.
5. Upright the Folding Door to slide the Bottom Pivot onto the Pivot Bearing located inside the Bottom Rail.
6. Go back to the Top Web. Lower the Spindle Drive Bar until it butts up against the Web.
7. Secure the Spindle Drive Bar to the Web with (4) 1/4-20 x 3/4 inch Hex Head Screws and (4) 1/4 inch Star Washers.
 - a. Do not tighten down bolts at this time. Bolts need to be loose enough to allow the Folding Door to be adjusted.

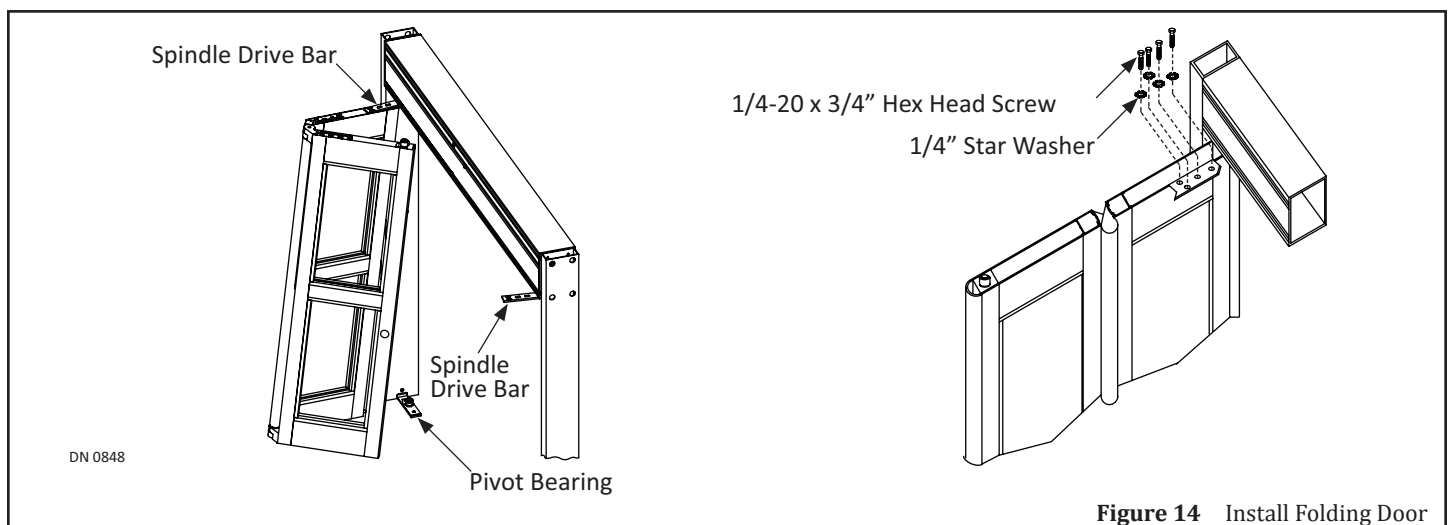


Figure 14 Install Folding Door

Section 8.5 Secure Guide Channel to Folding Door

1. Manually hold open the Folding door while removing the Pin or 1/8 inch Allen Wrench from the Lovejoy Coupling Access Hole.
2. Swing out and then lift the Guide Channel so it is directly on top of the Guide Roller located inside the Top Web at the Strike end. Drop the Guide Channel onto the Guide Roller. Allow the Folding door to close without slamming closed.

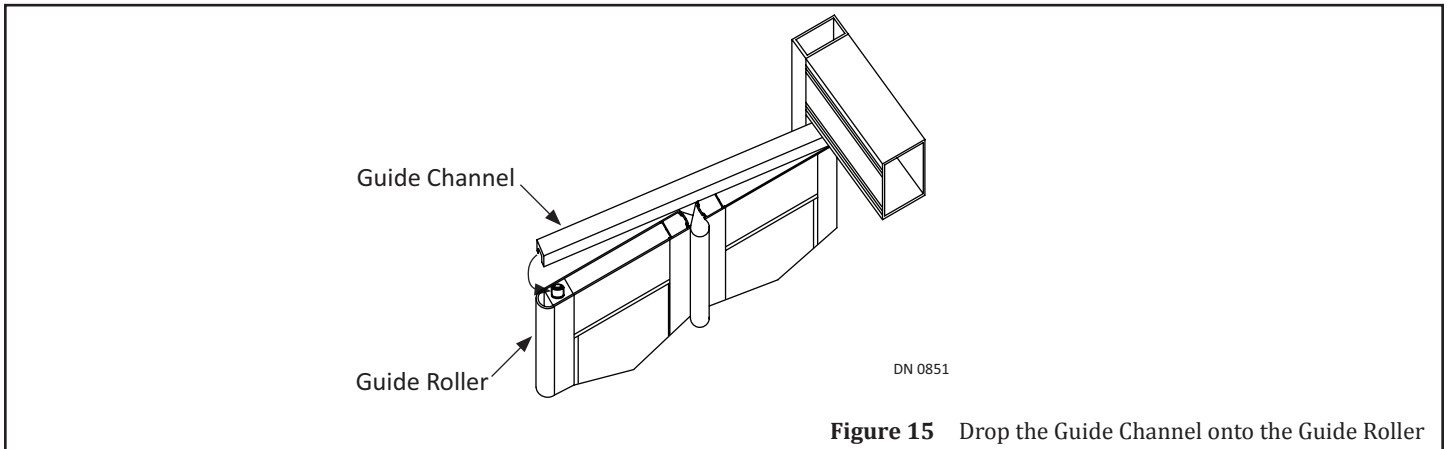


Figure 15 Drop the Guide Channel onto the Guide Roller

3. Adjust Door Panels so the gaps around the Top, Bottom, and Sides are parallel to the Jamb Tubes, Header, and Threshold.
 - a. Adjustments can be done using the Top Pivot Bracket and Bottom Pivot Bearing.
4. Tighten down the (4) 1/4-20 x 3/4 inch Hex Head screws and (4) 1/4 inch Star Washers.

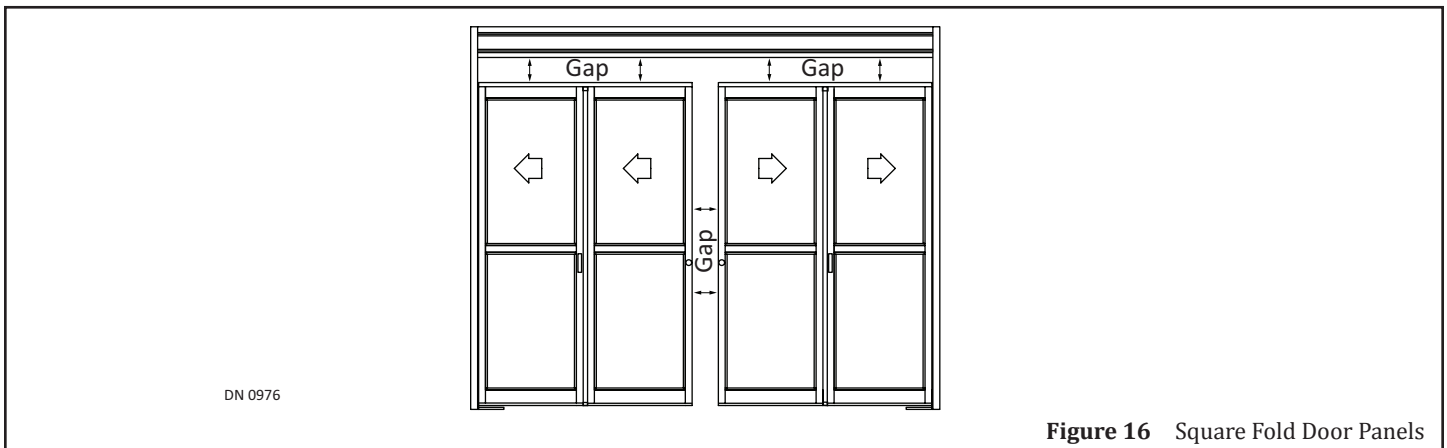


Figure 16 Square Fold Door Panels

5. Push on the Bar located in the middle of Bi-Fold Panels to manually fold open the Door.
6. Go to the Spindle Drive Bar located inside the Top Web, at the Pivot end.
7. Obtain (1) Split Plastic Bushing that was provided by NABCO.
8. Push the Split Plastic Bushing around the Spindle between the Guide Channel and Spindle Drive Bar.

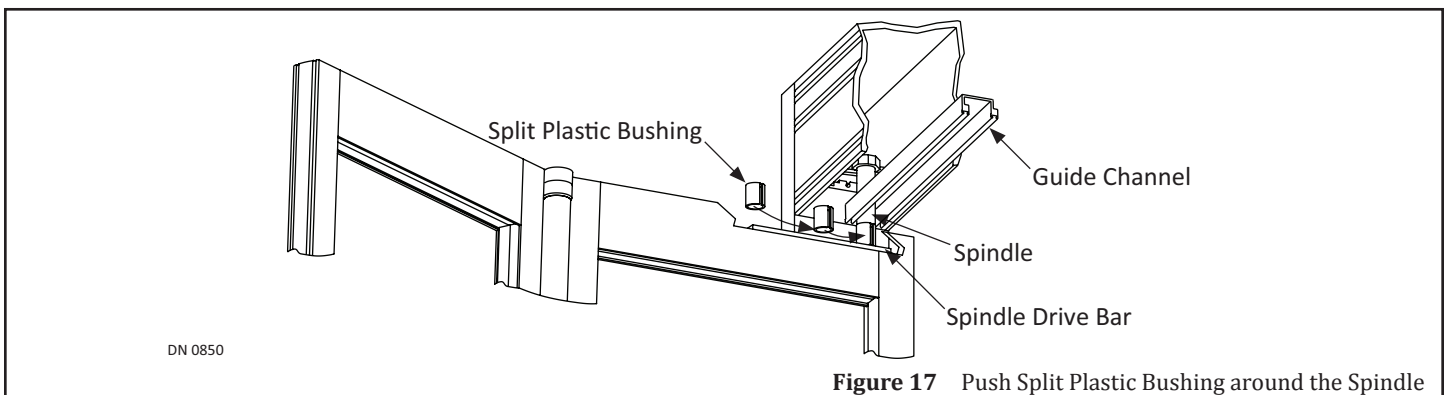


Figure 17 Push Split Plastic Bushing around the Spindle

CHAPTER 9: ADJUST THE FOLDING DOOR

Note: Each Push Rod has been pre-installed at the NABCO Factory to ensure the Folding door will fully close under normal operation. However, after installation, adjustments may be necessary.

1. Go to the Push Rod that needs to be adjusted. Loosen both Hex Locknuts.
 - a. One Hex Locknut has left hand threads, the other Hex Locknut has right hand threads.
2. Turn the Push Rod clockwise or counterclockwise to lengthen or shorten the Push Rod until the Folding Door can fully close with both door panels flat.
 - a. One end of each Push Rod has left-hand threads; the other end has right hand threads.
3. Re-tighten both Hex Locknuts. Do not over-tighten.

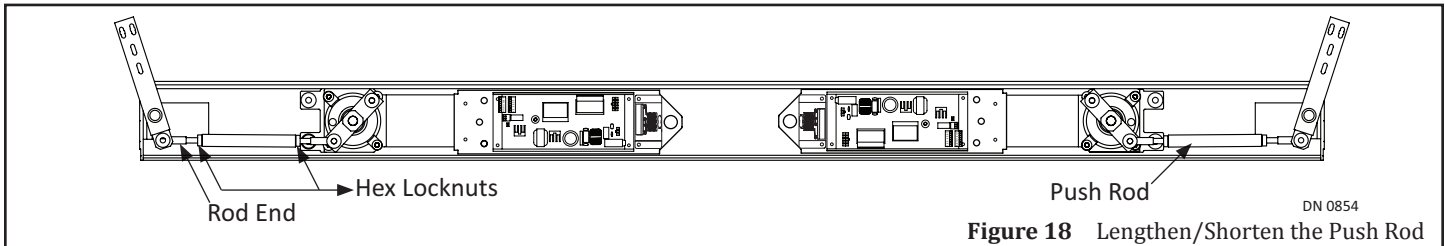


Figure 18 Lengthen/Shorten the Push Rod

CHAPTER 10: INSTALL THE WEATHERING

Note: Weathering Extrusions are pre-installed with brush at the NABCO Factory.

Note: Weathering Extrusions are bent at the NABCO Factory to fit the shape of the Door Hinge.

1. Go to the Outside bottom of the door.
2. Position the Weathering Extrusion so the bent portion lays on top of the Door Hinge.

Secure the weathering brush to Folding door panels with #6 x 1/2 inch self tapping, color matched screws

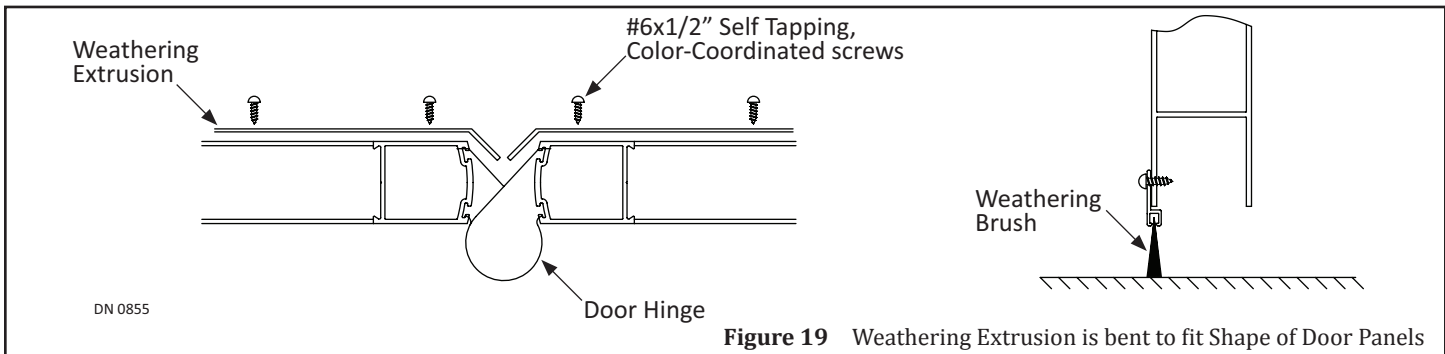
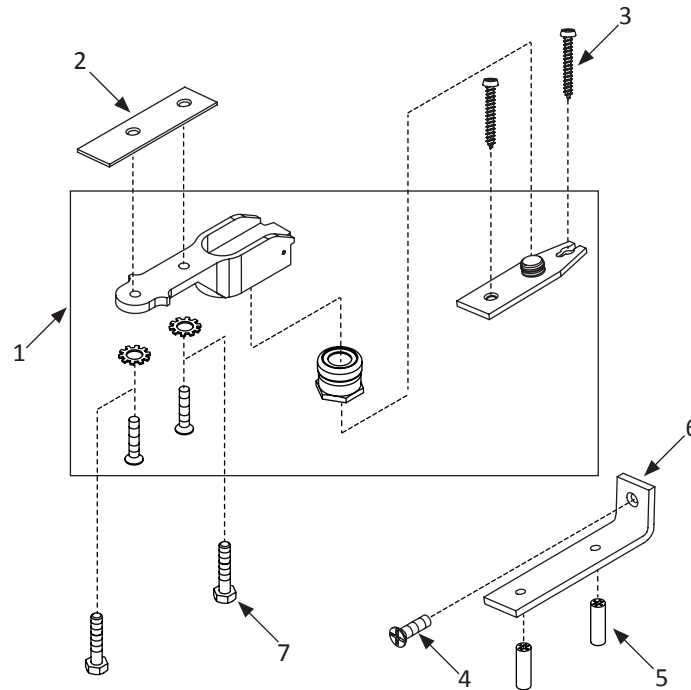


Figure 19 Weathering Extrusion is bent to fit Shape of Door Panels

SERVICE PARTS: BAG P/N A-00514

Floor Pivot Assembly



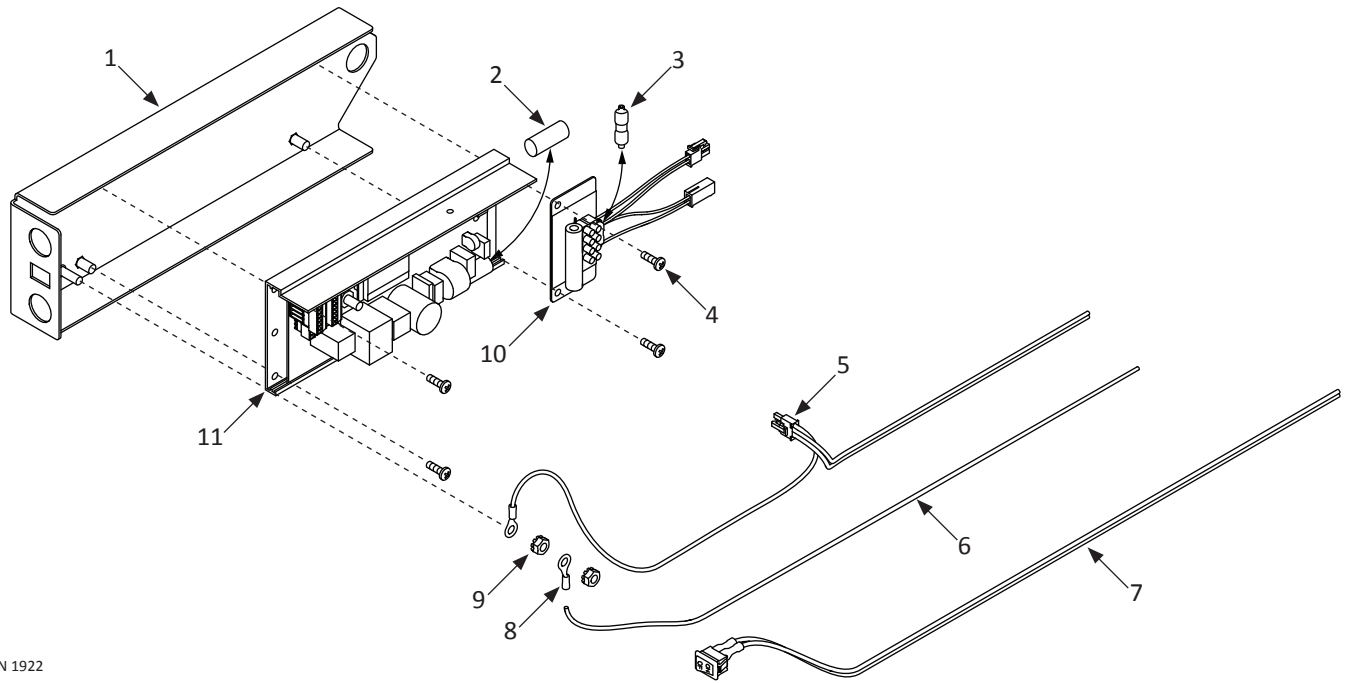
DN 1923

Floor Pivot Assembly, Parts Bag: P/N A-00514

Item	Part	QTY	Description	Used To
1	A-01089	1	"FLOOR PIVOT,CENTER HUNG,MACHINED"	Connect Floor Pivot Assembly to bottom of Swing Door
2	A-01047	1	"PIVOT ,SPACER"	Adjust height of the Center Hung Floor Pivot until it is flush to bottom of Swing Door
3	T-00459	2	"PHSMS,14x1.500L.,PHIL,ZINC,AB"	Secure Floor Pivot Assembly to Floor
4	T-00124	1	"FHMS,1/4-20x0.875L.,PHIL,ZINC"	Secure Pivot Base Bracket to Pivot Jamb Tube
5	T-00314	2	SCREW ANCHOR, #16 X 1" LG	Secure Floor Pivot Assembly to Floor
6	M-01115	1	BRACKET,PIVOT BASE	Secure Floor Pivot Assembly to Pivot Jamb Tube
7	T-00330	2	HHCS 1/4-20x1.25 L.	Secure Center Hung Floor Pivot to Bottom of Swing Door only if a Pivot Spacer is used

SERVICE PARTS: OPUS CONTROL

A-01135 with Switch; A-00136 without Switch



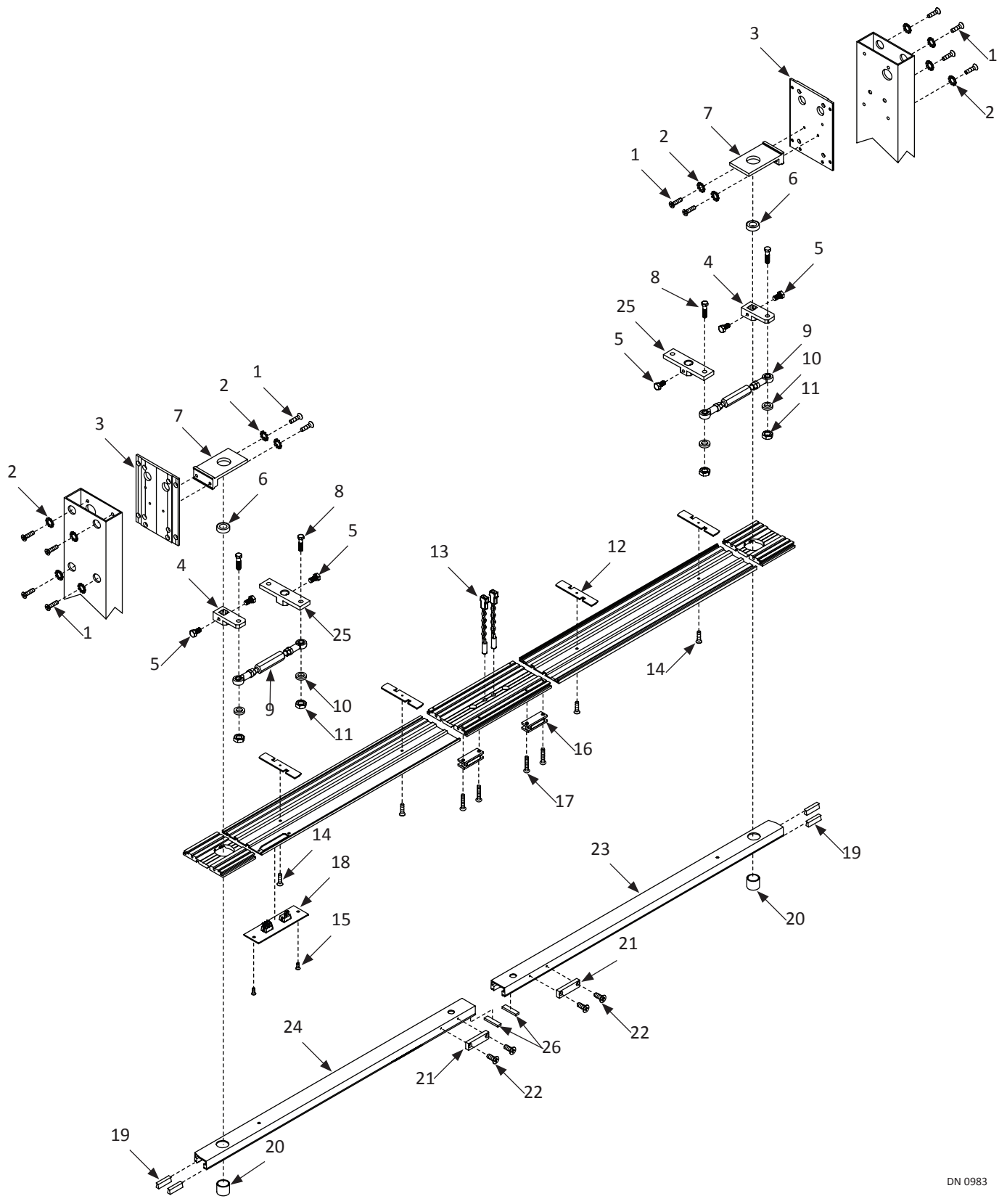
DN 1922

Opus Control				
Item	Part	Finish/Sizes/Notes	Description	
1	M-01736		BRACKET,BIFOLD,OPUS	
2	V-00552	Used on Opus Control	FUZE;5A;GMA;5X20mm	
3	V-00288	Used on Brake Module	FUZE,3 AMP,250V,FAST,2AG,AXIAL LEAD	
4	T-00078		PHMS,10-32x0.625L.,PHIL,ZINC	
5	M-01072		HARNESS,POWER,MAGNUM/OPUS	
6	T-00282	22 inch	WIRE,18 AWG,600V,UL 1015,GREEN	
7	M-01182		HARNESS,POWER,ROCKER SWITCH	
8	T-00362		TERMINAL,RING,1/4",RED	
9	T-00419		NUT,HEX,1/4-20,KEPS,ZINC	
10	A-01003		MODULE,BRAKE,OPUS	
11	M-01546		CONTROLLER,OPUS	

Header Top Half			
Item	Part	Finish/Sizes/Notes	Description
1	M-01220	RH	OPERATOR, MOUNT, WELDMENT, RH BI-FOLD
	M-01219	LH	OPERATOR, MOUNT, BIFOLD, LH
2	T-00126		"HHCS, 5/16-240.625L., ZINC"
3	T-00367		NUT: HEX: 10-24: ZN
4	T-00199		WASHER, LOCK, EXT, #10 ID, ZINC
5	V-00052		TRANSFORMER, 24 V / 40 VA.
6	A-01185	Sold as an Option	XFMR; 24V; 40A; W-MTG. BKT. & HDW.
7	T-00361		PHMS: 10-24x0.375L: PHIL: SS
8	A-01290	LH	OPER, SWGR, W/ENCOD, ROF, LH, NO CLUTCH, BFOLD
	A-01291	RH	OPER, SWGR, W/ENCOD, ROF, RH, NO CLUTCH, BFOLD
9	A-00620		GROUND WIRE: SWING OPERATOR: MAGNUM
10	T-00185		SHCS, 10-24x0.500L., BK. OX.
11	A-00824	RH	"OPERATOR, SWGR, W/ENCODER, RH CLUTCHLESS"
	A-00823	LH	"OPERATOR, SWGR, W/ENCODER, LH CLUTCHLESS"
12	T-00232		SHCS, 10-24x0.875L., ZINC
13	A-01053		"OPER. SWINGER, W/O MTR., NO CLUTCH, RH; ROF
14	V-00090		MOTOR, SHORT FRAME, ENCODER, DUOWEI
15	T-00092		WASHER, .438 ID, 1.00 OD, .083 THK, ZINC
16	T-00067		NUT, HEX, JAM, 3/8-16, ZINC
17	M-01159		RING, STOP - HOLD DOWN
18	T-00334		FHMS: 5/16-18x0.750L.: SOKT: ZN
19	M-01475		LIMIT STOP: C.U.
20	A-00489		STOP, RING ASSY
21	A-01135	With Switch	CONTROLLER, BI-FOLD, W/ SWITCH, OPUS
	A-01136	Without Switch	CONTROLLER, BI-FOLD, W/O SWITCH, OPUS
22	T-00025		NUT, WHIZLOCK, 3/8-16, ZINC
23	M-01488		PLATE: MOUNTING : RELAY
24	T-00309		NUT, HEX, 5/16-24, WHIZLOCK
25	T-00231		WASHER, LOCK, SPLIT, #10 ID, ZINC
26	A-00806		HARNESS, SWITCH, BIFOLD, OPUS
27	A-01000		HARNESS, MOTOR, OPUS
28	A-01001		HARNESS, HANDING, OPUS
29	T-00251		WIRE, 20 AWG, 300V, UL 1007, BLUE
30	M-01680	Simultaneous Pair/39"	HARNESS, SIM PAIR, OPUS
	M-01844	Simultaneous Pair/75"	HARNESS, SIM PAIR, 75", OPUS
31	C-00067		NAMEPLATE, NABCO LOGO

SERVICE PARTS: HEADER (BOTTOM HALF)

Viewed from *Non-Break Out* Side

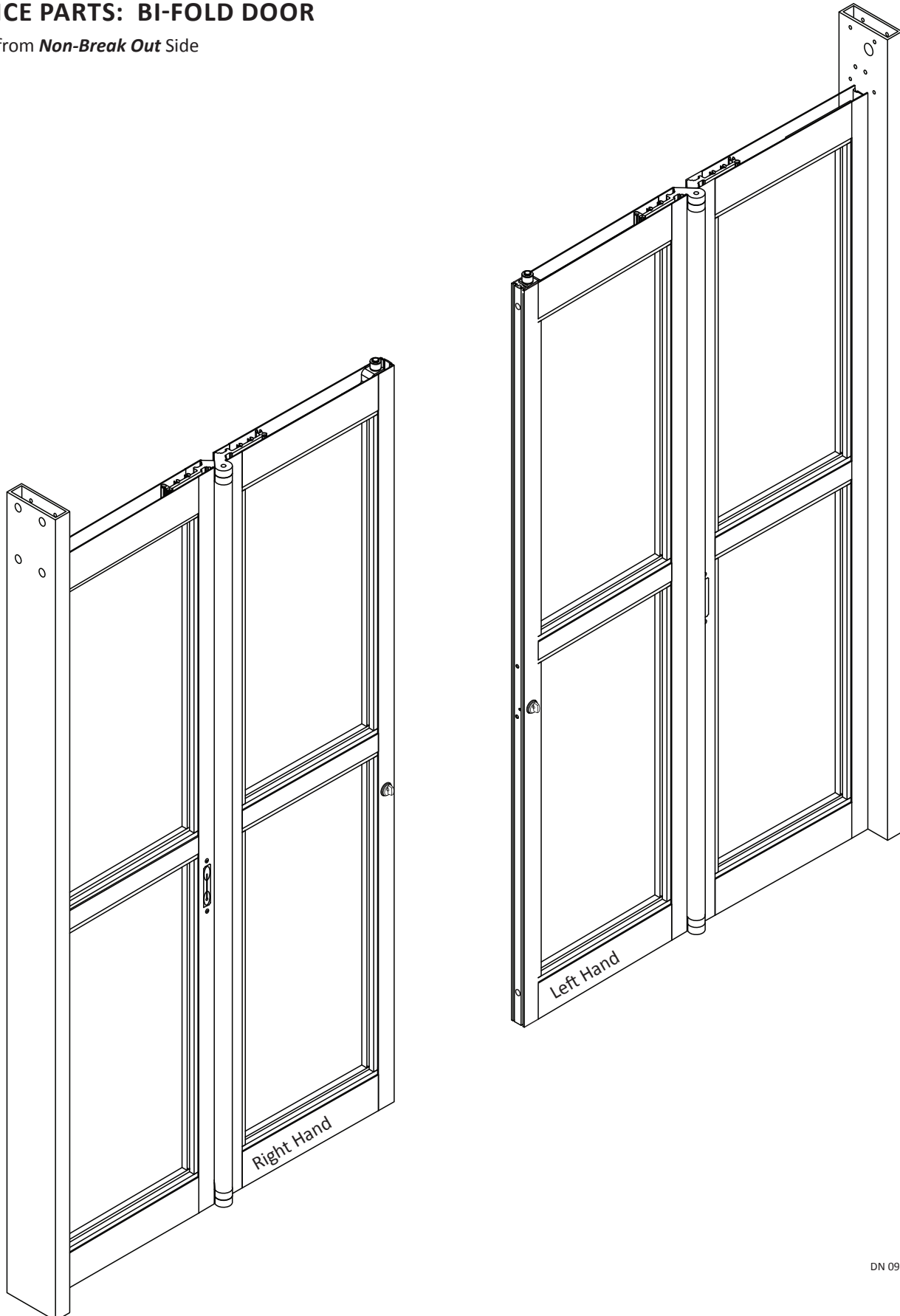


DN 0983

Header Bottom Half			
Item	Part	Finish/Sizes/Notes	Description
1	T-00064		HHCS,1/4-20x0.750L.,ZINC
2	T-00087		WASHER, LOCK, EXT, 1/4 ID, ZINC
3	22-9694		BIFOLD, HEADER END CAP ASSY NH
4	M-01335		ARM, BELL CRANK, BI-FOLD SPINDLE
5	T-00126		"HHCS,5/16-240.625L.,ZINC"
6	V-00328		"BEARING,RADIAL,15MM IDX32MM ODX9MM"
7	11-8968		UPPER SPINDLE GUIDE SUB-ASSY
8	T-00408		"HHCS,3/8-24x1.500L.,ZINC"
9	A-01161		PUSH ROD;SINGLE FOLD
10	M-00450		SPACER,MTG.END CAP
11	T-00074		NUT,HEX,NYLOCK,3/8-24,ZINC
12	M-01177		LOCK COVER PLATE - BOTTOM
13	A-00758		SWITCHBREAKOUT
14	T-00391		"FHMS,10-24x0.750L.,PHIL,ZINC"
15	T-00031	Black Zinc	FHMS,10-32x0.500L.,PHIL,UCUT,T-LOBE,BKZN
	T-00184	Zinc	FHMS,10-32x0.500L.,PHIL,UCUT,TRI-LOBE,ZN
16	A-00728		"MAGNETIC LATCH,RETROFIT KIT"
17	24-0015-63		RHMS,#10-24 X 1 1/4"PHIL.SS
18	A-01048		SWITCH,ROCKER,BIFOLD,OPUS
19	M-00499		WEATHERING:PILE:.27W X .25H:W/ ADH & FIN
20	V-00188		BEARING SLEEVE,1.181ODx.984IDx
21	M-01518		LATCH BLOCK
22	T-00241		FHMS,10-24x0.500L.,PHIL,ZINC
23	24-8972-01	LH/Clear	GUIDE CHANNEL LH
	24-8972-02	LH/Dark Bronze	GUIDE CHANNEL LH
24	24-8973-01	RH/Clear	GUIDE CHANNEL RH 204
	24-8973-02	RH/Dark Bronze	GUIDE CHANNEL RH 313
25	M-01208		ARM,BELL CRANK,OPERATOR
26	M-00282		FLEXIBLE MAGNETIC STRIP

SERVICE PARTS: BI-FOLD DOOR

Viewed from *Non-Break Out* Side

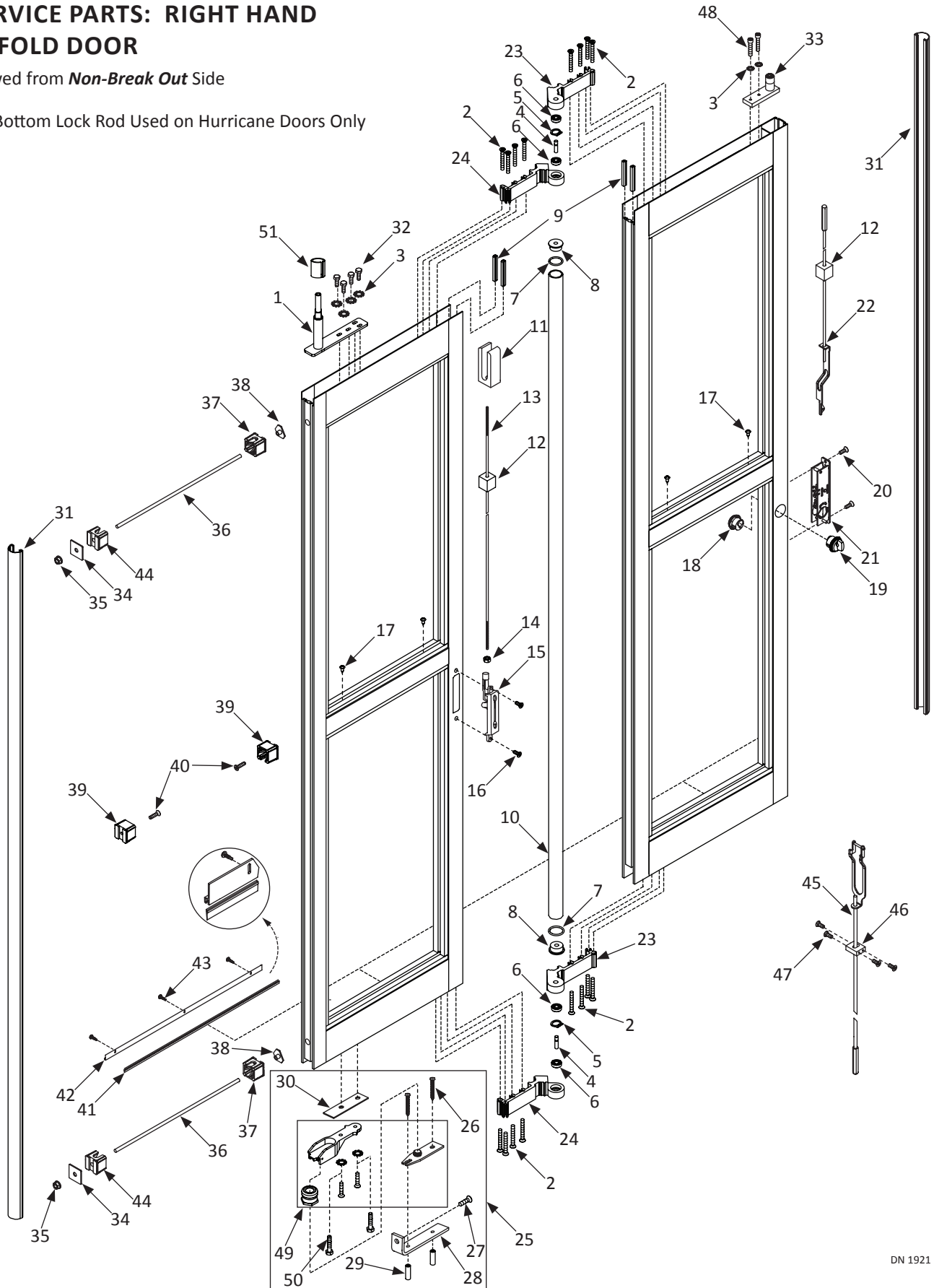


DN 0981

SERVICE PARTS: RIGHT HAND BI-FOLD DOOR

Viewed from *Non-Break Out* Side

* Bottom Lock Rod Used on Hurricane Doors Only

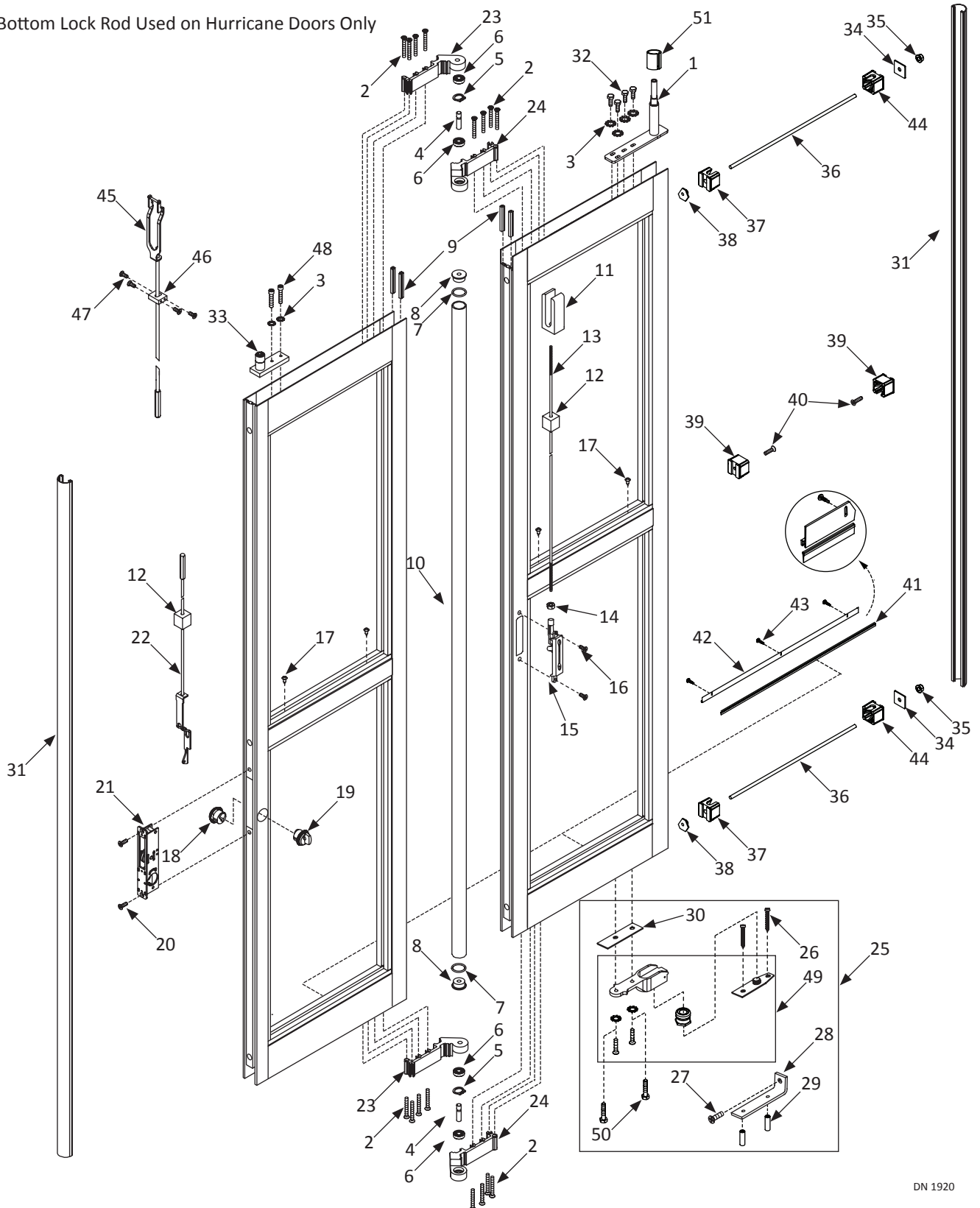


DN 1921

SERVICE PARTS: LEFT HAND BI-FOLD DOOR

Viewed from **Non-Break Out** Side

* Bottom Lock Rod Used on Hurricane Doors Only



DN 1920

Bi-Fold Door			
Item	Part	Finish/Sizes/Notes	Description
1	M-01142		DRIVEBAR, WLDMNT NH COMP W/8969-8970
2	T-00172		FHMS,1/4-20x2.000L.,PHIL,ZINC
3	T-00087		WASHER, LOCK, EXT, 1/4 ID, ZINC
4	M-00952		PIN, HINGE, BI-FOLD
5	T-00271		RING,RETAINING,EXT,SHAFT, 0.394 DIA
6	T-00202		BEARING,RADIAL,10mmID,26mmOD,8mmW
7	V-00157		O-RING,1.500Dx1.25ID,EPDM
8	M-01111		END PLUG,HINGE TUBE
9	M-00499		WEATHERING:PILE:.27W X .25H:W/ ADH & FIN
10	24-8958-01	Clear	HINGE TUBE, 6.58'
	24-8958-02	Dark Bronze	HINGE TUBE, 6.58'
11	M-01265		PIVOT ,PANEL,LOCK BOLT
12	M-00974		BLOCK,FOAM
13	24-8949		LOCK ROD, FOR FLUSH BOLT - 3.38'
14	T-00002		NUT,HEX,1/4-20,ZINC
15	24-8948-01		FLUSH BOLT KAWNEER - RD FACE
16	T-00043		FHMS,10-24x0.375L.,PHIL,UNDERCUT,ZINC
17	T-00098		PHSMS,10x0.563L.,PHIL,TYPE A
18	V-00123	Silver	CYLINDER,LOCK,KEYED,204
	V-70123	Dark Bronze	CYLINDER,LOCK,KEYED,313
19	V-00116	Silver	CYLINDER,LOCK,THUMBTURN,204
	V-70116	Dark Bronze	CYLINDER,LOCK,THUMBTURN,313
20	24-0011-84		FHMS,8-32 X 1/2,PHIL
21	V-00012		FLUSHBOLT,ADAMSRITE MS1870
22	V-00094		LOCKROD, ADAMS-RITE #4015
23	A-00864	Clear	"HINGE,CENTER,MACHINED,RH"
	M-70847	Dark Bronze	HINGE, BIFOLD, RH, 313
24	A-00447	Clear	HINGE,CENTER,MACHINED,LH
	A-00446	Dark Bronze	HINGE,CENTER,MACHINED,LH
25	A-00514		FLOOR PIVOT ASY - BIFOLD
26	T-00459		"PHSMS,14x1.500L.,PHIL,ZINC,AB"
27	T-00124		"FHMS,1/4-20x0.875L.,PHIL,ZINC"
28	M-01115		BRACKET,PIVOT BASE
29	T-00314		SCREW ANCHOR, #16 X 1" LG
30	A-01047		"PIVOT ,SPACER"
31	M-01171		WEATHER STRIP BULB, BLACK IN BULK
32	T-00064		HHCS,1/4-20x0.750L.,ZINC
33	A-00476		NOSE GUIDE, BIFOLD
34	M-00422		PLATE,TIE ROD

Bi-Fold Door				
Item	Part	Finish/Sizes/Notes	Description	
35	T-00025		NUT,WHIZLOCK,3/8-16,ZINC	
36	M-00272		3/8-16 THREADED ROD	
37	M-00460		CLIP,MUNTIN,.500 HOLE	
38	M-00416		T-NUT, 3/8"-16, TIE ROD	
39	M-00462		CLIP,MUNTIN,.261 HOLE	
40	T-00061		FHMS,1/4-20x1.000L.,PHIL,TRI-LOBE,ZINC	
41	M-00700		BRUSH, NYLON, .44"	
42	M-60278		HOLDER,WEATHERING BRUSH,204,EXTRU	
43	T-00222	Zinc	PHSMS,6x0.500L.,PHIL,TEKS,ZINC	
	T-00260	Black Zinc	PHSMS,6x0.500L. PHIL,TEKS BLK ZN	
44	M-00461		CLIP,MUNTIN,.386 HOLE	
45	V-00303	Hurricane Doors Only	LOCKROD, ADAMS-RITE #4016	
46	A-00934	Hurricane Doors Only	"GUIDE,LOCK,UPPER,HURRICANE UNIT"	
47	T-00176	Hurricane Doors Only	FHMS,10-32x0.500L.,PHIL,UCUT,23-PT,ZINC	
48	T-00037		SHCS,1/4-20x1.250L.,ZINC	
49	A-01089		"FLOOR PIVOT,CENTER HUNG,MACHINED"	
50	T-00330	Only use with Pivot Spacer	HHCS 1/4-20x1.25 L.	
51	M-01002		BUSHING,SUPPORT,BIFOLD BREAKOUT CHANNEL	