

PNEG-1364 42-60' 4" CORRUGATED 2 RING DOOR

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PNEG-1364

2/12/04

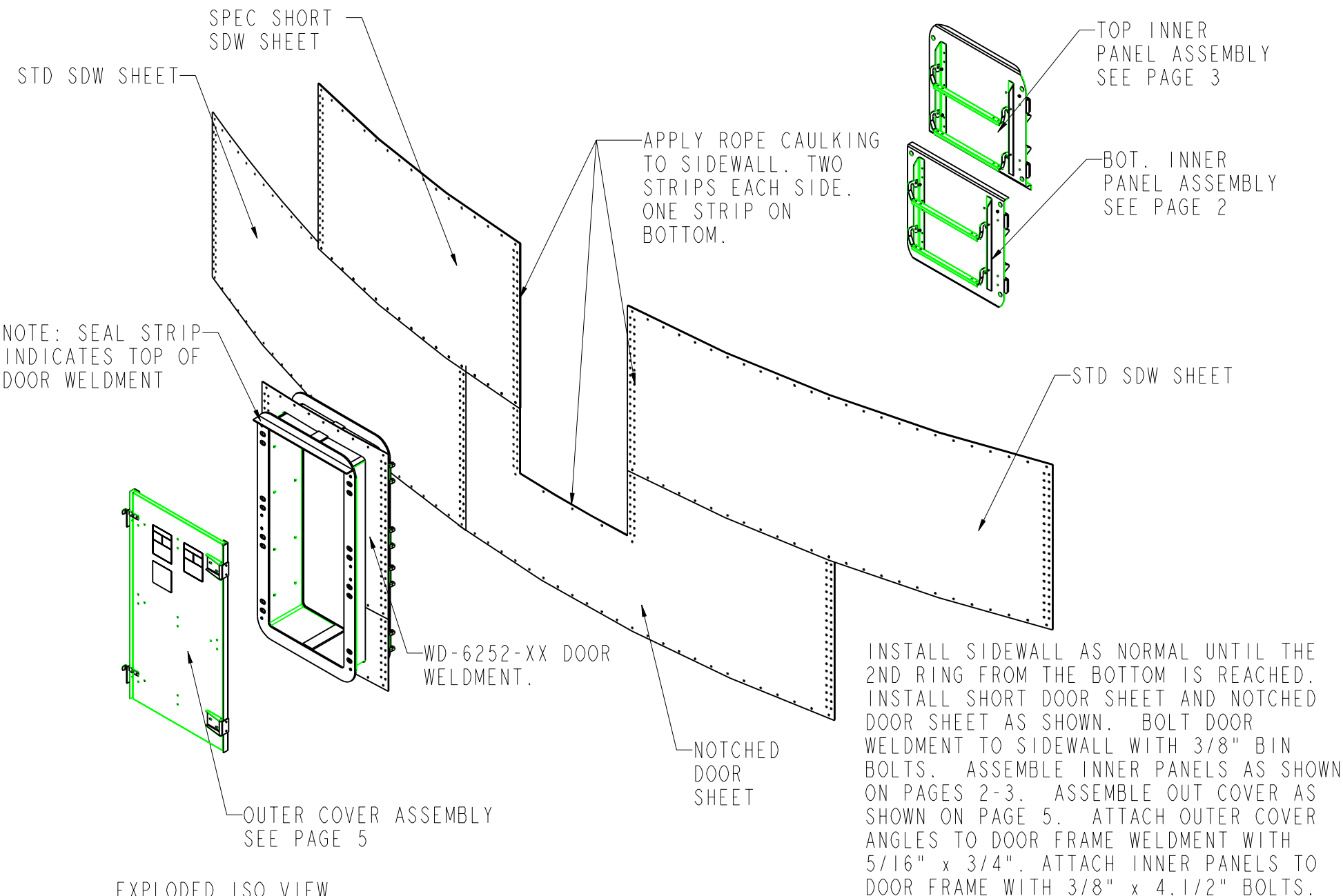
Revision: 3

PAGE (A), 42-60' 4" Bins

Manual# PNEG-1364

Written Instructions for Installation of a WD-6252-XX (4" Two Ring Door) in a 42-60' 4" Corrugation bin.

- 1). This door is to be installed in the bottom two rings of a 4" farm or commercial bin.
- 2). The door should normally be placed in line with the unload system. An intermediate discharge well should be located near the wall to clear grain away from the area of the access door (typical of all access doors). The door should be located either between two stiffeners on a commercial tank or between two anchor bolts on a farm tank.
- 3). Assemble the sidewall sheets as shown page 1. The notched door sheet and short door sheet must be installed as shown for the door to fit properly.
- 4). The door consists of a frame weldment, top and bottom inner panel assembly, and outer cover assembly. The frame weldment will bolt directly into the notched opening in the sidewall. Use 3/8" x 1" bin bolts. Apply sidewall caulk all around frame opening prior to installing the frame. Tighten all frame bolts at this time. In certain cases 5/16" x 3/4" bin bolts may be used if the surrounding sidewall is 14 gage or thinner.
- 5). Assemble the top and bottom inner panels as shown on pages 2-4. Note orientation of the latches and hinges. Install bearing pins (WD-6244) and latch bar holders (WD-6234) in door frame as shown on page 5. Use a 5/16" x 2.1/2" Gr. 8 bolts to attach the bearing pins to the door frame. Bolt head should be on the inside of the bin. Attach the latch bar holders to the door frame with 1/2" x 1.1/2" Gr. 8 bolts. Use 1/2" flat washers to adjust the position of the latch bar holders. A 1/2" lock washer must also be used on this connection. Do not fully tighten bearing pins or latch bar holders until the inner door panels have been installed and adjusted. Attach assembled top and bottom inner panels to door frame with 3/8" x 4.1/2" Gr. 2 bolts and lock nuts. Adjust hinges as necessary to allow door panels to open and close smoothly. The bearing pins should be adjusted to fit the door panel holes. Adjust latch bar holders as necessary until inner panel latches operate smoothly. **Inner panels must seat on bearing pins and lock over latch bar holders for the door panels to shut properly. Do not fill tank until the door panels have been properly adjusted.** Once the panels have been installed and adjusted, apply a foam seal strip all along the door frame to seal inner panels.
- 6). Assemble the outer cover as shown on page 5. Be sure that the decals DC-GBC-1A and DC-GBC-1S are on the inner side of the outer cover. Decals DC-GBC-2A, DC-GBC-2S, and DC-1754 must be placed on the outside of the outer cover. Apply sidewall caulking to the frame weldment and attach the outer cover angles (NCWT0205) to the frame weldment with 5/16" X 1.1/4" bin bolts. Use a flat washer on all slotted connections. Adjust hinge location until outer cover operates smoothly. Apply foam seal strip all along the outer surface of frame weldment to seal outer cover. Fill all open holes with 3/8" x 1" bin bolts. Caulk around door frame as necessary to seal door and sidewall.



EXPLODED ISO VIEW			
PAGE 1			
Sheet 1 of 5		IMW	N/A
Weight Index		N/A	N/A
Drawn By		TJH	12-Jan-04
Checked By		TBD	00-00-00
Date		12-Jan-04	00-00-00
Scale		NONE	Work to Dimensions Do Not Scale
Drawing No.			PNEG-1364

No.	ECN	Revision Description	Date	By
2	10140	DOOR WELDMENT REVISION	3/12/04	TJH
1	9638	OVERALL REVISION, ADD DC-1754	2/12/04	TJH

NCWT0196 REINF. ANGLE
USE 5/16" x 3/4" BIN
BOLTS FOR ALL
NON-HINGE CONNECTIONS

USE FLAT WASHER ON AL SLOTTED CONNECTIONS

INSIDE OF BIN

WD-6040 LATCH BUSHING
(4 PER DOR)

WD-6037 & WD-6038
ARE BOTH ON THE
INSIDE OF ANGLES

USE 5/16" x 1.1/4" BIN BOLTS FOR
ALL HINGE/REINF. ANGLE CONNECTIONS

USE 5/16" x 3/4" BOLTS FOR
ALL HINGE CONNECTIONS

SEE DETAIL A

USE 5/16" x 1.1/4" HEX
HEAD BOLT, WD-6040 LATCH
BUSHING, AND S-5220 5/16"
LOCK NUT

REINF. RIBS
MUST FACE THE
INSIDE OF BIN

WD-6038 LEFT HAND
INNER PANEL LATCH

NCWT0197 LATCH BAR

USE 5/16" x 3/4" SLOTTED
TRUSS HEAD BOLTS
(S-4303) TO CONNECT
LATCH BARS TO LATCHES

WD-6037 RIGHT HAND
INNER PANEL LATCH

BOLT HEAD TO BE
ON THIS SIDE OF
DOOR PANEL FOR
ALL CONNECTIONS

NOTE HINGE
ORIENTATION

DETAIL A
SCALE 0.250

OUTSIDE OF BIN

Stock Size		BOTTOM INNER PANEL ASSEMBLY			
Material		PAGE 2			
Sheet 2 of 5		IMW		Drawing No.	
Weight Index		N/A		N/A	
Sg. Ft.		N/A		N/A	
Drawn By		TJH		Date	
12-Jan-04		Scale		NONE	
Checked By		TBD		Date	
00-00-00		Work to Dimensions Do Not Scale		PNEG-1364	

No.	ECN	Revision Description	Date	By
1	10140	REVISED FRAME WELDMENT	3/12/04	TJH

NCWT0196 REINF. ANGLE
USE 5/16" x 3/4" BIN
BOLTS FOR ALL
NON-HINGE CONNECTIONS

USE FLAT WASHER ON ALL SLOTTED CONNECTION

OUTSIDE OF BIN

WD-6040 LATCH BUSHING
(4 PER DOOR)

USE 5/16" x 1.1/4"
BIN BOLT, WD-6040
LATCH BUSHING, AND
S-5220 5/16" LOCK NUT

USE 5/16" x 1.1/4"
BIN BOLTS FOR ALL
HINGE/REINF. ANGLE
CONNECTIONS

USE 5/16" x 3/4" BIN
BOLTS FOR ALL HINGE
CONNECTIONS

WD-6037 & WD-6038
ARE BOTH ON THE
INSIDE OF ANGLES

SEE DETAIL B

WD-6037 LEFT HAND
INNER PANEL LATCH

NCWT0197 LATCH
BAR (2)

REINF. RIBS
TO BE ON THE
INSIDE OF BIN

NOTE HINGE
ORIENTATION

USE 5/16" x 3/4" SLOTTED
TRUSS HEAD BOLTS
(S-4303) TO CONNECT
LATCH BARS TO LATCHES


BOLT HEAD TO BE
ON THIS SIDE OF
DOOR PANELS FOR
ALL CONNECTIONS

DETAIL B
SCALE 0.250

INSIDE OF BIN

Stock Size				TOP INNER PANEL ASSEMBLY			
Material				PAGE 3			
Sheet 3 of 5				IMW N/A		Drawing No.	
Weight Index N/A		Sq. Ft. N/A		Ship Wt. N/A			
Drawn By TJH		Date 13-Jan-04		Scale NONE		PNEG-1364	
Checked By TBD		Date 00-00-00		Work to Dimensions Do Not Scale			

1		10140		REVISED FRAME WELDMENT		3/12/04 TJH	
No.		ECN		Revision Description		Date By	



THE GSI GROUP

Assumption, IL

Engineering Division

GRAIN SYSTEMS

HEAVY WELDED 4" DOOR ASSEMBLY INSTRUCTIONS

ATTACH BEARING PIN WD-6224
TO FRAME WITH 5/16" x
2.1/2" Gr 5 BOLTS. BOLT
HEAD TO THIS SIDE

NOTE: BOLT HEAD MUST
BE ON THIS SIDE FOR
HINGE CONNECTION
TYP. ALL HINGES

USE 5/16" x 1.1/4"
FOR HINGE TO FRAME
CONNECTIONS

DETAIL C
SCALE 0.188

ATTACH LATCH BAR HOLDER WD-6234
TO FRAME WITH 1/2" x 1.1/2" Gr 8
BOLTS. USE WASHERS AS NECESSARY
TO ADJUST POSITION OF WD-6234.

CLOSE LATCH BARS OVER
HOLDERS AND ADJUST AS
NECESSARY UNTIL LATCH
OPERATES SMOOTHLY

SEE DETAIL C

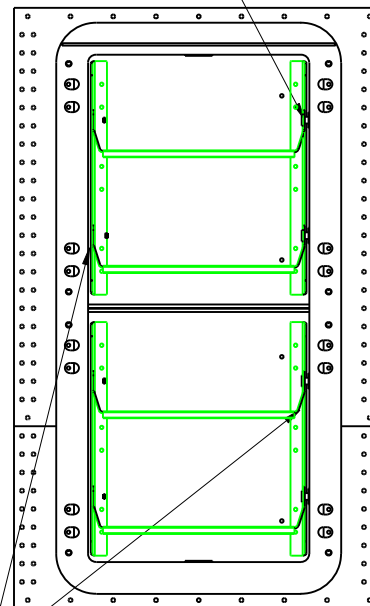
TOP INNER PANEL
NOT SHOWN FOR
CLARITY

USE 3/8" x 4.1/2" Gr 2
BOLTS WITH 3/8" LOCK
NUT TO ATTACH DOOR
PANEL HINGE TO FRAME
HINGE BRACKET

ADJUST HINGE POSITION
TO CENTER DOOR PANEL
OVER BEARING PINS

ISO VIEW
VIEWED FROM INSIDE OF TANK
SCALE 0.050

WD-6252-XX
FRAME WELDMENT



INSTALL FOAM SEALANT
ALL ALONG FRAME TO
SEAL INNER PANELS

BACK VIEW
VIEWED FROM OUTSIDE OF TANK
SCALE 0.050

INNER PANEL ASSEMBLY			
PAGE 4			
Sheet 4 of 5		IMW	N/A
Weight Index		Sq. Ft.	N/A
Drawn By		Date	13-Jan-04
Checked By		Date	00-00-00
TOLERANCES (Unless Noted) Fractions +/- 1/32" Decimals +/- .031 Angles +/- 1.00		Scale	NONE
		Work to Dimensions Do Not Scale	
Drawing No.			PNEG-1364

No.	ECN	Revision Description	Date	By
1	10140	REVISED FRAME WELDMENT	3/12/04	TJH

NCWT0166 LATCH
BRACKET (2)

NCWT0204 OUTER COVER
REINF. CHANNEL (3)

WD-033
LATCH (2)

DC-GBC-2A &
DC-GBC-2S

NCWT0203 OUTER
COVER

NCWT0170
HINGE (2)

NCWT0205 OUTER
COVER ANGLE (2)

NCWT0165 HINGE
WELDMENT (2)

**IMPORTANT: OUTER COVER DECALS
MUST BE IN PLACE UPON DOOR
INSTALLATION. DC-GBC-1A & DGBC-1S
MUST BE PLACED ON THE INNER SIDE
OF THE OUTER COVER. DC-GBC-2A,
DC-GBC-2S, AND DC-1754 MUST BE
PLACED ON THE OUTER SIDE OF THE
OUTER COVER. IF THESE DECALS ARE
ABSENT OR DAMAGED CALL GSI FOR
FREE REPLACEMENT.**

APPLY ROPE CAULK TO OUTER COVER ANGLES PRIOR TO
ATTACHING TO THE FRAME WELDMENT. USE 5/16" HARDWARE
FOR ALL CONNECTIONS. HINGE/OUTER COVER/ REINF.
CHANNEL CONNECTIONS WILL USE 5/16" x 1 1/4" BIN
BOLTS. ALL OTHER CONNECTIONS WILL USE 5/16" x 3/4"
BIN BOLTS. PLACE SEALING WASHER BETWEEN OUTER COVER
AND LATCH (WD-033) ADJUST LATCHES AND HINGES AS NECESSARY
TO ALLOW OUTER COVER TO OPEN AND CLOSE SMOOTHLY.

Stock Size
OUTER COVER ASSEMBLY

Material
PAGE 5

Sheet 5 of 5

IMW **N/A**

Drawing No.

Weight Index **N/A**

Sq. Ft. **N/A**

Ship Wt. **N/A**

Drawn By **TJH**

Date **13-Jan-04**

Scale **NONE**

Checked By **TBD**

Date **00-00-00**

Work to Dimensions
Do Not Scale

PNEG-1364



Engineering Division
GRAIN SYSTEMS

HEAVY WELDED 4" DOOR

ASSEMBLY INSTRUCTIONS

TOLERANCES
(Unless Noted)
Fractions +/- 1/32"
Decimals +/- .031
Angles +/- 1.00

No.	ECN	Revision Description	Date	By
1	9638	OVERALL REVISION, ADD DC-1754	2/12/04	TJH