

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

**PRINTED: 1/2004**

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PNEG-1364

2/12/04

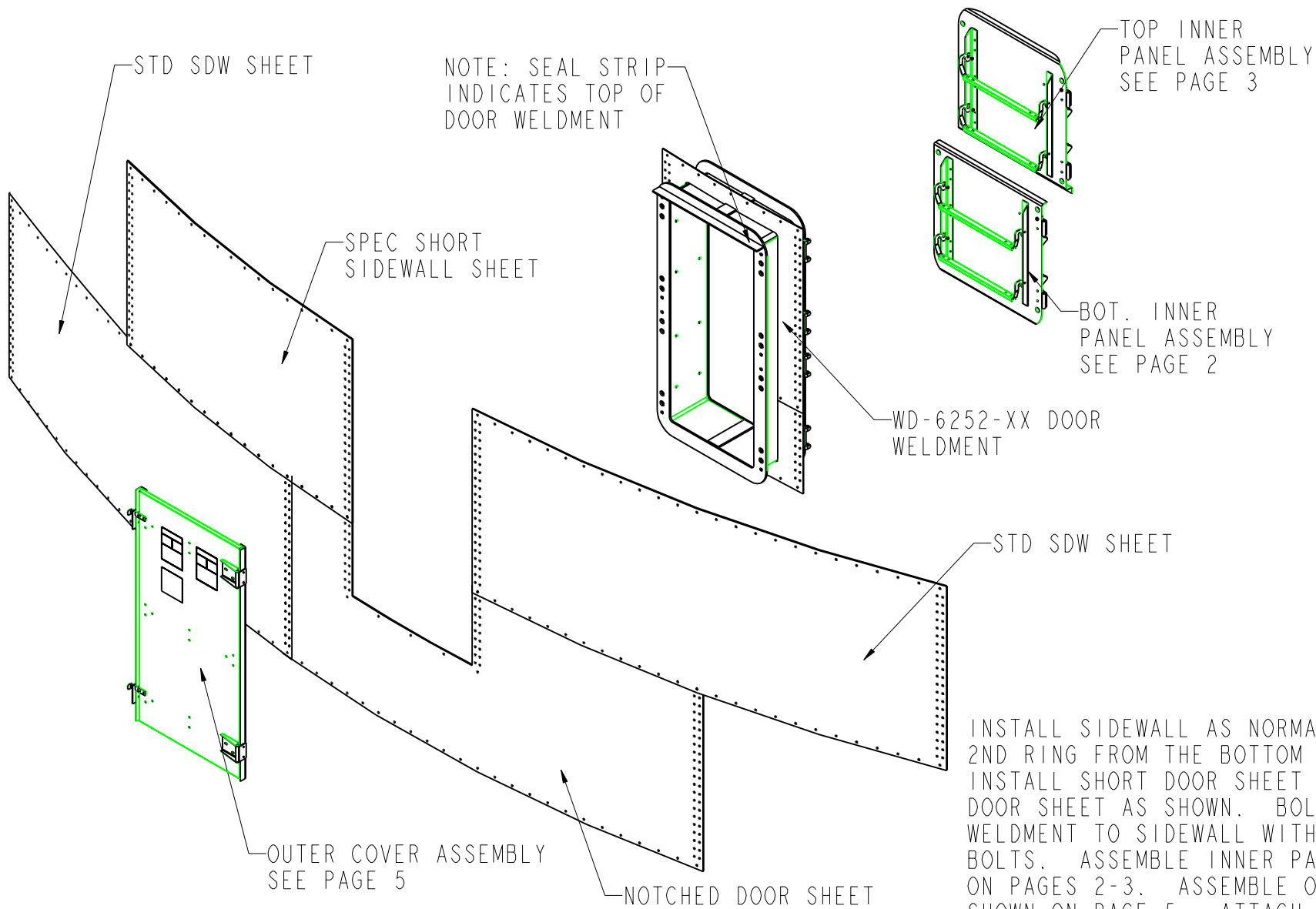
Revision: 3

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 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 6" 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.



INSTALL SIDEWALL AS NORMAL UNTIL THE 2ND RING FROM THE BOTTOM IS REACHED. INSTALL SHORT DOOR SHEET AND NOTCHED DOOR SHEET AS SHOWN. BOLT DOOR WELDMENT TO SIDEWALL WITH 3/8" BIN BOLTS. ASSEMBLE INNER PANELS AS SHOWN ON PAGES 2-3. ASSEMBLE OUT COVER AS SHOWN ON PAGE 5. ATTACH OUTER COVER ANGLES TO DOOR FRAME WELDMENT WITH 5/16" x 3/4". ATTACH INNER PANELS TO DOOR FRAME WITH 3/8" x 4 1/2" BOLTS.

EXPLODED ISO VIEW  
SCALE 0.035

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

THE GSI GROUP Assumption, IL			
Engineering Division			
GRAIN SYSTEMS			
No.	ECN	Revision Description	Date By
1	9638	OVERALL REVISION, ADD DC-1754	2/12/04 TJH

## HEAVY WELDED 4" DOOR ASSEMBLY INSTRUCTIONS

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

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

WD-6038 LEFT HAND  
INNER PANEL LATCH

REINF. RIBS  
MUST FACE THE  
INSIDE OF BIN

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					<b>BOTTOM INNER PANEL ASSEMBLY</b>	
Material					<b>PAGE 2</b>	
Sheet 2 of 5			IMW	N/A		Drawing No.  <b>PNEG-1364</b>
Weight Index	N/A		Sq. ft.	N/A		
Shipped By	TJH		Date	12-Jan-04		
Checked By	TBD		Date	00-00-00		
			Scale	NONE		
			Work to Dimensions Do Not Scale			

No.	ECN	Revision Description	Date	By

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

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

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

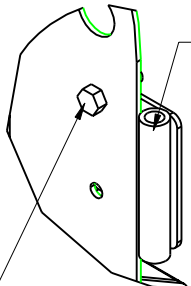
WD-6037 LEFT HAND  
INNER PANEL LATCH

SEE DETAIL B

NCWT0197 LATCH  
BAR (2)

REINF. RIBS  
TO BE ON THE  
INSIDE OF BIN

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



NOTE HINGE  
ORIENTATION

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

DETAIL B  
SCALE 0.250

INSIDE OF BIN

No.	ECN	Revision Description	Date	By



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**GRAIN SYSTEMS**

# HEAVY WELDED 4" DOOR ASSEMBLY INSTRUCTIONS

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

Stock Size										TOP INNER PANEL ASSEMBLY																													
Material										PAGE 3																													
Sheet 3 of 5										IMW					N/A					Drawing No.  PNEG-1364																			
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									

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 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

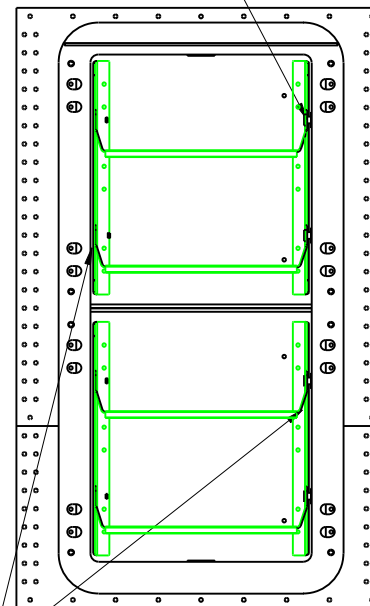
TOP INNER PANEL  
NOT SHOWN FOR  
CLARITY

USE 3/8" x 6" 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

Stock Size				INNER PANEL ASSEMBLY	
Material				PAGE 4	
Sheet 4 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	

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

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HEAVY WELDED 4" DOOR
ASSEMBLY INSTRUCTIONS

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

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		
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	

Drawing No.	
PNEG-1364	

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



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ASSEMBLY INSTRUCTIONS	

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