

# Top Dry Air Box

## Assembly Manual

**PNEG-1890**

**Date: 07-10-12**

G S I G R O U P



PNEG-1890

**All information, illustrations, photos, and specifications in this manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.**

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# NOTES

# 1 Top Dry Air Box Assembly

## Topics Covered in this Chapter

- Assemble Air Box Covers
- Assemble Vent to Angle Plate
- Attach Vent Assembly to Side Plate
- Attach Side Plate Assembly to Support Frame
- Assemble Top Spout to Support Frame
- Install Inner Spout
- Assemble Door Frame
- Install Sliding Access Door

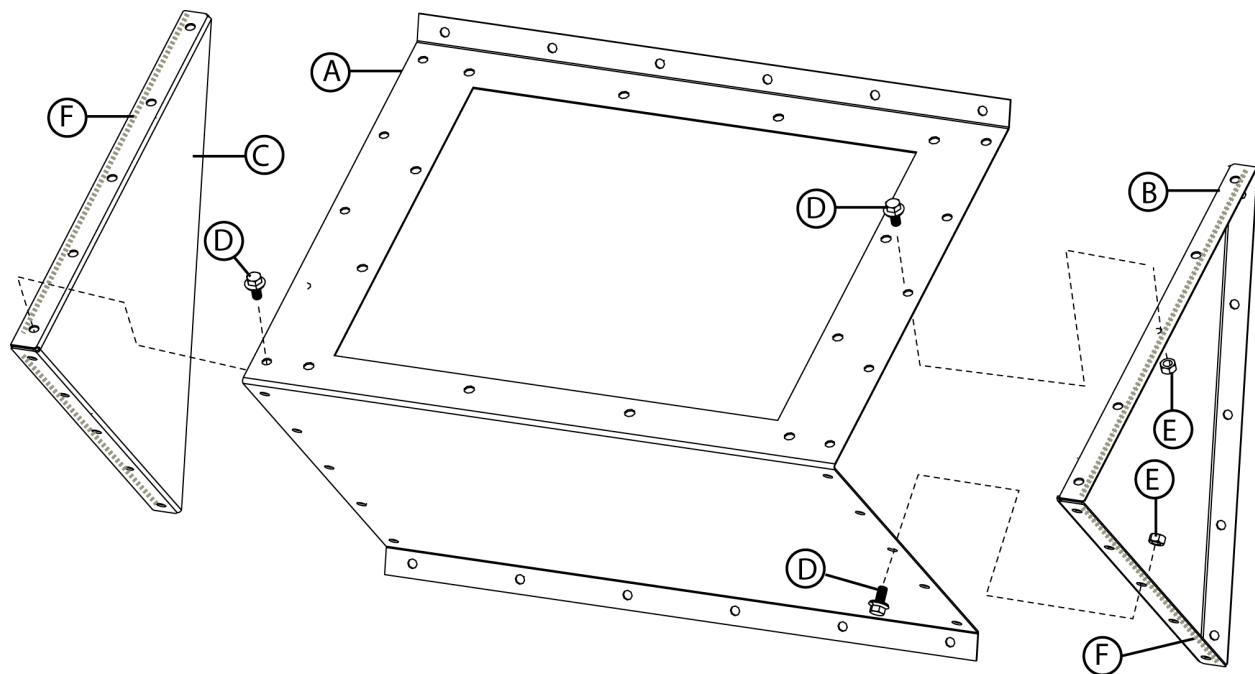
### NOTICE

*Use a silicone based caulk along all connecting surfaces throughout the assembly to assure a water tight fit.*

Assemble Air Box Covers

The air box covers consist of the air box right and left covers and the air box cover angle plate. This assembly will be the base for the vent assembly.

- 1. Apply caulk (F) along the bolt holes in both the right side panel (B) and the left side panel (C).
- 2. Install the right side panel (B) and the left side panel (C) to the angle plate (A) using bolts (D) and nuts (E).

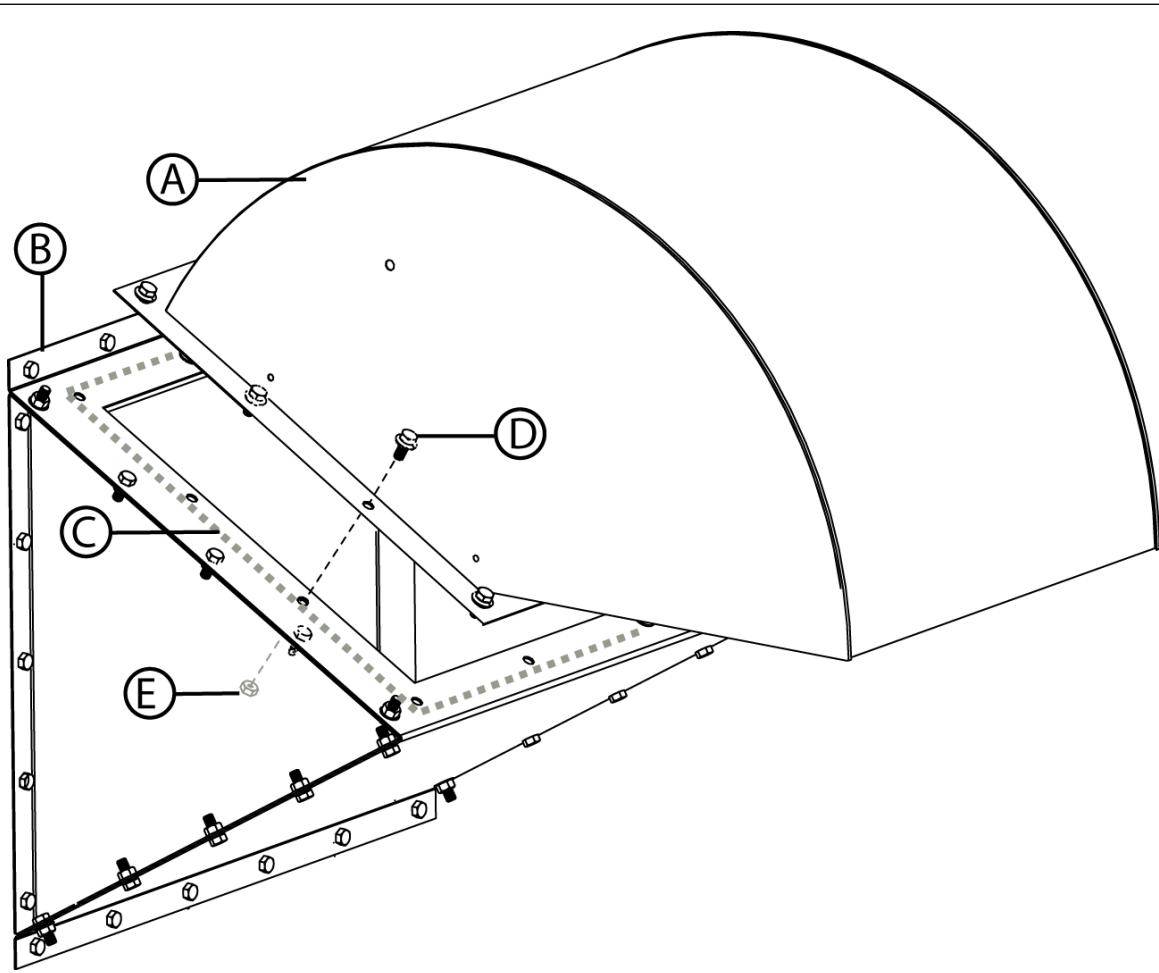


Callout	Part Number	Description
A	TD-101154	Air Box Cover — Angle Plate
B	TD-101152	Air Box Cover — Right
C	TD-101151	Air Box Cover — Left
D	S-275	5/16"-18 X 3/4" Grade 5 Hex Bolt
E	S-396	5/16"-18 Zinc YDP Grade 2 Hex Nut
F	CH-6873	Silicone caulk area indicated by gray dashed line.

Assemble Vent to Angle Plate

Assembling the vents to the angle plates before attaching the angle plates to the side plates will allow easier access to hardware during installation.

- 1. Apply caulk around angle plate opening next to bolt holes (C).
- 2. Align holes in vent flange (A) with holes in angle plate (B).
- 3. Attach vent to angle plate using bolt (D) and nut (E).

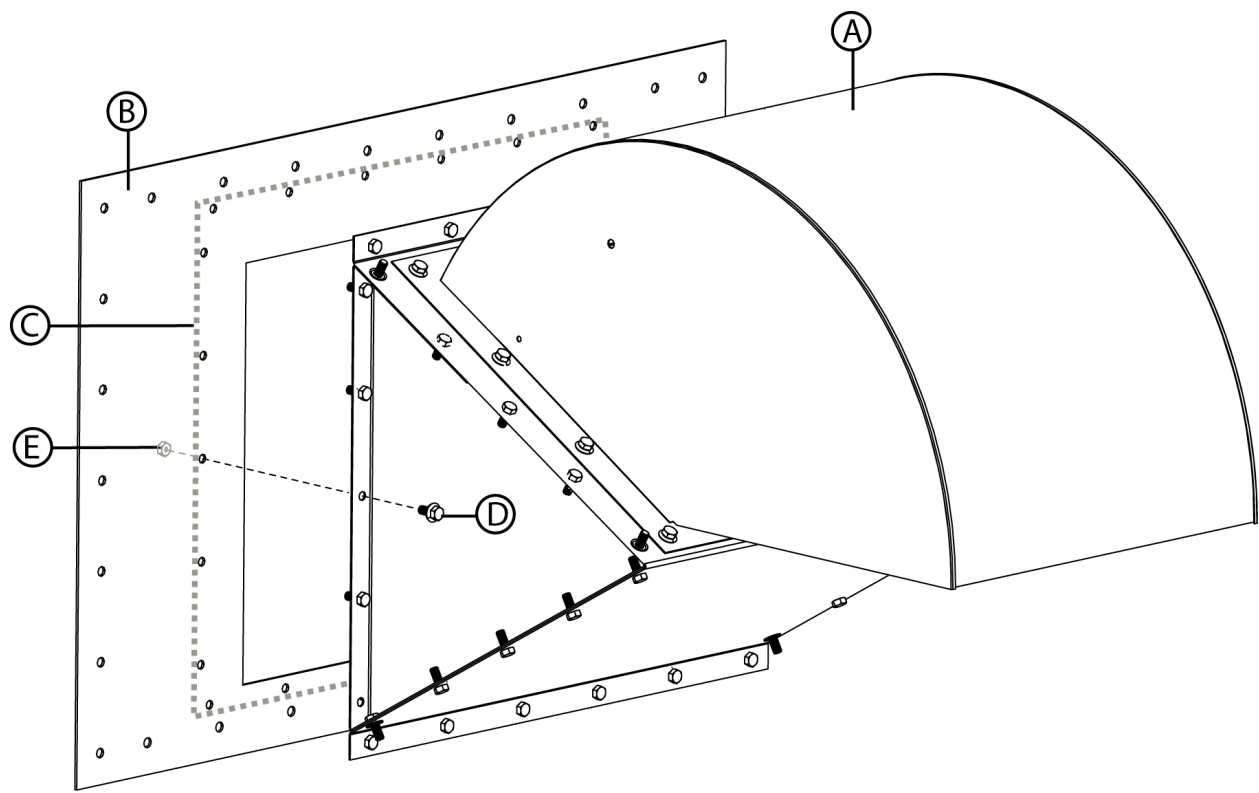


Callout	Part Number	Description
A	MIS-6773	Slim Roof Vent Housing
B	TD-101154	Air Box Cover — Angle Plate
C	MIS-6778	Base Gasket indicated by gray dashed line.
D	S-275	5/16"-18 X 3/4" Grade 5 Hex Bolt
E	S-396	5/16"-18 Zinc YDP Grade 2 Hex Nut

Attach Vent Assembly to Side Plate

Attaching the vent assemblies to the side plates first will allow for easier access to hardware during installation.

- 1. Apply caulk (C) along the perimeter of the bolt holes in the side plate (B).
- 2. Align holes in vent assembly (A) with those in the side plate (B).
- 3. Fasten vent assembly (A) to side plate (B) using screws (D) and nuts (E).



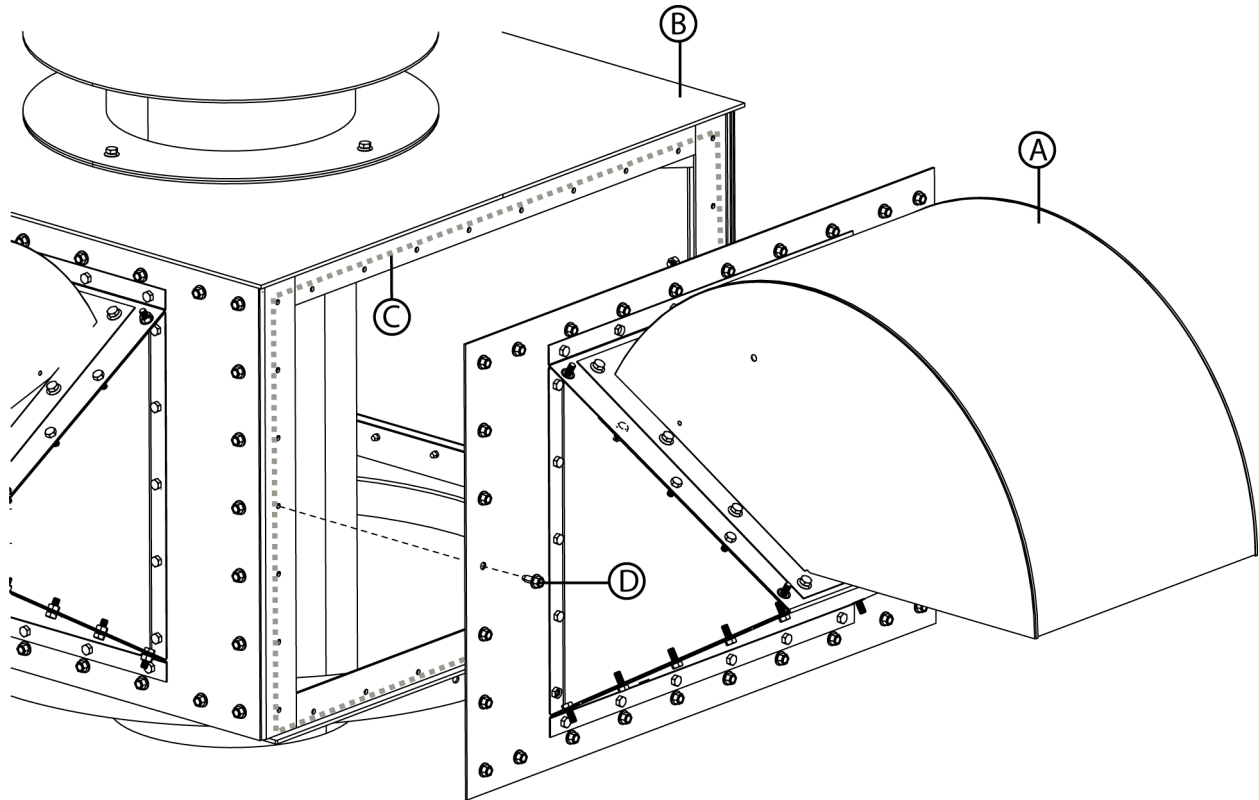
Callout	Part Number	Description
A	NA	Vent Assembly
B	TD-101153	Air Box Cover Side Plate
C	CH-6873	Silicone caulk area indicated by gray dashed line.
D	S-275	5/16"-18 X 3/4" Grade 5 Hex Bolt
E	S-396	5/16"-18 Zinc YDP Grade 2 Hex Nut



## Attach Side Plate Assembly to Support Frame

The side plate assemblies will cover three sides of the air box support frame. The remaining side will house the access door.

1. Apply caulk (C) along the perimeter of the bolt holes on the support frame (B).
2. Align holes in side plate assembly (A) with those on the support frame (B).
3. Fasten side plate assembly (A) to support Frame (B) using screws (D).

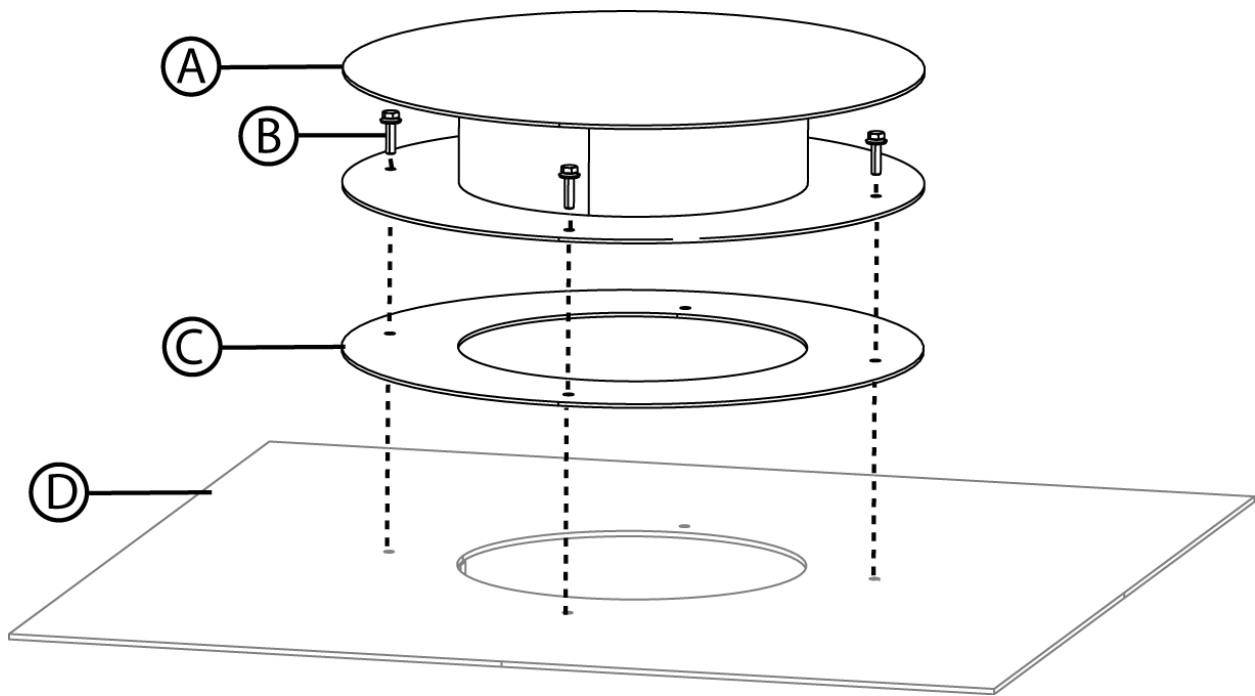


Callout	Part Number	Description
A	NA	Side Plate Assembly
B	TD-101155	Air Box Support Frame
C	CH-6873	Silicone caulk area indicated by gray dashed line.
D	S-7221	5/16"-18 X 3/4" Grade 2 Self Tapping Screw

Assemble Top Spout to Support Frame

The top spout is fastened to the top of the air box using three bolts through threaded plates located on the inside of the box.

- 1. Align holes in bottom of top spout (A) with holes in rubber gasket (C) and support frame top (D).
- 2. Fasten together using only three bolts (B). Do not install the bolt located on the door side.

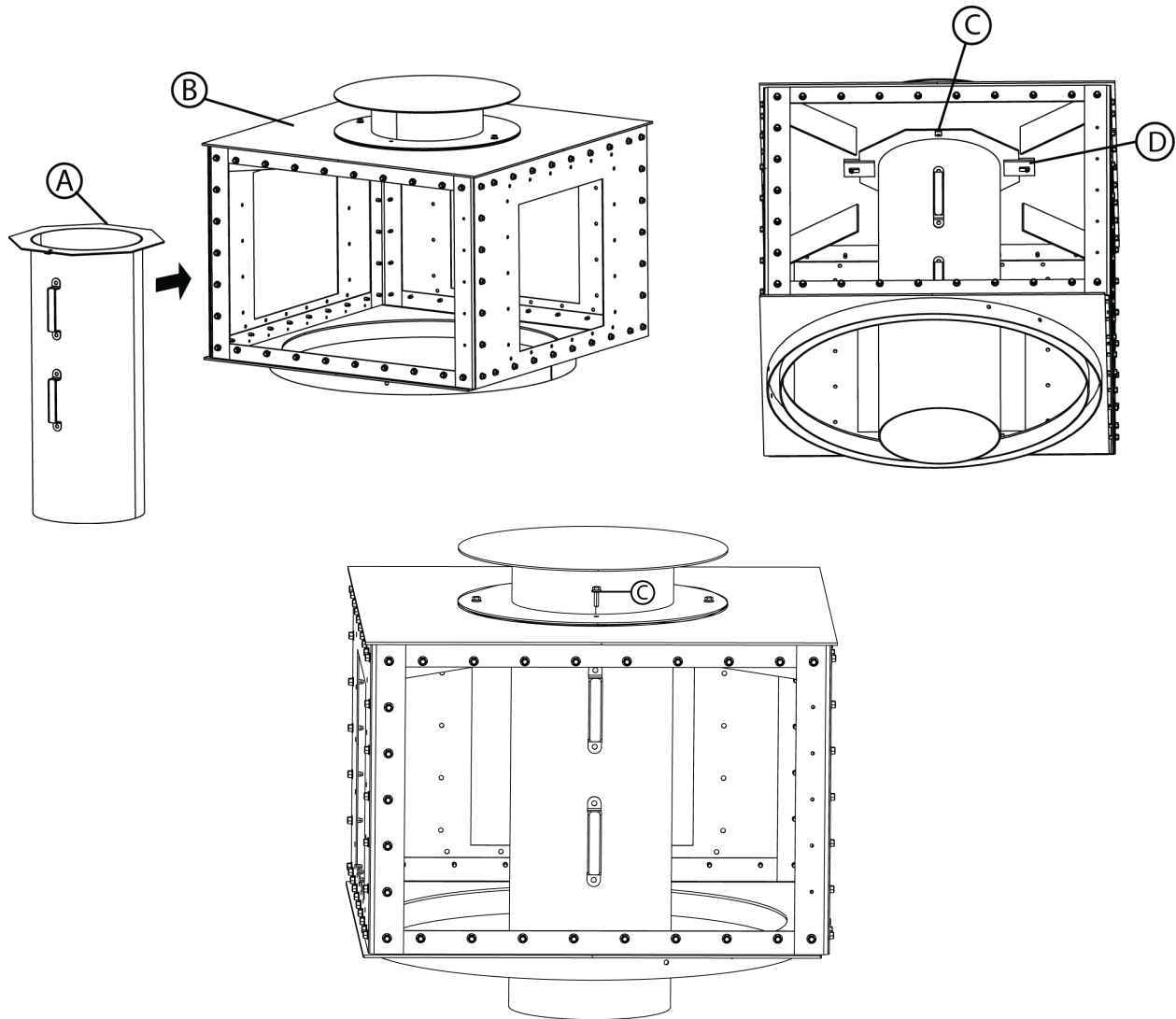


Callout	Part Number	Description
A	TD-101313	Air Box Top Spout Weldment
B	S-277	5/16"-18 X 1-1/4" Grade 5 Bin Bolt
C	TD-101325	Rubber Gasket Seal
D	TD-101155	Air Box Support Frame

## Install Inner Spout

The inner spout slides onto the support plates located inside the air box under the top spout and is fastened in place with a keeper bolt.

1. Slide flanges of inner spout (A) onto spout support plates (D).
2. Fasten in place with keeper bolt (C).

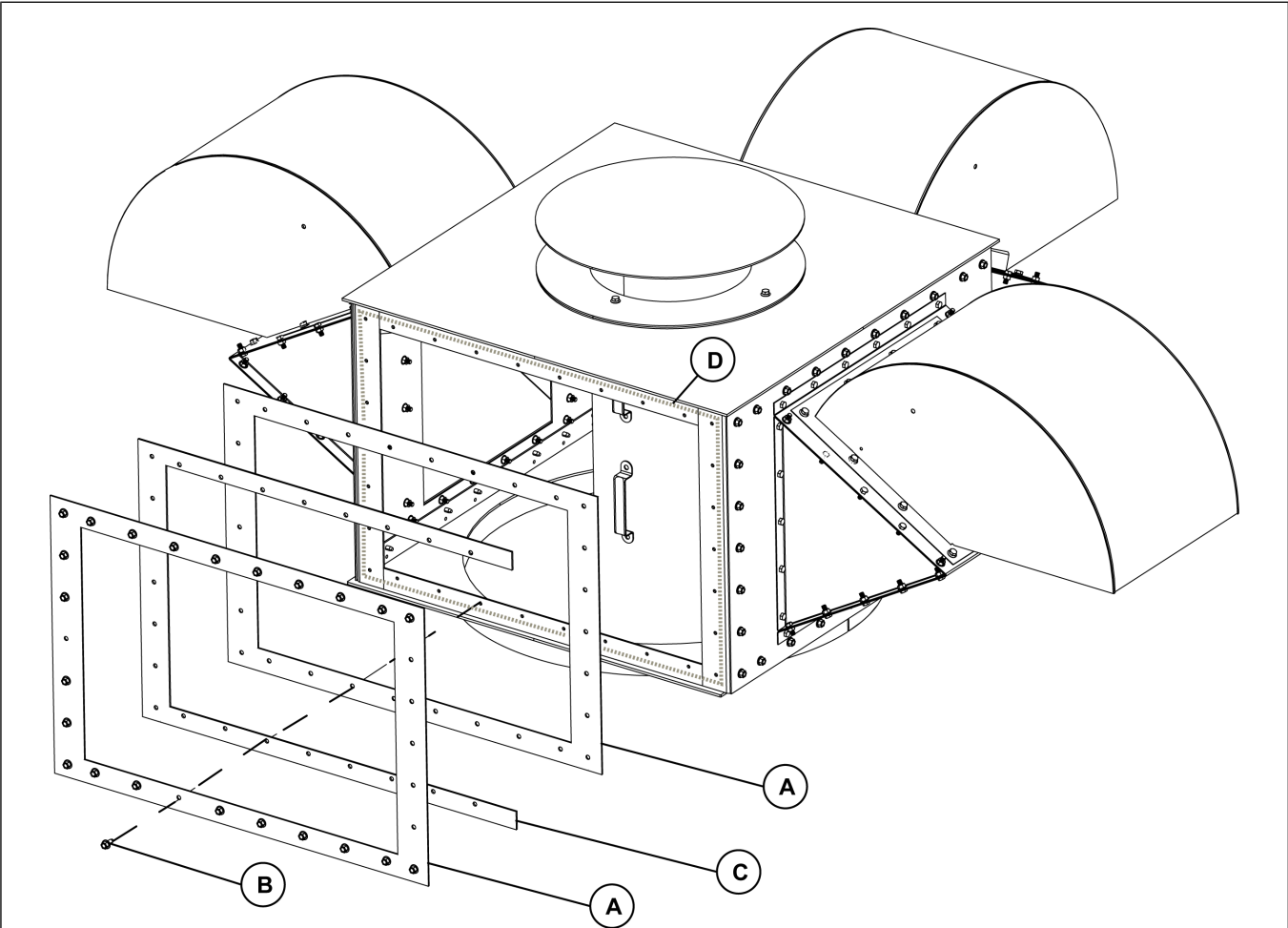


Callout	Part Number	Description
A	TD-101310	Air Box Inner Spout Weldment
B	TD-101155	Air Box Cover Support Frame
C	S-277	5/16"-18 X 1-1/4" YDP Grade 5 Bin Bolt
D	NA	Spout Support Plate
E	TD-101313	Air Box Top Spout Weldment

Assemble Door Frame

The air box sliding door frame is made of three plates. One side of the middle plate is removed to allow the door to slide between the two outer plates.

- 1. Apply caulk along the perimeter of the bolt holes in the support frame (D).
- 2. Align holes in outer and inner door plates (A and C) with holes in support frame.
- 3. Attach together using bolts (B).

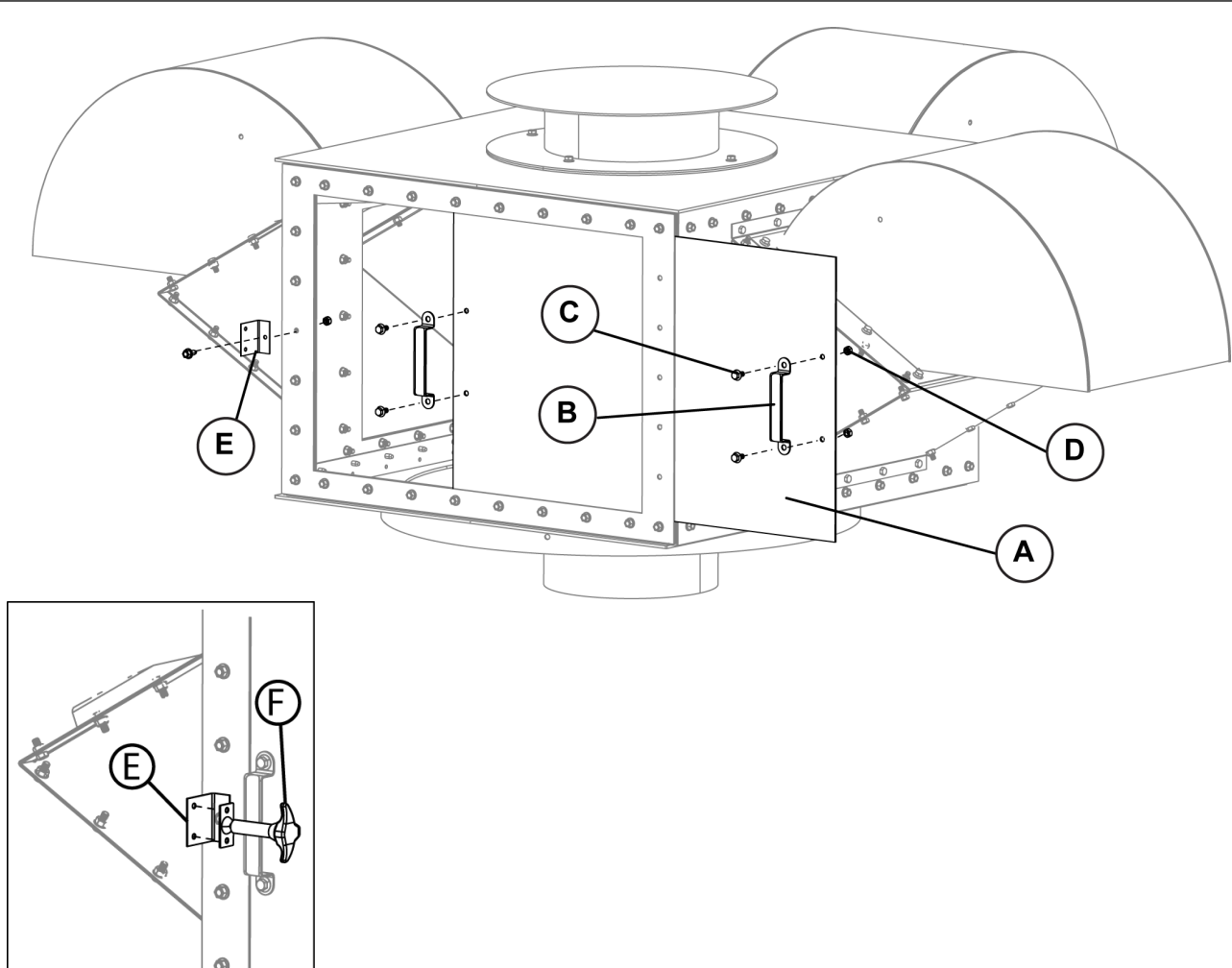


Callout	Part Number	Description
A	TD-101318	Air Box Sliding Door Outer Plate
B	S-7221	5/16" x 3/4" Grade 2 Self Tapping Screw
C	TD-101319	Air Box Sliding Door Inner Plate
D	CH-6873	Silicone caulk area indicated by gray dashed line.

## Install Sliding Access Door

The top dry air box sliding door allows access to the inside of the air box to easily remove the inner tube.

1. Slide access door (A) into opening on side of door frame.
2. Attach handles (B) to door using bolts (C) and nuts (D).
3. Install latch bracket (E) to air box side panel next to handle.
4. Install the latch (F) to the latch bracket (E).



Callout	Part Number	Description
A	TD-101320	Air Box Sliding Door
B	PR-331	Handle
C	S-275	5/16"-18 X 3/4" YDP Grade 5 Bin Bolt
D	S-396	5/16"-18 YDP Grade 2 Hex Nut
E	TD-101321	Air Box Sliding Door Latch Bracket
F	CRP-4654	Latch

# NOTES

## GSI Group, LLC Limited Warranty

The GSI Group, LLC ("GSI") warrants products which it manufactures to be free of defects in materials and workmanship under normal usage and conditions for a period of 12 months after sale to the original end-user or if a foreign sale, 14 months from arrival at port of discharge, whichever is earlier. The end-user's sole remedy (and GSI's only obligation) is to repair or replace, at GSI's option and expense, products that in GSI's judgment, contain a material defect in materials or workmanship. Expenses incurred by or on behalf of the end-user without prior written authorization from the GSI Warranty Group shall be the sole responsibility of the end-user.

### Warranty Extensions:

The Limited Warranty period is extended for the following products:

	Product	Warranty Period
<b>AP Fans and Flooring</b>	Performer Series Direct Drive Fan Motor	3 Years
	All Fiberglass Housings	Lifetime
	All Fiberglass Propellers	Lifetime
<b>Cumberland Feeding/Watering Systems</b>	Feeder System Pan Assemblies	5 Years **
	Feed Tubes (1-3/4" and 2.00")	10 Years *
	Centerless Augers	10 Years *
	Watering Nipples	10 Years *
<b>Grain Systems</b>	Grain Bin Structural Design	5 Years
<b>Grain Systems Farm Fans Zimmerman</b>	Portable and Tower Dryers	2 Years
	Portable and Tower Dryer Frames and Internal Infrastructure †	5 Years

\* Warranty prorated from list price:  
0 to 3 years - no cost to end-user  
3 to 5 years - end-user pays 25%  
5 to 7 years - end-user pays 50%  
7 to 10 years - end-user pays 75%

\*\* Warranty prorated from list price:  
0 to 3 years - no cost to end-user  
3 to 5 years - end-user pays 50%

† Motors, burner components and moving parts not included.  
Portable dryer screens included.  
Tower dryer screens not included.

GSI further warrants that the portable and tower dryer frame and basket, excluding all auger and auger drive components, shall be free from defects in materials for a period of time beginning on the twelfth (12<sup>th</sup>) month from the date of purchase and continuing until the sixtieth (60<sup>th</sup>) month from the date of purchase (extended warranty period). During the extended warranty period, GSI will replace the frame or basket components that prove to be defective under normal conditions of use without charge, excluding the labor, transportation, and/or shipping costs incurred in the performance of this extended warranty.

### Conditions and Limitations:

THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE LIMITED WARRANTY DESCRIPTION SET FORTH ABOVE. SPECIFICALLY, GSI MAKES NO FURTHER WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE IN CONNECTION WITH: (I) PRODUCT MANUFACTURED OR SOLD BY GSI OR (II) ANY ADVICE, INSTRUCTION, RECOMMENDATION OR SUGGESTION PROVIDED BY AN AGENT, REPRESENTATIVE OR EMPLOYEE OF GSI REGARDING OR RELATED TO THE CONFIGURATION, INSTALLATION, LAYOUT, SUITABILITY FOR A PARTICULAR PURPOSE, OR DESIGN OF SUCH PRODUCTS.

GSI shall not be liable for any direct, indirect, incidental or consequential damages, including, without limitation, loss of anticipated profits or benefits. The sole and exclusive remedy is set forth in the Limited Warranty, which shall not exceed the amount paid for the product purchased. This warranty is not transferable and applies only to the original end-user. GSI shall have no obligation or responsibility for any representations or warranties made by or on behalf of any dealer, agent or distributor.

GSI assumes no responsibility for claims resulting from construction defects or unauthorized modifications to products which it manufactured. Modifications to products not specifically delineated in the manual accompanying the equipment at initial sale will void the Limited Warranty.

This Limited Warranty shall not extend to products or parts which have been damaged by negligent use, misuse, alteration, accident or which have been improperly/inadequately maintained. This Limited Warranty extends solely to products manufactured by GSI.

Prior to installation, the end-user has the responsibility to comply with federal, state and local codes which apply to the location and installation of products manufactured or sold by GSI.

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(revised July 2009)

**This equipment shall be installed in accordance with the  
current installation codes and applicable regulations  
which should be carefully followed in all cases.  
Authorities having jurisdiction should be consulted  
before installations are made.**

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