

TopDry Air Box

Models:

TD-101164

TD-101522

Assembly Manual

PNEG-1890

Version 05

Date: 09-27-20



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.

NOTES

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NOTES

1 Safety Precautions

Topics Covered in this Chapter

- Safety Guidelines
- Cautionary Symbol Definitions
- Safety Cautions

Safety Guidelines

Safety guidelines are general-to-specific safety rules that must be followed at all times. This manual is written to help you understand safe operating procedures and problems that can be encountered by the operator and other personnel when using this equipment. Read and save these instructions.

As owner or operator, you are responsible for understanding the requirements, hazards, and precautions that exist and to inform others as required. Unqualified persons must stay out of the work area at all times.

Alterations must not be made to the equipment. Alterations can produce dangerous situations resulting in **SERIOUS INJURY** or **DEATH**.

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

When necessary, you must consider the installation location relative to electrical, fuel and water utilities.








Personnel operating or working around equipment must read this manual. This manual must be delivered with equipment to its owner. Failure to read this manual and its safety instructions is a misuse of the equipment.

ST-0001-4

Cautionary Symbol Definitions

Cautionary symbols appear in this manual and on product decals. The symbols alert the user of potential safety hazards, prohibited activities and mandatory actions. To help you recognize this information, we use the symbols that are defined below.

Table 1-1 Description of the different cautionary symbols

Symbol	Description
	This symbol indicates an imminently hazardous situation which, if not avoided, will result in serious injury or death.
	This symbol indicates a potentially hazardous situation which, if not avoided, can result in serious injury or death.
	This symbol indicates a potentially hazardous situation which, if not avoided, can result in minor or moderate injury.
	This symbol is used to address practices not related to personal injury.
	This symbol indicates a general hazard.
	This symbol indicates a prohibited activity.
	This symbol indicates a mandatory action.

ST-0005-2

Safety Cautions

Use Personal Protective Equipment

- Use appropriate personal protective equipment:

Eye Protection



Respiratory Protection



Foot Protection



Hearing Protection



Head Protection



Fall Protection



Hand Protection



- Wear clothing appropriate to the job.
- Remove all jewelry.
- Tie long hair up and back.

ST-0004-1

Follow Safety Instructions

- **Warning:** If the information in the manual is not followed exactly, a fire or explosion can result, causing property damage, personal injury or loss of life.
- Carefully read all safety messages in this manual and safety signs on your machine. Keep signs in good condition. Replace missing or damaged safety signs. Be sure new equipment components and repair parts include the current safety signs. Replacement safety signs are available from the manufacturer.
- Learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction.
- If you do not understand any part of this manual or need assistance, contact your dealer.
- Retain these instructions for future reference.



ST-0025-3

NOTES

2 Air Box Assembly

Topics Covered in this Chapter

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- Assembling the Air Box Covers
- Installing Vent to Angle Plate
- Installing Vent Assembly
- Installing Side Plate Assembly
- Installing the Top Spout to the Support Frame
- Installing the Inner Spout
- Installing the Door Frame
- Installing the Access Door

NOTICE

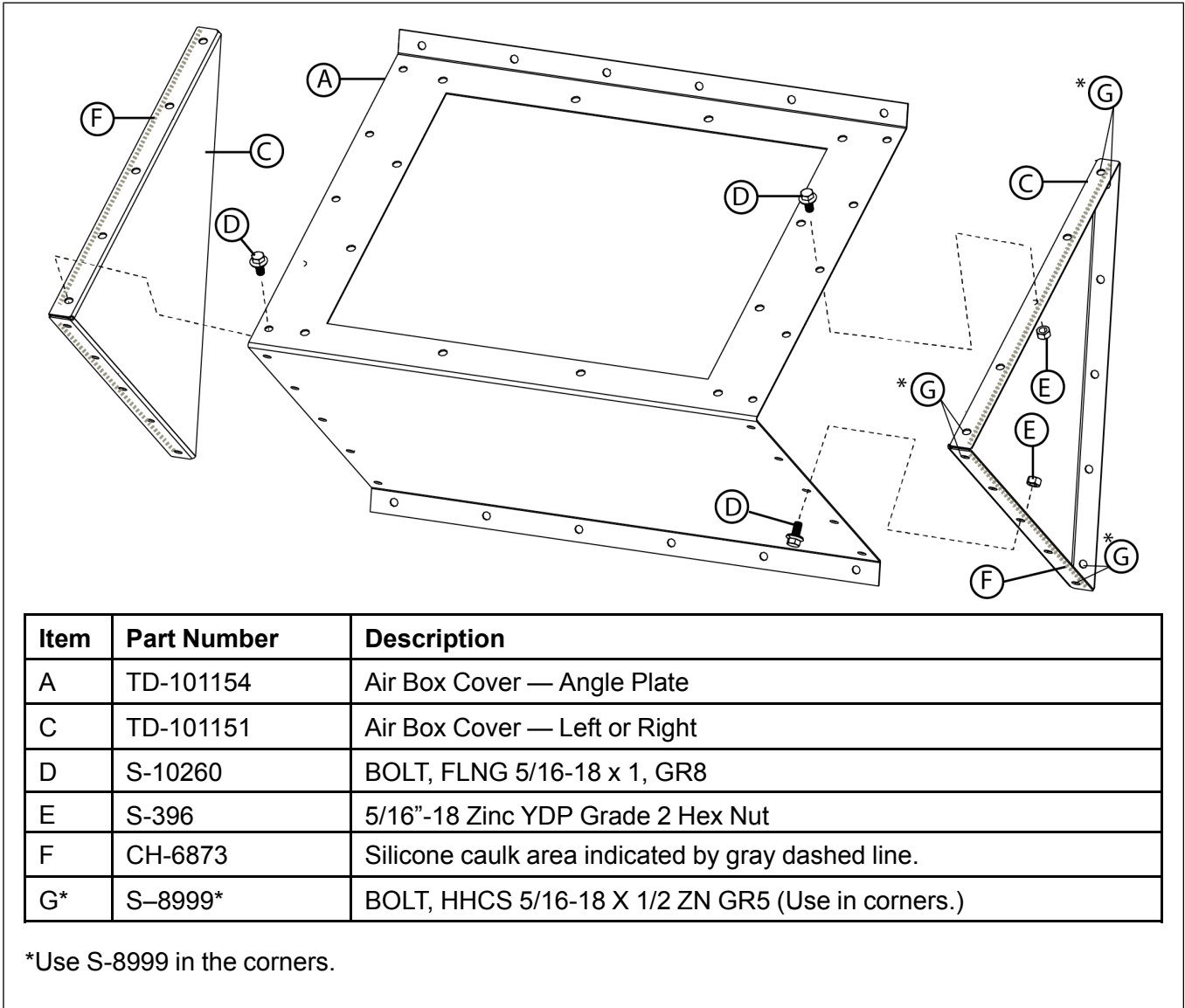
Use a silicone based caulk along all connecting surfaces throughout the assembly to assure a water tight fit.

Assembling the 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 and left side panels (C).
2. Install the right and left side panels (C) to the angle plate (A) using bolts (D) and nuts (E).

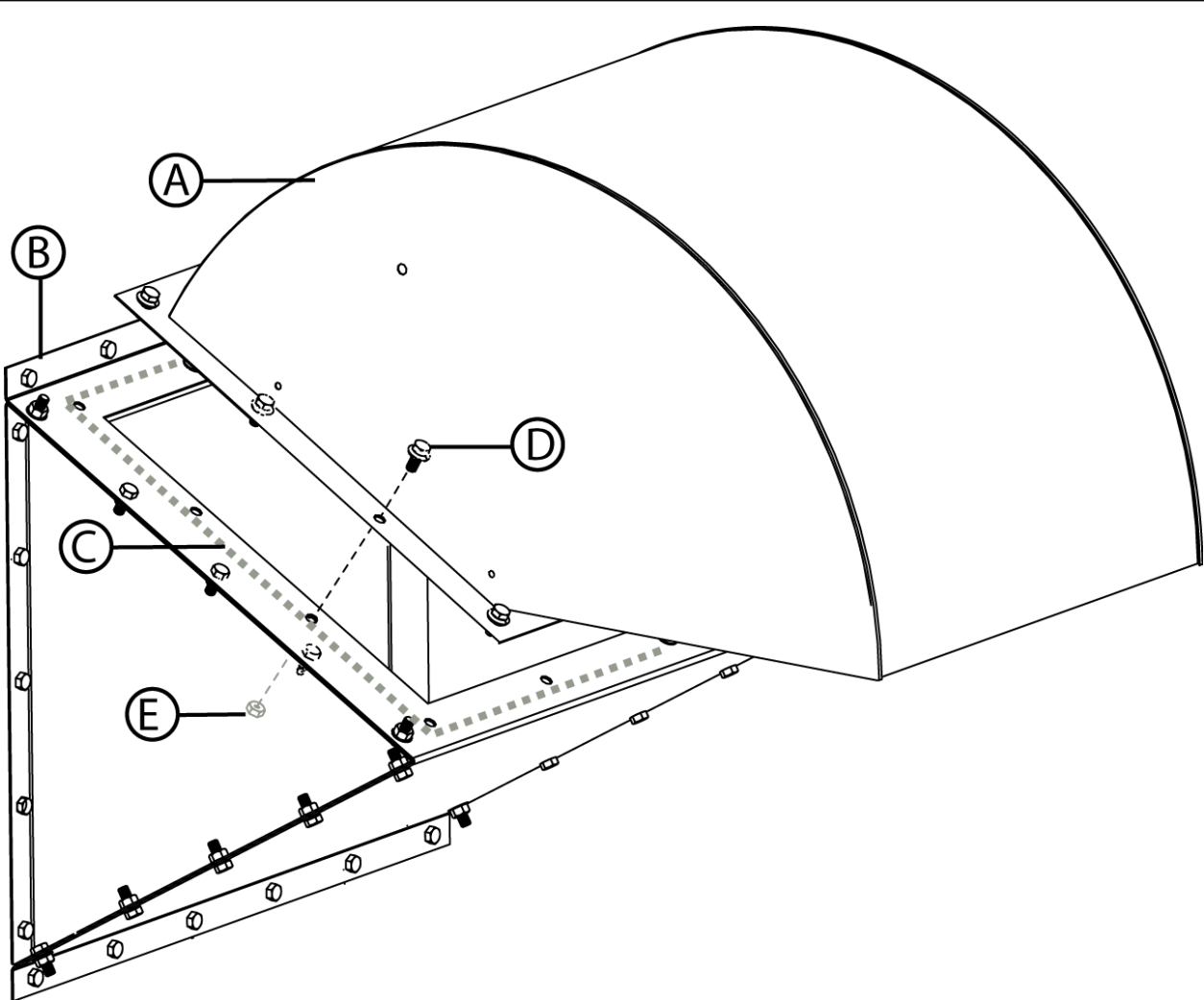
NOTE: Use S-8999 (G) in corners where space is tight.



Installing 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).



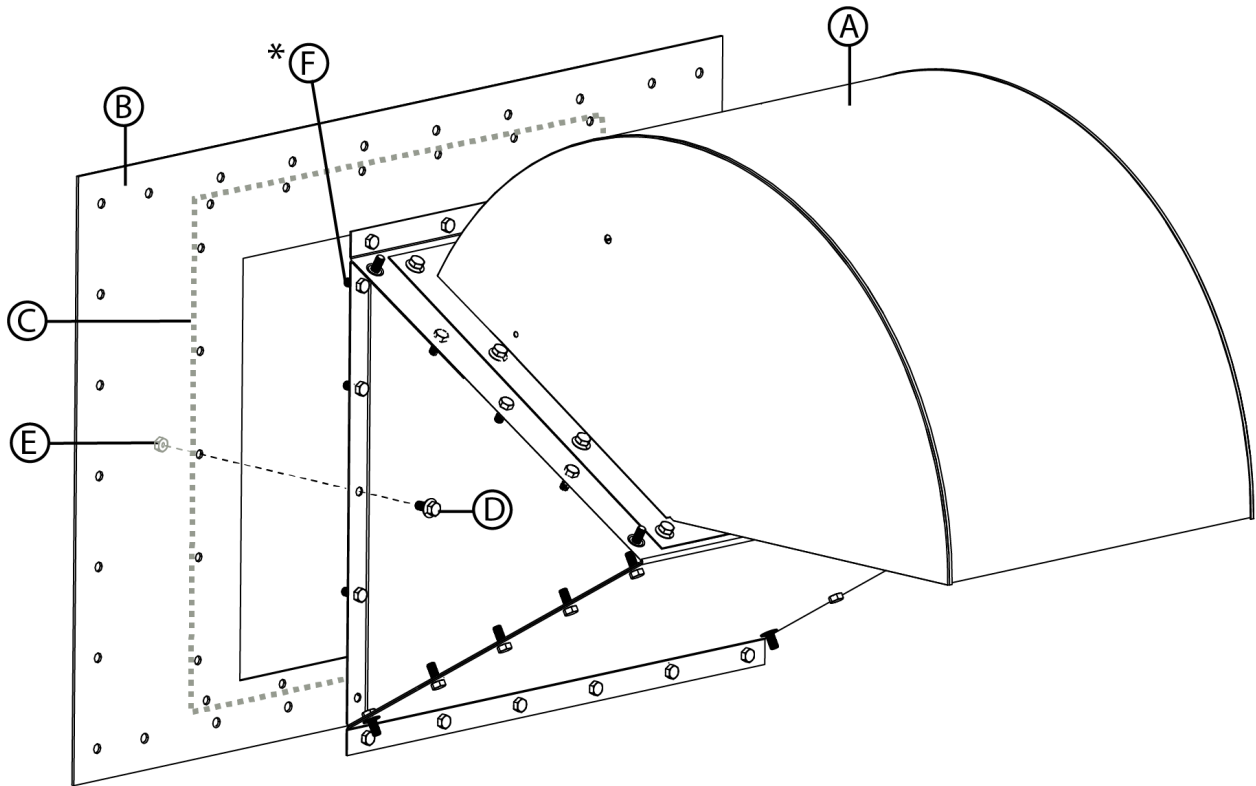
Item	Part Number	Description
A	MIS-6773	Slim Roof Vent Housing
B	TD-101154	Air Box Cover — Angle Plate
C	MIS-6778	Base Gasket indicated by gray dashed line
D	S-10260	BOLT, FLNG 5/16-18 x 1, GR8
E	S-396	5/16"-18 Zinc YDP Grade 2 Hex Nut

Installing Vent Assembly

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).

NOTE: Use S-8999 (F) in corners where space is tight.



Item	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-10260	BOLT, FLNG 5/16-18 x 1, GR8
E	S-396	5/16"-18 Zinc YDP Grade 2 Hex Nut
F*	S-8999*	BOLT, HHCS 5/16-18 X 1/2 ZN GR5 (Use in corners.)

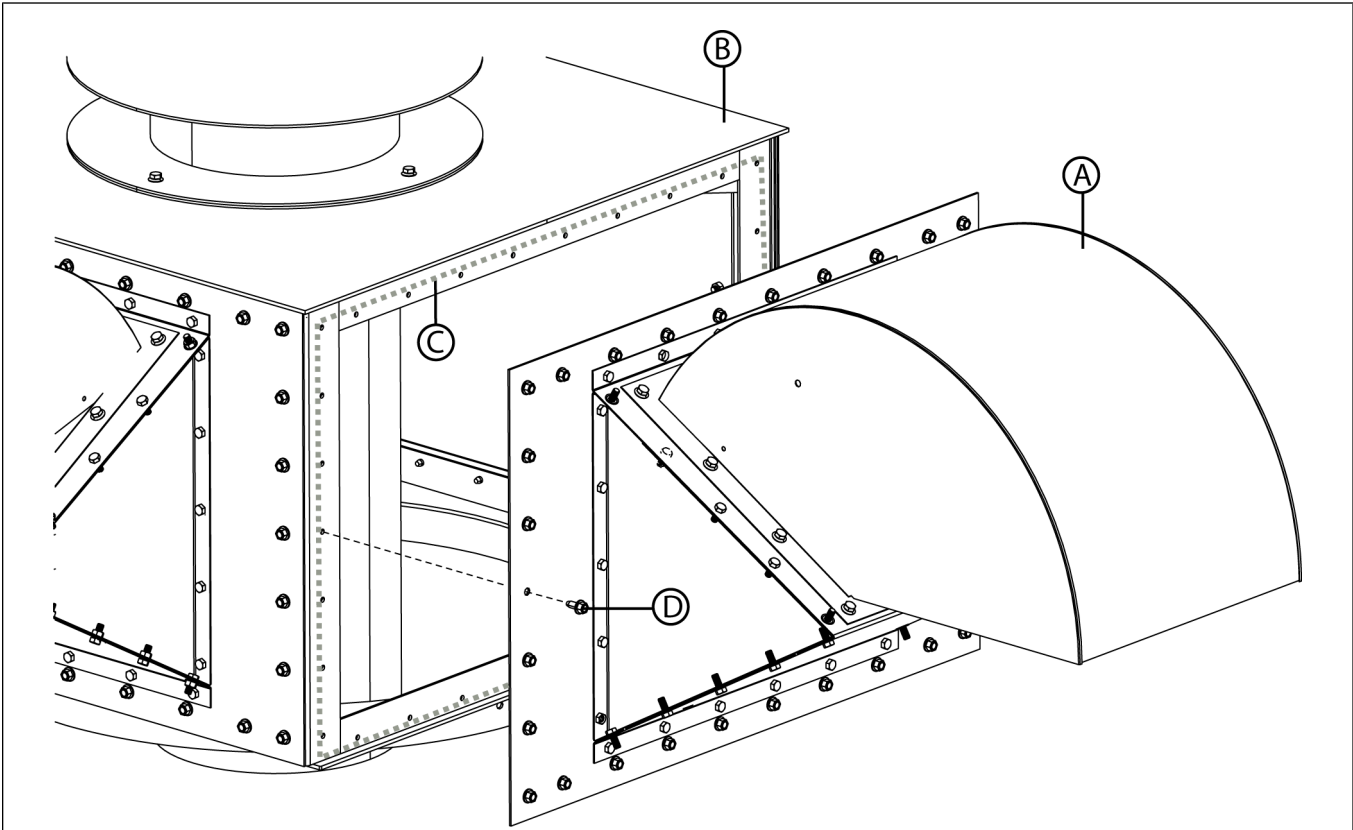
*Use S-8999 in corners.

Installing Side Plate Assembly

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

NOTE: The two vent version (TD-101522) will have two access doors and two vents.

- 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).

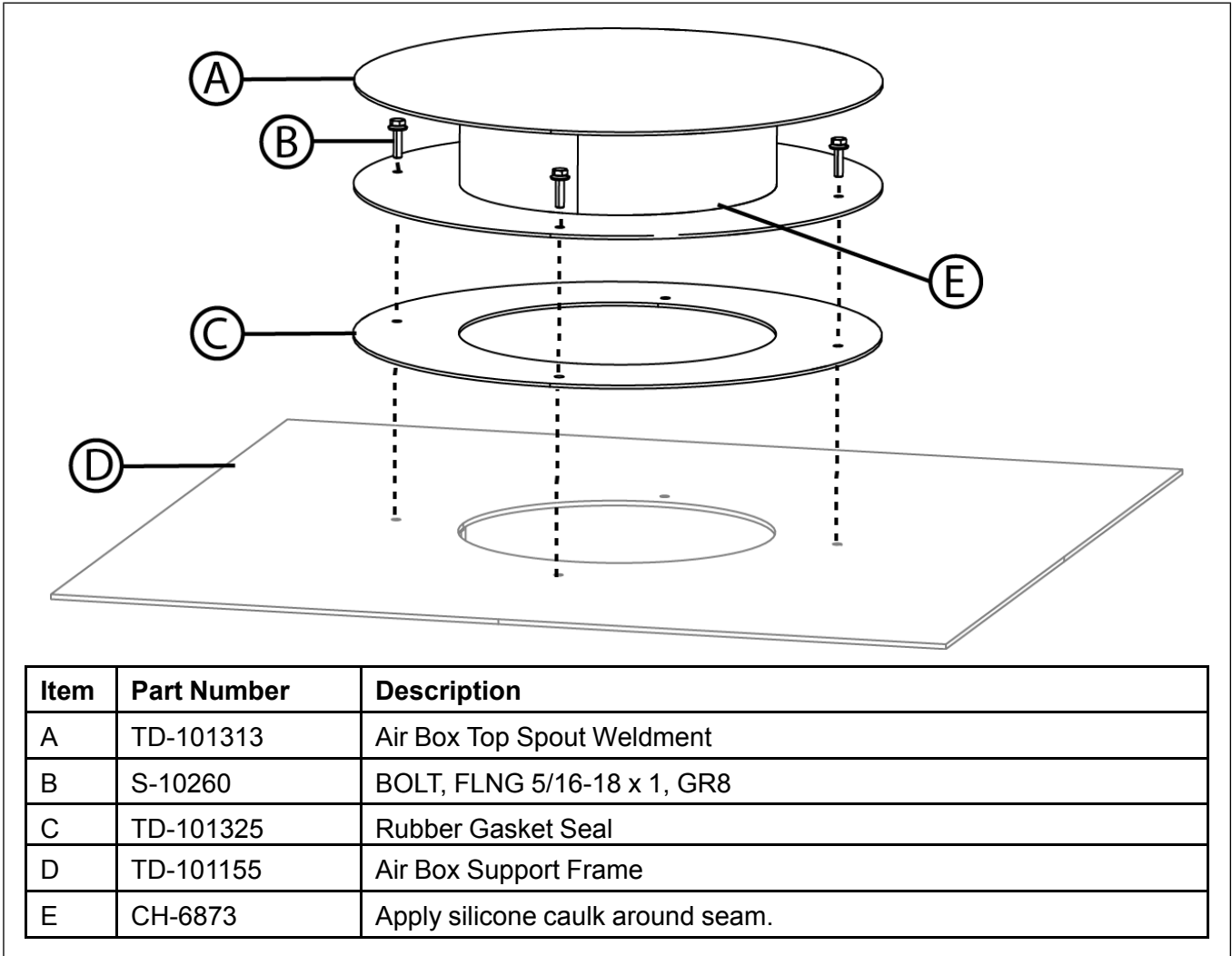


Item	Part Number	Description
A	NA	Side Plate Assembly
B	TD-101155	Air Box Support Frame
C	CH-6873	Silicone caulk area indicated by gray dashed line.
D	S-7221	5/16"-18 X 3/4" Grade 2 Self Tapping Screw

Installing the Top Spout to the 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.

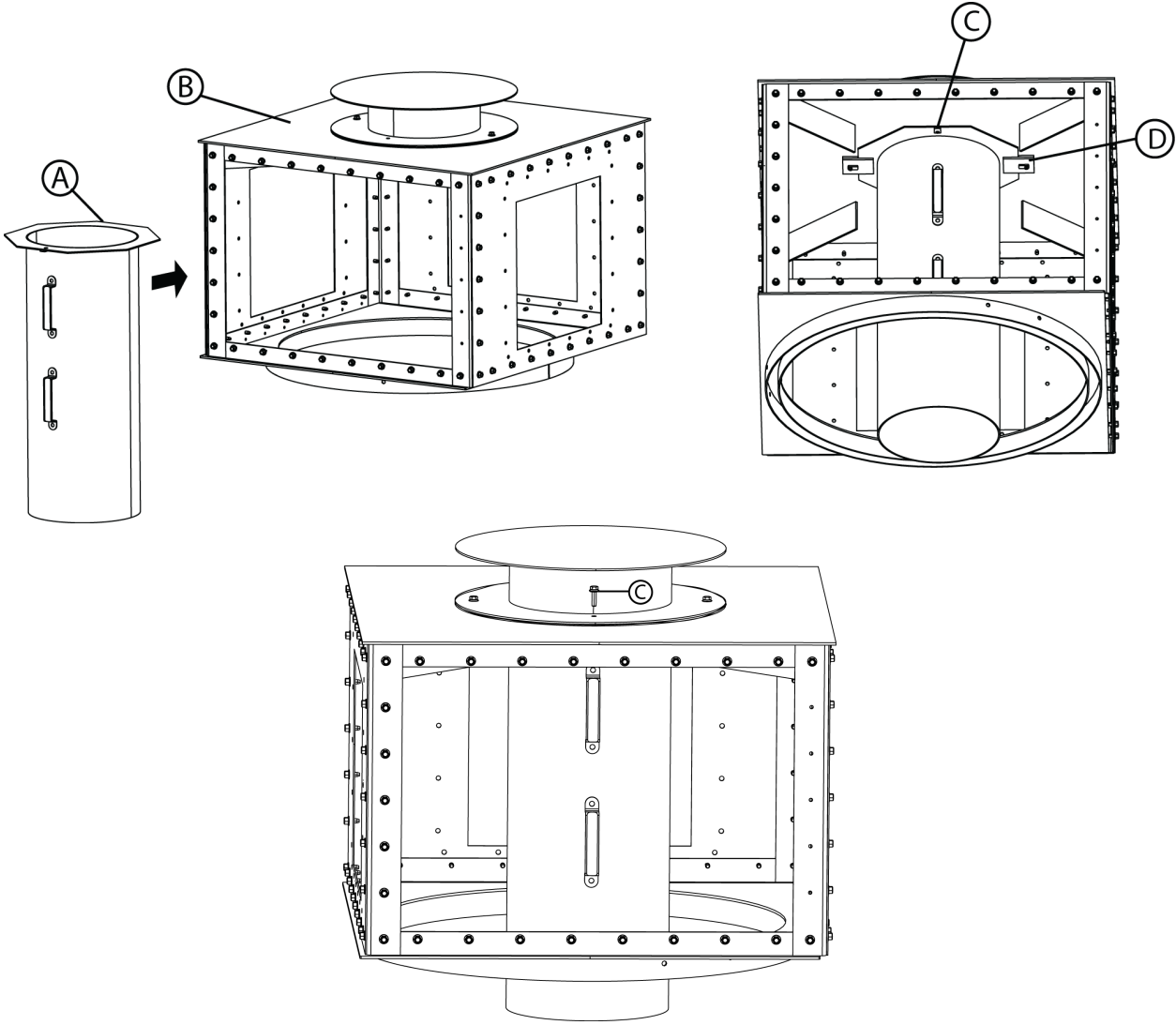
1. Align holes in bottom of top spout (A) with holes in rubber gasket (C) and support frame top (D).
2. Fasten together using only three bolts (B). Do not install the bolt located on the door side.
3. Apply silicone caulk (E) all around seam.



Installing the 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).



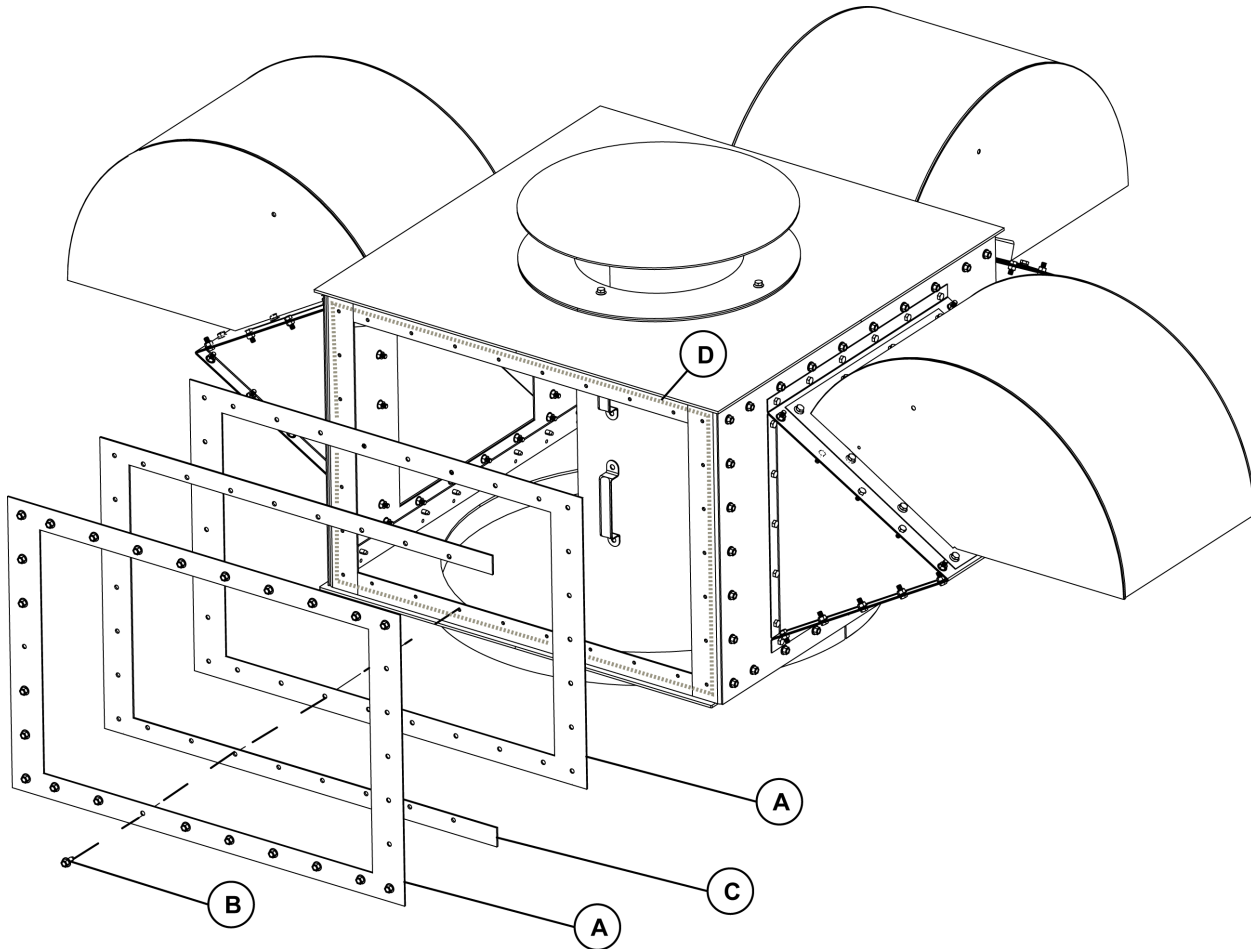
Item	Part Number	Description
A	TD-101310	Air Box Inner Spout Weldment
B	TD-101155	Air Box Cover Support Frame
C	S-7483	BOLT, FLNG 5/16-18 x 1-1/4, GR8
D	NA	Spout Support Plate
E	TD-101313	Air Box Top Spout Weldment

Installing the 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.

NOTE: *The two vent version (TD-101522) will have another door frame on the opposite side instead of a vent.*

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).



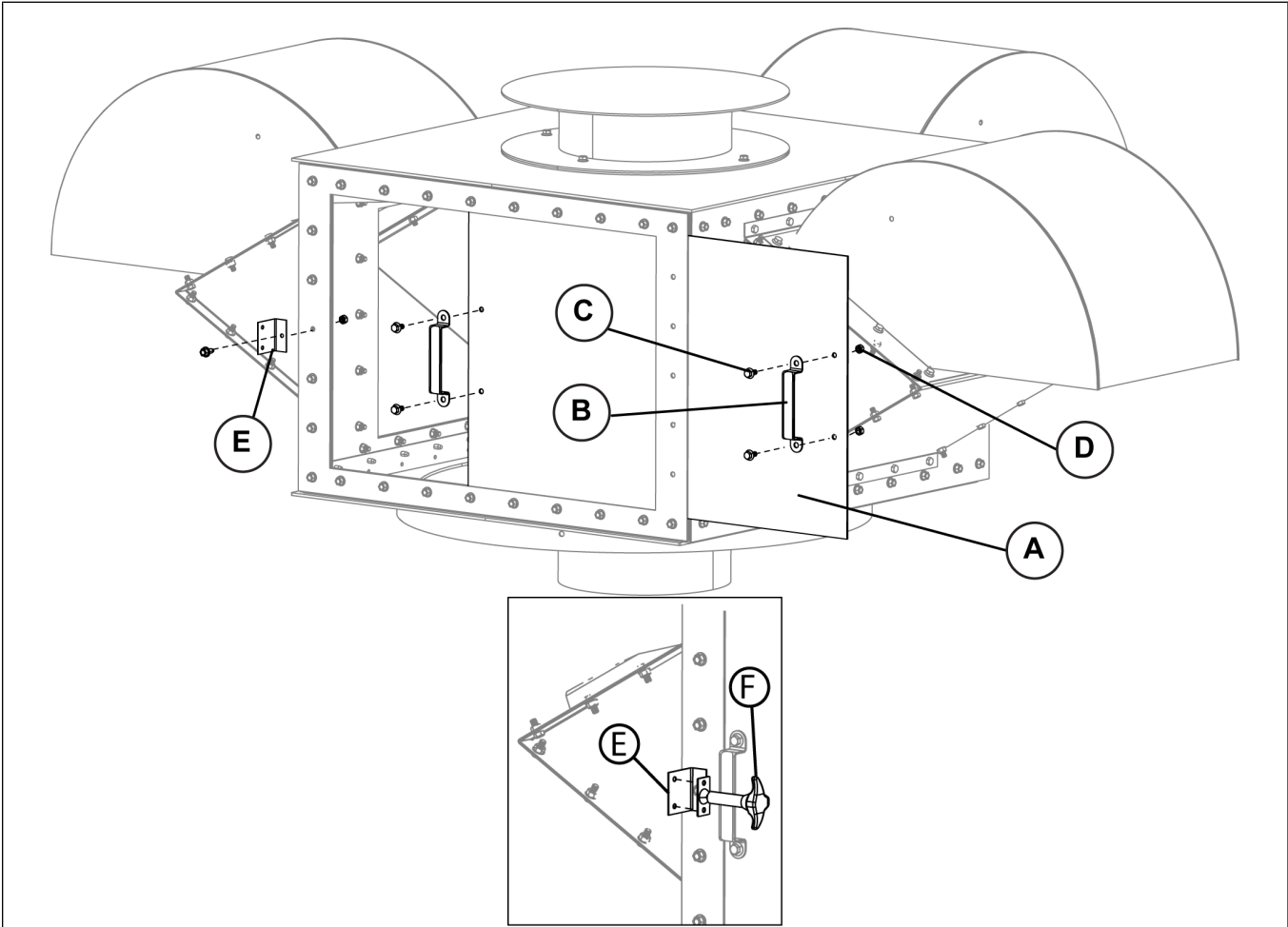
Item	Part Number	Description
A	TD-101318	Air Box Sliding Door Outer Plate
B	S-7221	5/16" x 3/4" Grade 2 Self Tapping Screw
C	TD-101319	Air Box Sliding Door Inner Plate
D	CH-6873	Silicone caulk area indicated by gray dashed line.

Installing the Access Door

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

NOTE: The two vent version (TD-101522) will have another access door on the opposite side instead of a vent.

- 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).



Item	Part Number	Description
A	TD-101320	Air Box Sliding Door
B	PR-331	Handle
C	S-10260	BOLT, FLNG 5/16-18 x 1, GR8
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

Limited Warranty — N.A. Grain Products

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 from the date of shipment (or, if shipped by vessel, 14 months from the date of arrival at the port of discharge). If, in GSI’s sole judgment, a product is found to have a defect in materials and/or workmanship, GSI will, at its own option and expense, repair or replace the product or refund the purchase price. This Limited Warranty is subject to extension and other terms as set forth below.

Warranty Enhancements: The warranty period for the following products is enhanced as shown below and is in lieu of (and not in addition to) the above stated warranty period. (Warranty Period is from date of shipment.)

	Product	Warranty Period
Storage	Grain Bin Structural Design • Sidewall, roof, doors, platforms and walkarounds • Flooring (when installed using GSI specified floor support system for that floor) • Hopper tanks (BFT, GHT, NCHT, and FCHT)	5 Years
Conditioning	Dryer Structural Design – (Tower, Portable and TopDry) • Includes (frame, portable dryer screens, ladders, access doors and platforms)	5 Years
	All other Dryer parts including: • Electrical (controls, sensors, switches and internal wiring)	2 Years
	All Non-PTO Driven Centrifugal and Axial Fans	3 Years
	Bullseye Controllers	2 Years
Material Handling	Bucket Elevators Structural Design	5 Years
	Towers Structural Design	5 Years
	Catwalks Structural Design	5 Years
	Accessories (stairs, ladders and platforms) Structural Design	5 Years

Conditions and Limitations:

THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE LIMITED WARRANTY DESCRIPTION SET FORTH HEREIN; SPECIFICALLY, GSI DISCLAIMS ANY AND ALL OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE IN CONNECTION WITH: (I) ANY 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.

The sole and exclusive remedy for any claimant is set forth in this Limited Warranty and shall not exceed the amount paid for the product purchased. This Warranty only covers the value of the warranted parts and equipment, and does not cover labor charges for removing or installing defective parts, shipping charges with respect to such parts, any applicable sales or other taxes, or any other charges or expenses not specified in this Warranty. GSI shall not be liable for any other direct, indirect, incidental or consequential damages, including, without limitation, loss of anticipated profits or benefits. Expenses incurred by or on behalf of a claimant without prior written authorization from the GSI warranty department shall not be reimbursed. 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. Prior to installation, the end-user bears all responsibility to comply with federal, state and local codes which apply to the location and installation of the products.

This Limited Warranty extends solely to products sold by GSI and does not cover any parts, components or materials used in conjunction with the product, that are not sold by GSI. GSI assumes no responsibility for claims resulting from construction defects, unauthorized modifications, corrosion or other cosmetic issues caused by storage, application or environmental conditions. Modifications to products not specifically delineated in the manual accompanying the product at initial sale will void all warranties. 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.

Notice Procedure:

In order to make a valid warranty claim a written notice of the claim must be submitted, using the RMA form, within 60 days of discovery of a warrantable nonconformance. The RMA form is found on the OneGSI portal.

Service Parts:

GSI warrants, subject to all other conditions described in this Warranty, Service Parts which it manufactures for a period of 12 months from the date of purchase unless specified in Enhancements above.

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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