

18' Tower Dryer Fan Style Catwalk Assembly

Installation Manual

GSI GROUP

PNEG-1874

Date: 05-09-13





Contents

Chapter 1	Introduction	4
Chapter 2	Safety	
	Safety Guidelines	
Chapter 3	Decals	7
Chapter 4	18' Outside Catwalk Installation Instructions	
	Installing Z-Clips (GT1-2036)	10
	Installing Swing Gate Stop (GT1-2045)	11
	Installing Catwalk Support Clip (GT1-2040-BS)	12
	Installing Inner Toe Board (GT1-2035) and Ladder Opening Toe Board (GT4-1465)	13
	Installing Plank (GT1-2033) to Inner Toe Board (GT1-2035)	15
	Installing Plank Support (GT1-2086)	18
	Installing Knee Support (GT1-2039-BS)	19
	Installing Outer Toe Board (GT1-2034) and Catwalk Vertical Support (GT1-2037-BS)	20
	Installing Handrails (GT1-2038-18O)	21
	Installing Safety Gate (GT4-1455)	23
	Installing Ladder Bracket (GT1-2088)	25
	Installing Planks at Jack Pole Locations	26
	Outside Catwalk Walk Surface	28
Chapter 5	18' Inside Catwalk Installation Instructions	30
	Installing Z-Clips (GT1-2036)	30
	Installing Catwalk Support Clip (GT1-2040-BS)	31
	Installing Outer Toe Board (GT1-2062)	32
	Installing Planks (GT1-2033) to Outer Toe Board (GT1-2062)	33
	Installing Knee Support (GT1-2039-BS)	35
	Installing Inner Toe Board (GT1-2061) and Catwalk Vertical Support (GT1-2037-BS)	36
	Installing Handrail (GT1-2038-18I)	
	Inside Catwalk Walk Surface	38
Chapter 6	18' Offset and Roof Hatch Platform Installation Instructions	40
	Installing Z-Clips (GT1-2036)	
	Installing Swing Gate Stop (GT1-2045)	
	Installing Catwalk Support Clip (GT1-2040-BS)	43
	Installing Inner Toe Board (GT1-2035)	
	Installing Plank (GT1-2033) to Inner Toe Board (GT1-2035)	
	Installing Plank Support (GT1-2086)	
	Installing Knee Support (GT1-2039-BS)	
	Installing Outer Toe Board (GT1-2034) and Catwalk Vertical Support (GT1-2037-BS)	
	Installing Long Handrails (GT1-2038-18O)	53
	Installing Safety Gate (GT4-1455) with Plank Support (GT1-2086)	56
Chapter 7	Parts List	
	18' Outside Fan Style Catwalk (GT4-1039-18F)	
	18' Inside Fan Style Catwalk (GT4-1043-18F)	
	18' Offset Fan Style Platform (GT4-1047-18F)	
	18' Roof Hatch Fan Style Platform (GT4-1051-18F)	72
Chapter 8	Warranty	77

1. Introduction

READ THIS MANUAL carefully to learn how to properly use and install equipment. Failure to do so could result in personal injury or equipment damage.

INSPECT the shipment immediately upon arrival. The customer is responsible for ensuring that all quantities are correct. The customer should report and note any damage or shortage on the bill of lading to justify their claim to the transport company.

THIS MANUAL SHOULD BE CONSIDERED a permanent part of your equipment and should be easily accessible when needed.

This warranty provides you the assurance that the company will back its products when defects appear within the warranty period. In some circumstances, the company also provides field improvements, often without charge to the customer, even if the product is out of warranty. Should the equipment be abused, or modified to change its performance beyond the factory specifications, the warranty will become void and field improvements may be denied.

Safety Guidelines

This manual contains information that is important for you, the owner/operator, to know and understand. This information relates to protecting *personal safety* and *preventing equipment problems*. It is the responsibility of the owner/operator to inform anyone operating or working in the area of this equipment of these safety guidelines. To help you recognize this information, we use the symbols that are defined below. Please read the manual and pay attention to these sections. Failure to read this manual and its safety instructions is a misuse of the equipment and may lead to serious injury or death.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.



WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.



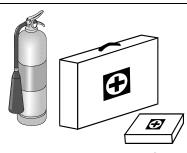
NOTICE is used to address practices not related to personal injury.

Prepare for Emergencies

Be prepared if fire starts.

Keep a first aid kit and fire extinguisher handy.

Keep emergency numbers for doctors, ambulance service, hospital, and fire department near your telephone.



Keep Emergency Equipment Quickly Accessible

Wear Protective Clothing

Wear close-fitting clothing and safety equipment appropriate to the job.

Eye Protection



Remove all jewelry.

Tie long hair up and back.

Gloves



Wear safety glasses at all times to protect eyes from debris.

Wear gloves to protect your hands from sharp edges on plastic or steel parts.

Steel-Toed Boots



Wear steel-toed boots to help protect your feet from falling debris. Tuck in any loose or dangling shoestrings.

atially



A respirator may be needed to prevent breathing potentially toxic fumes and dust.

Wear a hard hat to help protect your head.

Hard Hat

Respirator



Wear appropriate fall protection equipment when working at elevations greater than six feet (6').

Fall Protection



Safety decals should be read and understood by all people in and around the dryer area. If the following safety decals are not displayed on your dryer or if they are damaged, contact the GSI for replacement:

GSI Decals

1004 E. Illinois St. Assumption, IL. 62510 Phone: 1-217-226-4421



> 1000 lbs (4.50 kN)

DO NOT EXCEED PLATFORM LOAD LIMIT

Load limit = 1000 LBS. (4.50 kN)

Excessive load will damage platform and cause platform to fall.

Injury or death will result.

DC-2188

DC-2188

Background: White

Colors: Black, Safety Red (PMS 485C), Safety Yellow (PMS 109C)

Size: 3.0" x 7.0"

NOTES



18' Outside Fan Style Catwalk Assembly Instructions (GT4-1039-18F)

Installing Z-Clips (GT1-2036)

1. Bolt Z-clip (GT1-2036) to all vertical channels (GT1-0001). The Z-clip can be installed on each vertical channel as wall sheets are installed using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 4A and Figure 4B.)

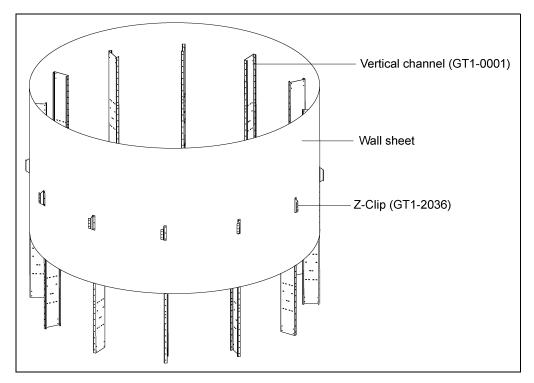


Figure 4A

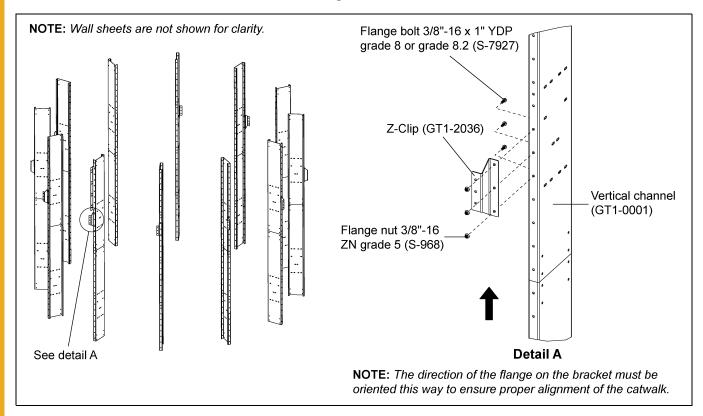


Figure 4B

Installing Swing Gate Stop (GT1-2045)

1. Identify the ladder opening vertical channel and install the swing gate stop (GT1-2045) to the vertical channel (GT1-0001) as wall sheets are installed using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 4C and Figure 4D.)

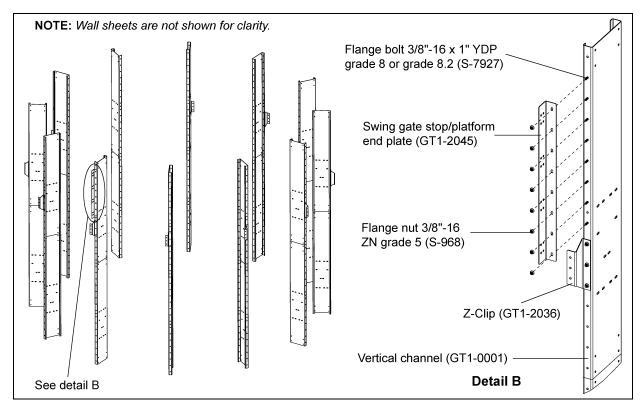


Figure 4C

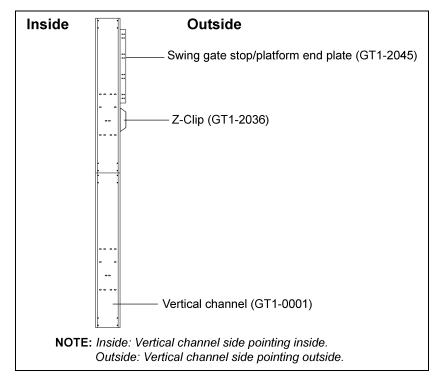


Figure 4D

Installing Catwalk Support Clip (GT1-2040-BS)

- 1. Install catwalk support clips (GT1-2040-BS) to all vertical channels (GT1-0001). Support clip can be installed on each vertical channel as the wall sheets are installed using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 4E.)
- 2. The distance between the Z-clip and support clip for 18' outside catwalk is 31-1/2". (See Figure 4F.)

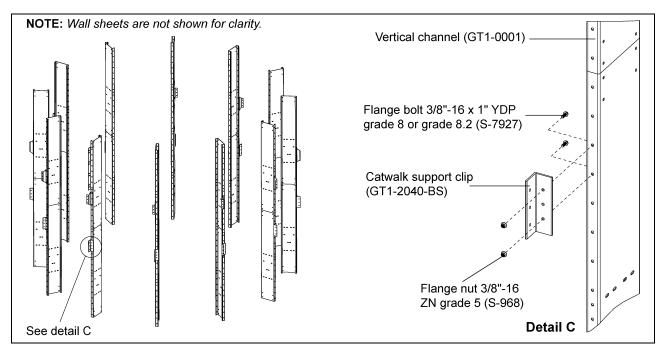


Figure 4E

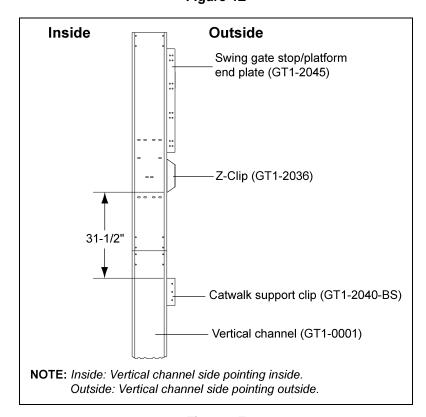


Figure 4F

Installing Inner Toe Board (GT1-2035) and Ladder Opening Toe Board (GT4-1465)

- 1. Install the inner toe board (GT1-2035) to the Z-clips (GT1-2036). All toe boards should be installed between the Z-clips using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 4G.)
- 2. At the ladder location, install the ladder opening toe board (GT4-1465) to Z-clips using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968) in such a way that toe board opening falls on the ladder path. (See Figure 4G below and Figure 4H on Page 14.)

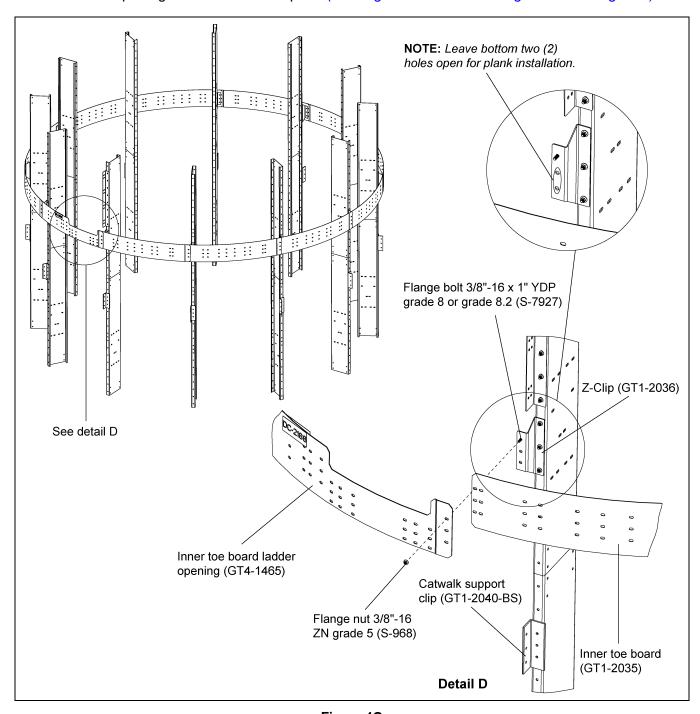


Figure 4G

Installing Inner Toe Board (GT1-2035) and Ladder Opening Toe Board (GT4-1465) (Continued)

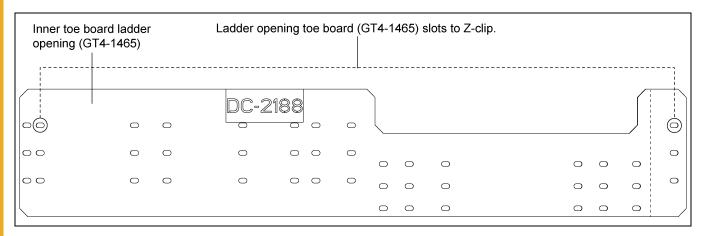


Figure 4H 18' Ladder Opening Toe Board (GT4-1465)

3. Inner toe board is arranged with overlap slots on each side. Install 18' inner toe boards (GT1-2035) to corresponding slots as shown in *Figure 4I*.

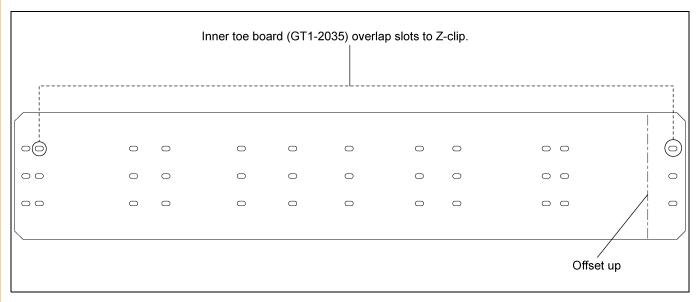


Figure 4I 18' Inner Toe Board (GT1-2035)

Installing Plank (GT1-2033) to Inner Toe Board (GT1-2035)

- 1. Install planks around the dryer on inner toe board starting from ladder opening toe board (GT4-1465) as shown by arrow in the *Figure 4J*.
- 2. Planks (GT1-2033) are installed to bottom two (2) holes of the inner toe board (GT1-2035) using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 4J.)

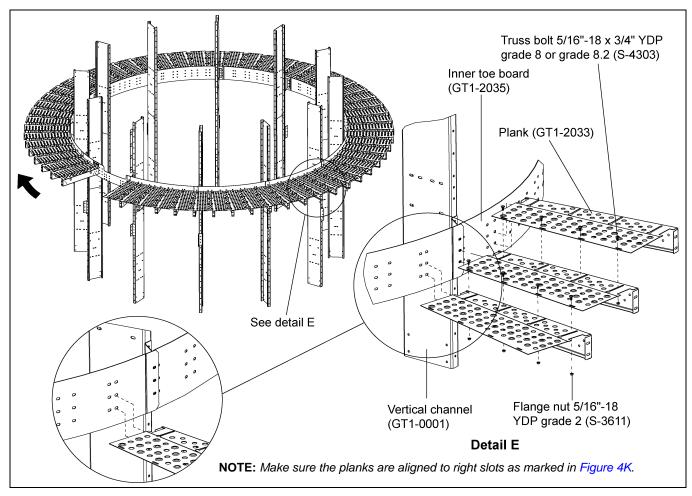


Figure 4J

3. Inner toe board (GT1-2035) is arranged with many slots to install plank. Install planks to corresponding slots as shown in *Figure 4K*.

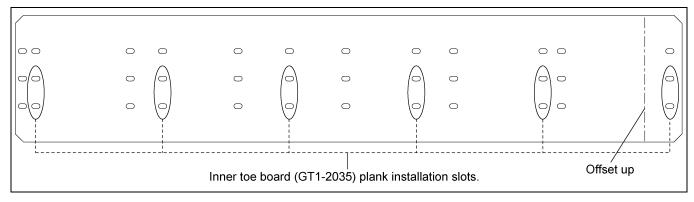


Figure 4K 18' Inner Toe Board (GT1-2035)

Installing Planks (GT1-2033) to Inner Toe Board (GT1-2035) (Continued)

4. Install all the planks (GT1-2033) continuously around the dryer except at the jack pole locations. (See Figure 4L and Figure 4M.)



Figure 4L

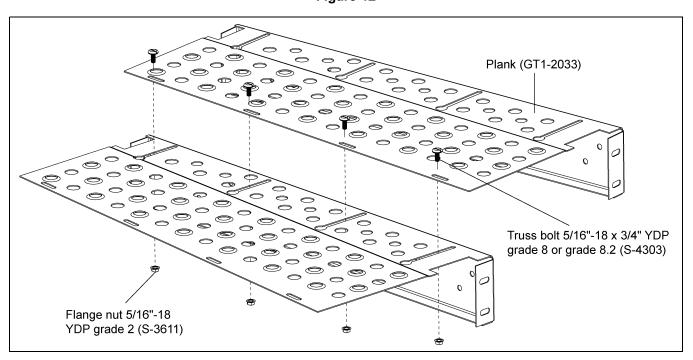


Figure 4M

Installing Planks (GT1-2033) to Inner Toe Board (GT1-2035) (Continued)

5. Each plank should be overlapped at the edges and bolted with 5/16"-18 x 3/4" YDP grade 8 or grade 8.2 bolts (S-4303) and 5/16"-18 YDP grade 2 nuts (S-3611). (See Figure 4N.)

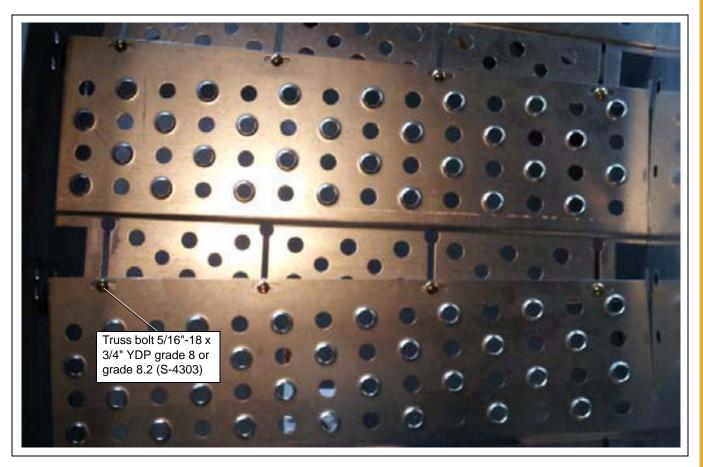


Figure 4N

Installing Plank Support (GT1-2086)

1. Once the planks are installed, install the plank support (GT1-2086) to the last plank (GT1-2033) and toe board (GT4-1465) using 5/16"-18 x 3/4" YPD grade 8 and grade 8.2 bolts (S-4303), 5/16"-18 YPD grade 2 nuts (S-3611) and flange bolts 3/8"-16 x 1" YDP grade 8 or grade 8.2 (S-7927). (See Figure 40.)

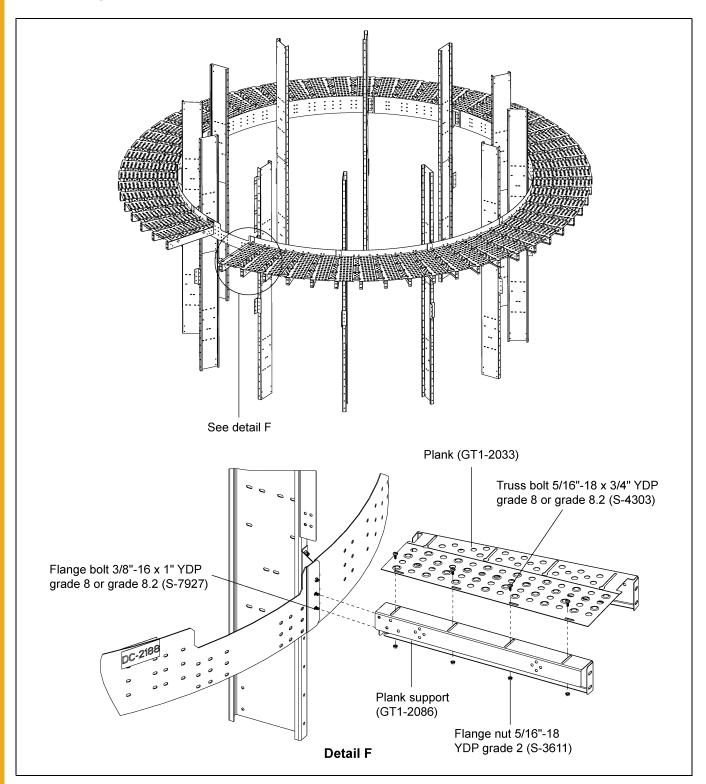


Figure 40

Installing Knee Support (GT1-2039-BS)

1. Install the knee support (GT1-2039-BS) around the dryer between the catwalk support clips (GT1-2040-BS) and planks (GT1-2033) using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 4P and Figure 4Q.)

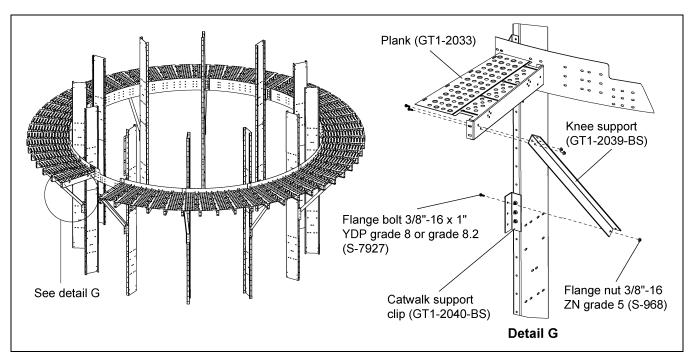


Figure 4P

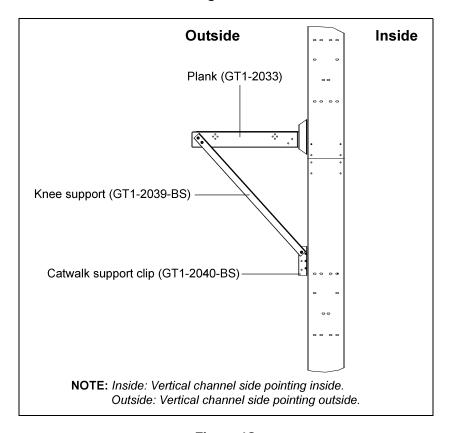


Figure 4Q

Installing Outer Toe Board (GT1-2034) and Catwalk Vertical Support (GT1-2037-BS)

- 1. Install all the outer toe boards (GT1-2034) to the planks (GT1-2033). (See Figure 4R.)
- 2. When installing the outer toe board with planks, install the catwalk vertical support (GT1-2037-BS) simultaneously at proper locations using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 4R.)

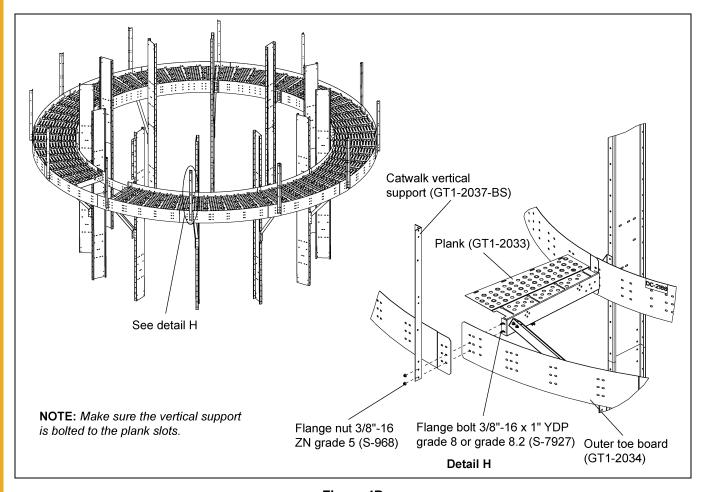


Figure 4R

3. Outer toe board (GT1-2034) is aligned and attached to the planks with the corresponding slots as shown in *Figure 4S*.

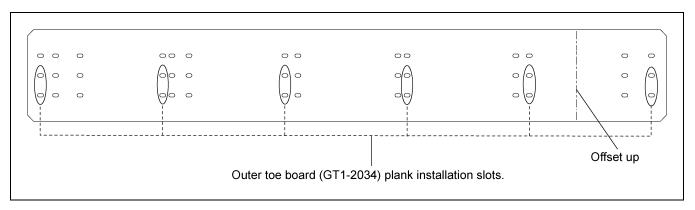


Figure 4S 18' Outer Toe Board (GT1-2034)

Installing Handrails (GT1-2038-180)

1. Install the handrail (GT1-2038-18O) to the catwalk vertical support (GT1-2037-BS) using 5/16"-18 ZN U-bolts (S-10171) and 5/16"-18 YDP grade 2 nuts (S-3611) to tighten the handrail with vertical post. (See Figure 4T.) (See Page 22.)

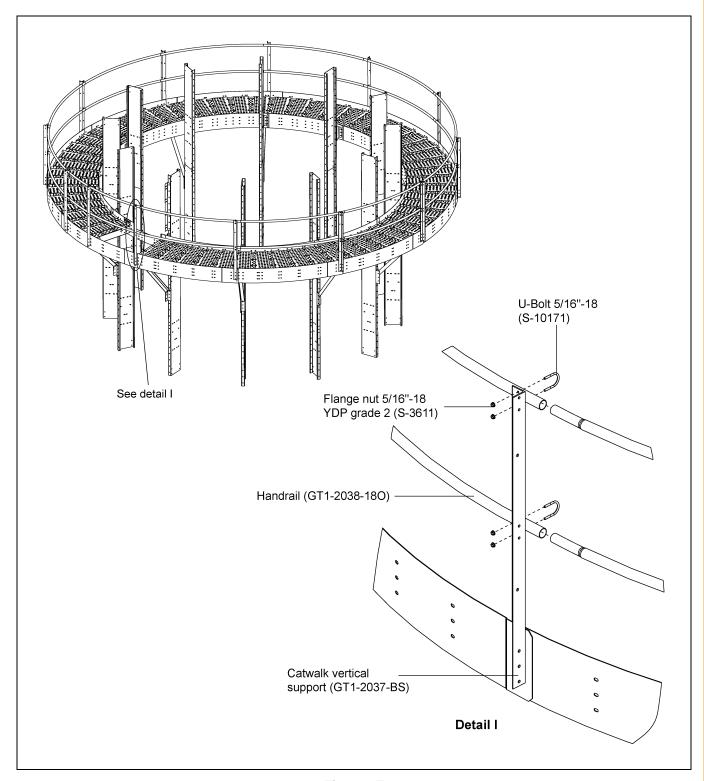


Figure 4T

Installing Handrails (GT1-2038-180) (Continued)



Figure 4U

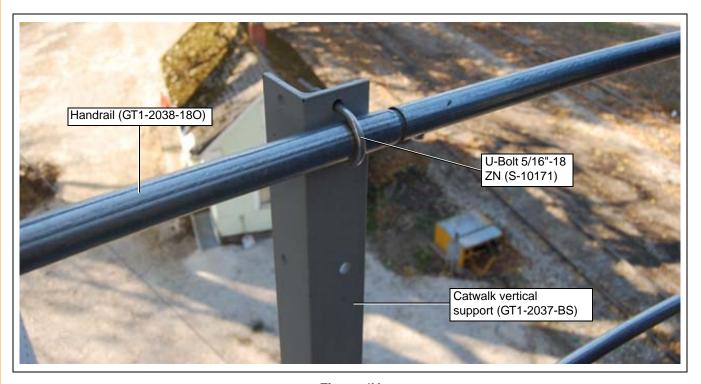


Figure 4V

Installing Safety Gate (GT4-1455)

- 1. Install the swing gate support (GT1-2087) with the plank support (GT1-2086) using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968). (See detail J in *Figure 4W*.)
- 2. Install two (2) catwalk handrails (GT1-0920) between the swing gate support (GT1-2087) and the catwalk vertical support (GT1-2037-BS) using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968). (See detail J in *Figure 4W*.)
- 3. On the other side, install the swing gate support (GT1-2087) to the plank (GT1-2033) using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968). (See detail K in *Figure 4W*.)
- 4. Install two (2) catwalk handrails (GT1-0920) between the swing gate support (GT1-2087) and the catwalk vertical support (GT1-2037-BS) using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968). (See detail K in *Figure 4W*.)

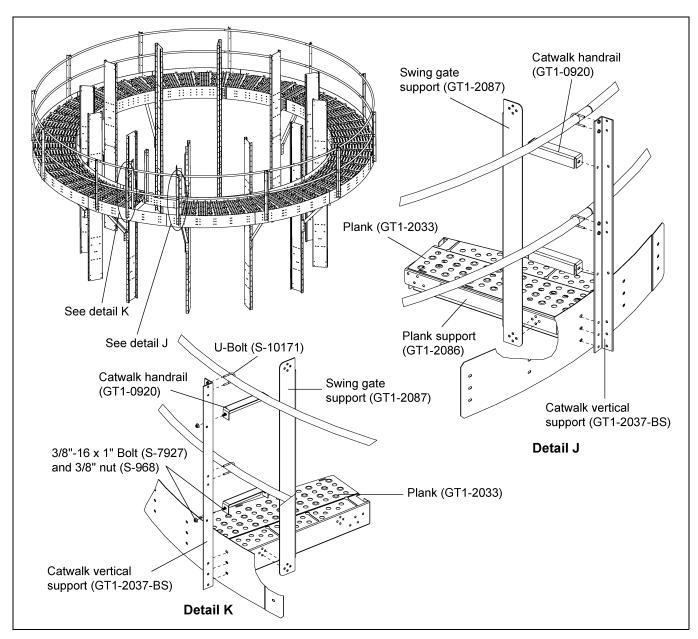


Figure 4W

Installing Safety Gate (GT4-1455) (Continued)

- 5. Install the ladder safety gate assembly (GT4-1455) to the swing gate support (GT1-2087) using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968). (See detail L in *Figure 4X*.)
- 6. Install the ladder safety gate (GT4-1455) to the swing gate support (GT1-2087) and attach the stop plate (GT1-2091) to the ladder opening toe board (GT4-1465) and the plank (GT1-2033) using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968). (See detail M in *Figure 4X*.) The distance between the plank and handrail is 42".

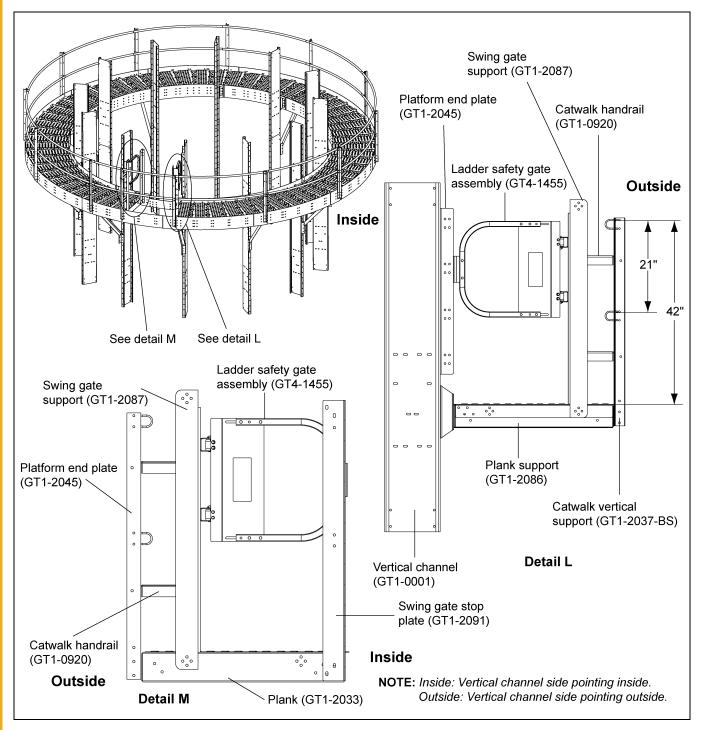


Figure 4X

Installing Ladder Bracket (GT1-2088)

1. Install the ladder bracket (GT1-2088) to the ladder opening toe board (GT4-1465) using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 4Y.)

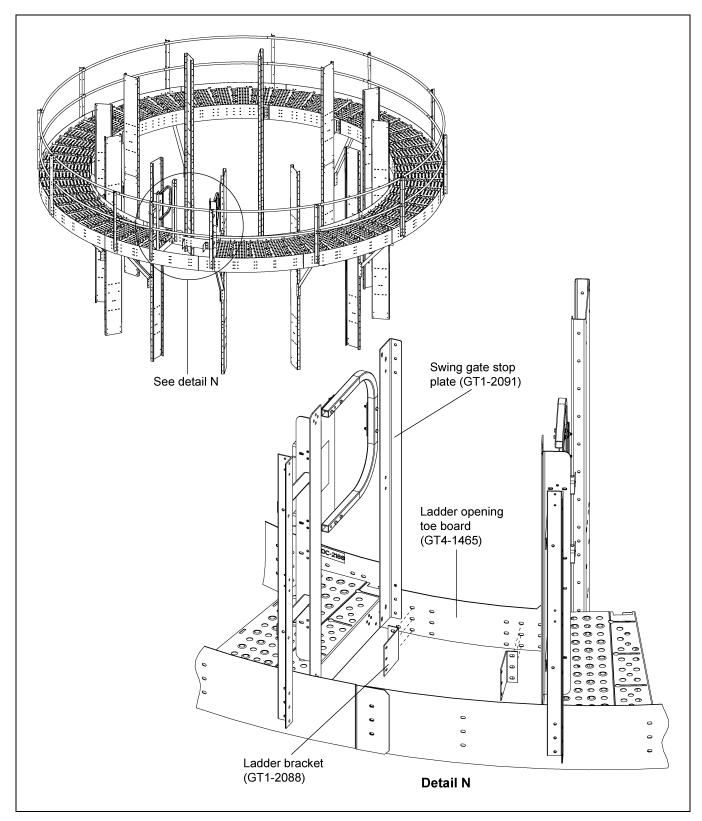


Figure 4Y

Installing Planks at Jack Pole Locations

Once catwalk is lifted above the jack poles, install the planks at jack pole locations from top using 5/16"-18 x 3/4" YPD grade 8 or grade 8.2 bolts (S-4303) and retainer nuts (090-1709-6). (See Figure 4Z.)



Figure 4Z

- 1. Insert the retainer nut (090-1709-6) to the rounded edge of the plank slot and slide it to the proper position as shown in the detail O of *Figure 4AA*.
- 2. Place the following plank over the installed plank and bolt to the retainer nut (090-1709-6) using 5/16"-18 x 3/4" bolt (S-4303) as shown in the detail P of *Figure 4AA*.

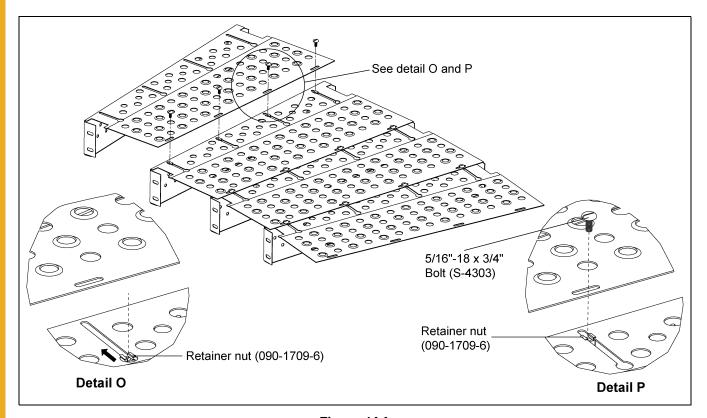


Figure 4AA

Installing Planks at Jack Pole Locations (Continued)

- 3. Install the holding plate (GT1-2144) (pre-assembled with two (2) extruded nuts (S-10175)) to the proper slots in the toe board and hand tight using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolt (S-7927) and 3/8"-16 ZN grade 5 nut (S-968). (See Figure 4AB.)
- 4. Now adjust the plank to align with the slot and bolt from outside the toe board. (See Figure 4AB.)

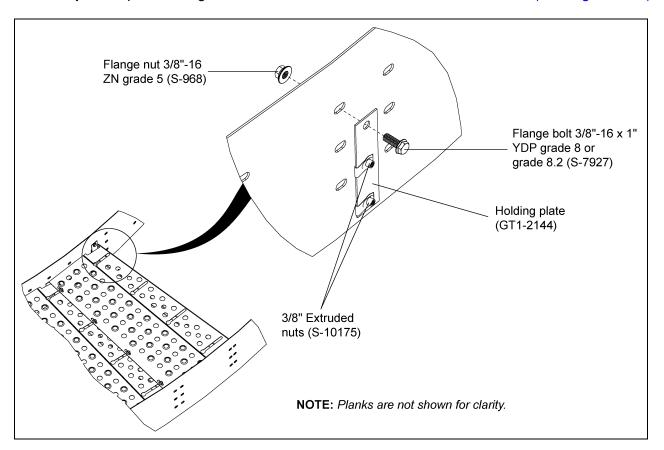


Figure 4AB

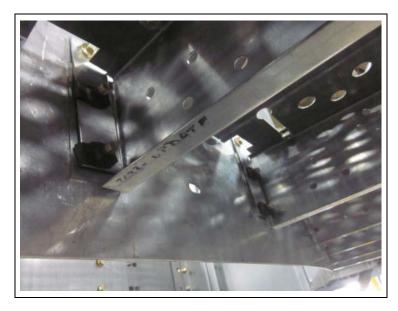


Figure 4AC

Outside Catwalk Walk Surface

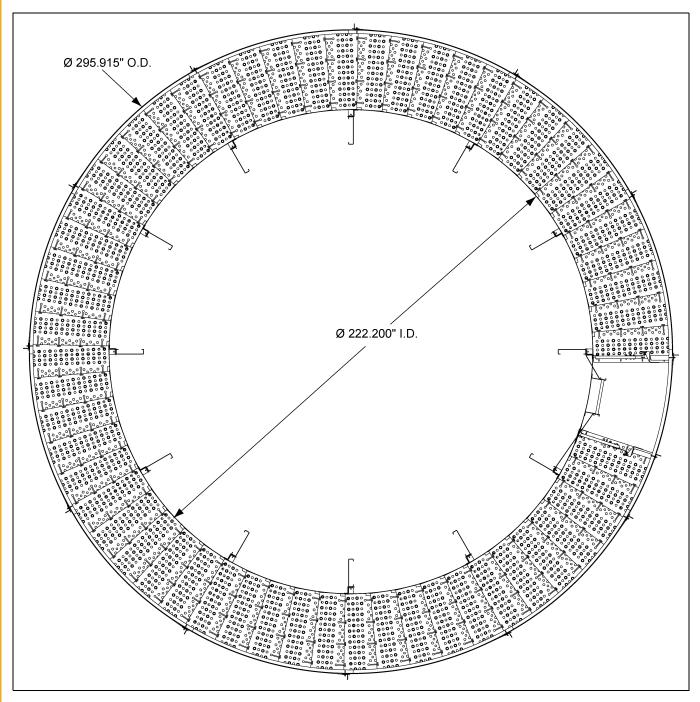


Figure 4AD



18' Inside Fan Style Catwalk Assembly Instructions (GT4-1043-18F)

Installing Z-Clips (GT1-2036)

1. Bolt Z-clips (GT1-2036) to all vertical channels (GT1-0001). The Z-clip can be installed on each vertical channel as inner wall sheets are installed using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 5A.)

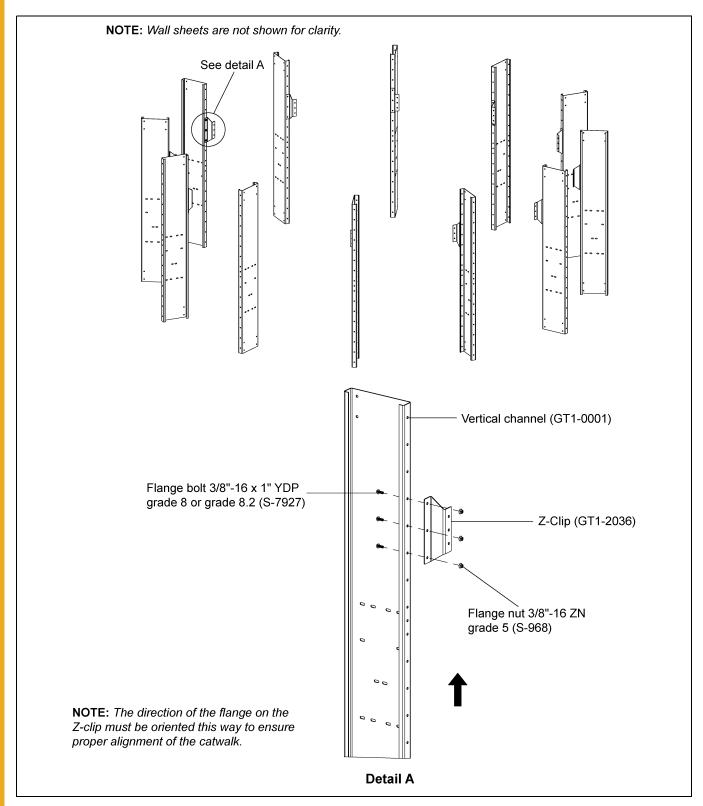


Figure 5A

Installing Catwalk Support Clip (GT1-2040-BS)

- 1. Install catwalk support clips (GT1-2040-BS) to vertical channels (GT1-0001). Support clip can be installed on each vertical channel as the inner wall sheets are installed using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 5B.)
- 2. The distance between the Z-clip and support clip for 18' inside catwalk is 31-1/2". (See Figure 5C.)

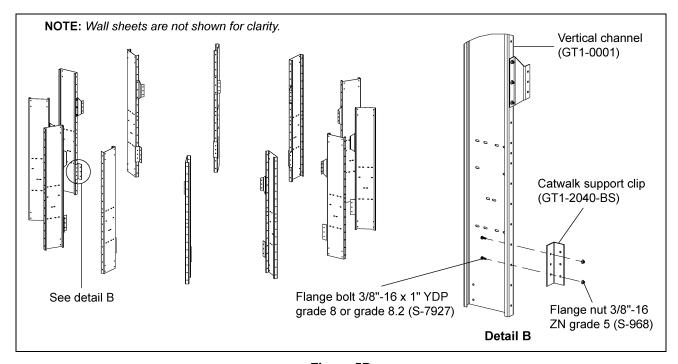


Figure 5B

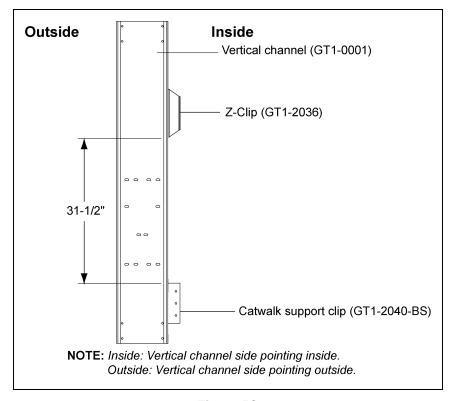


Figure 5C

Installing Outer Toe Board (GT1-2062)

1. Install the outer toe board (GT1-2062) to the Z-clips (GT1-2036). All toe boards should be installed between the Z-clips using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 5D.)

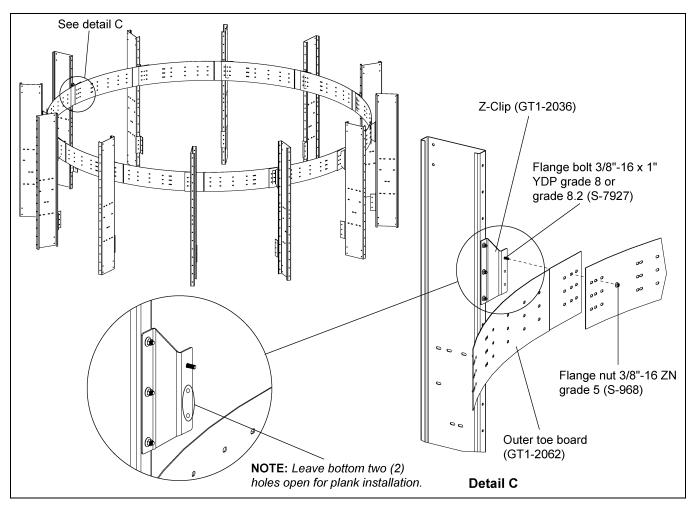


Figure 5D

2. Outer toe board is arranged with overlap slots on each side. Install 18' outer toe boards (GT1-2062) to corresponding slots as shown in *Figure 5E*.

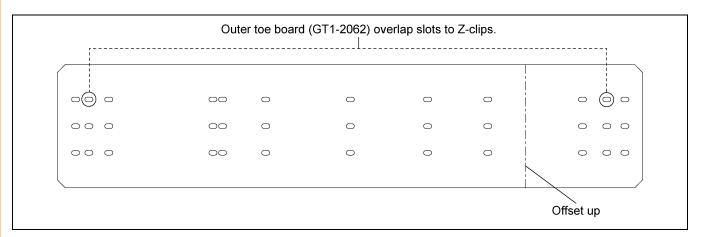


Figure 5E 18' Outer Toe Board (GT1-2062)

Installing Planks (GT1-2033) to Outer Toe Board (GT1-2062)

1. Install the planks (GT1-2033) to the outer toe board (GT1-2062) using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 5F.)

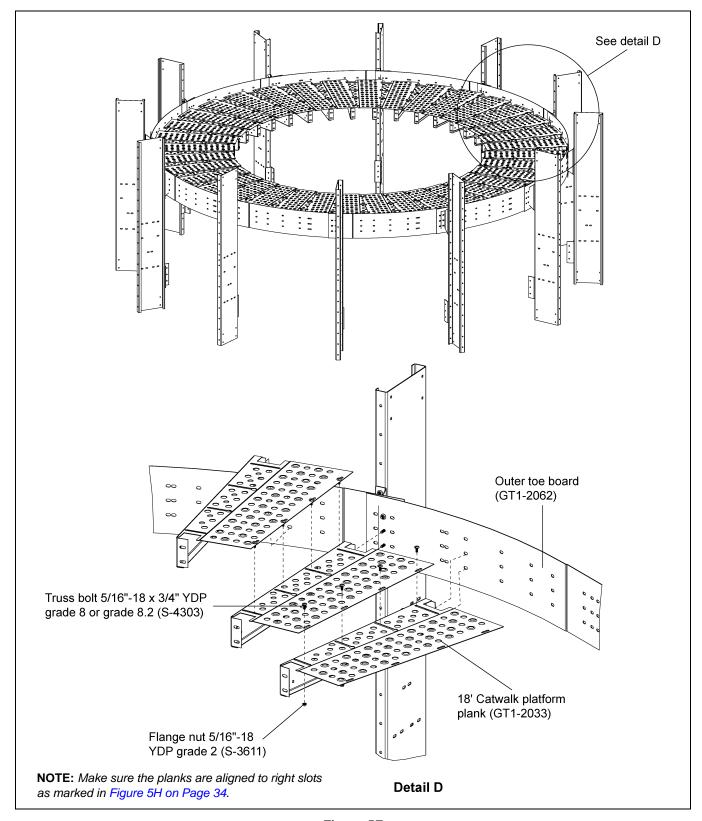


Figure 5F

Installing Planks (GT1-2033) to Outer Toe Board (GT1-2062) (Continued)

2. Install all the planks (GT1-2033) continuously around the dryer. (See Figure 5G.)

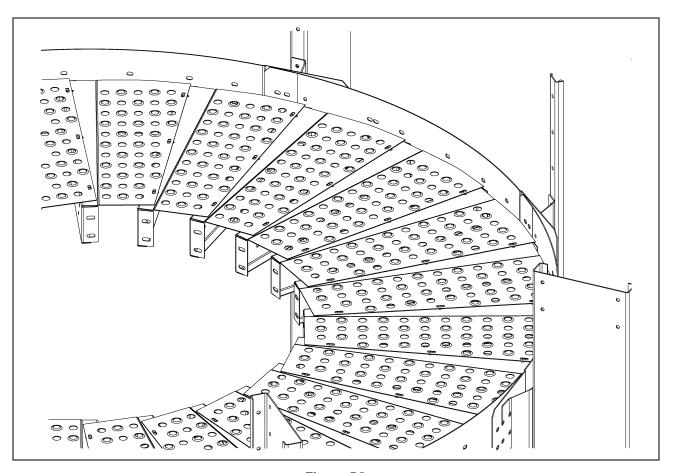


Figure 5G

3. Outer toe board (GT1-2062) is arranged with many slots to install plank. Install planks to corresponding slots as shown in *Figure 5H*.

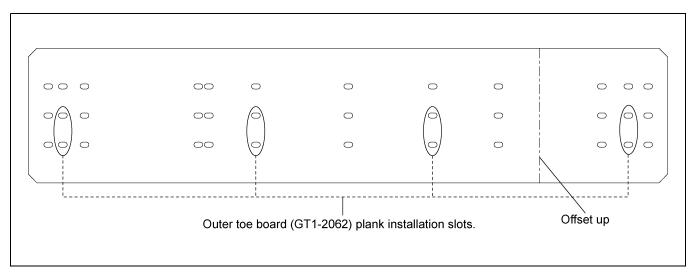


Figure 5H 18' Outer Toe Board (GT1-2062)

Installing Knee Support (GT1-2039-BS)

1. Install the knee support (GT1-2039-BS) around the dryer between the catwalk support clips (GT1-2040-BS) and planks (GT1-2033) using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 5I.)

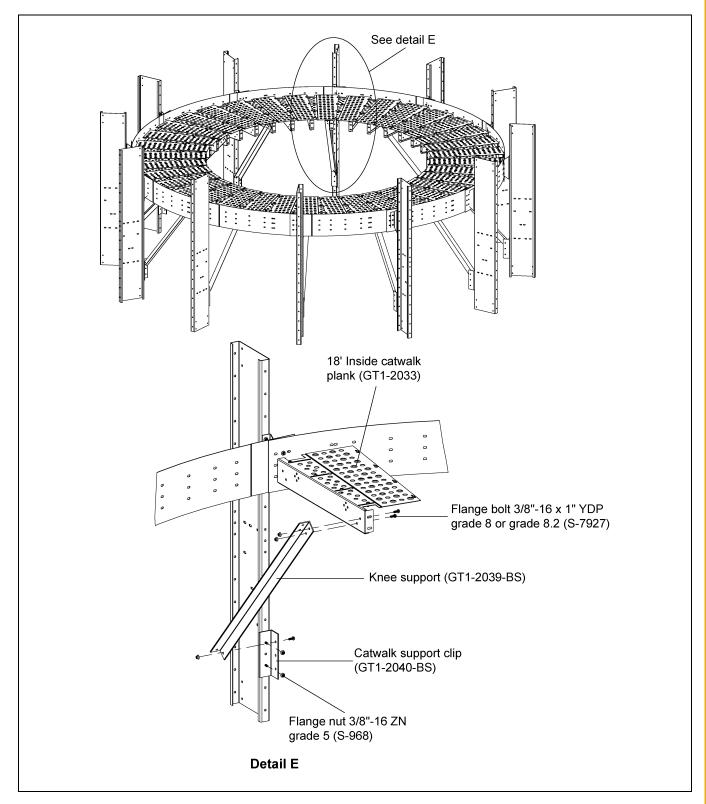


Figure 51

Installing Inner Toe Board (GT1-2061) and Catwalk Vertical Support (GT1-2037-BS)

- 1. Install all the inner toe boards (GT1-2061) to the planks (GT1-2033). (See Figure 5J.)
- 2. When installing the inner toe board with planks, install the catwalk vertical support (GT1-2037-BS) simultaneously at proper locations using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 5J.)

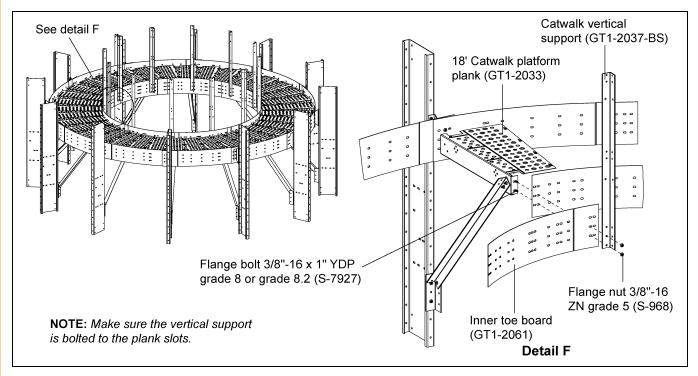


Figure 5J

3. Inner toe board is arranged with overlap slots on each side and plank installation slots. Install 18' inner toe boards (GT1-2061) to corresponding overlap and plank installation slots as shown in *Figure 5K*.

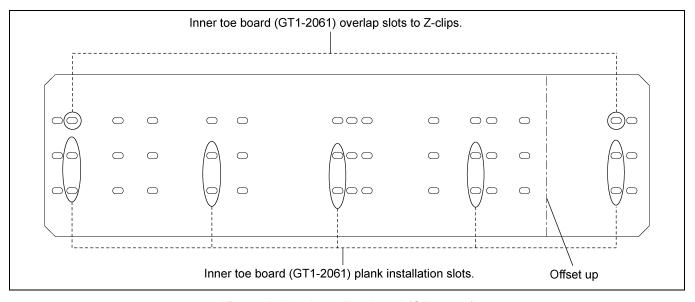


Figure 5K 18' Inner Toe Board (GT1-2061)

Installing Handrail (GT1-2038-18I)

1. Install the handrail (GT1-2038-18I) to the catwalk vertical support (GT1-2037-BS) using 5/16"-18 ZN U-bolts (S-10171) and 5/16"-18 YDP grade 2 nuts (S-3611) to tighten the handrail with vertical post. (See Figure 5L and Figure 5M.)

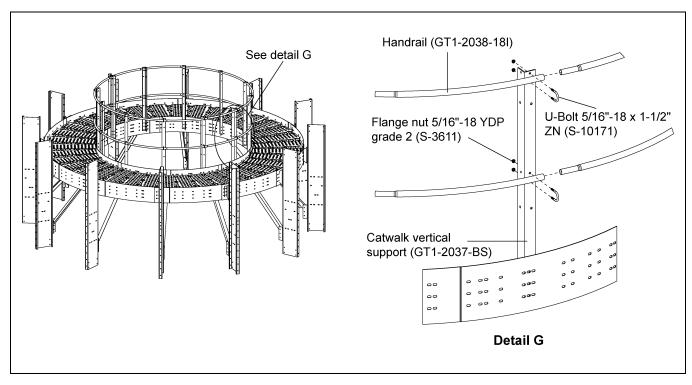


Figure 5L

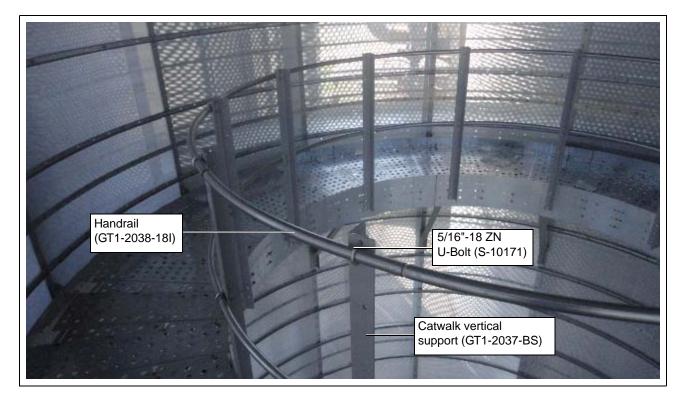


Figure 5M

Inside Catwalk Walk Surface

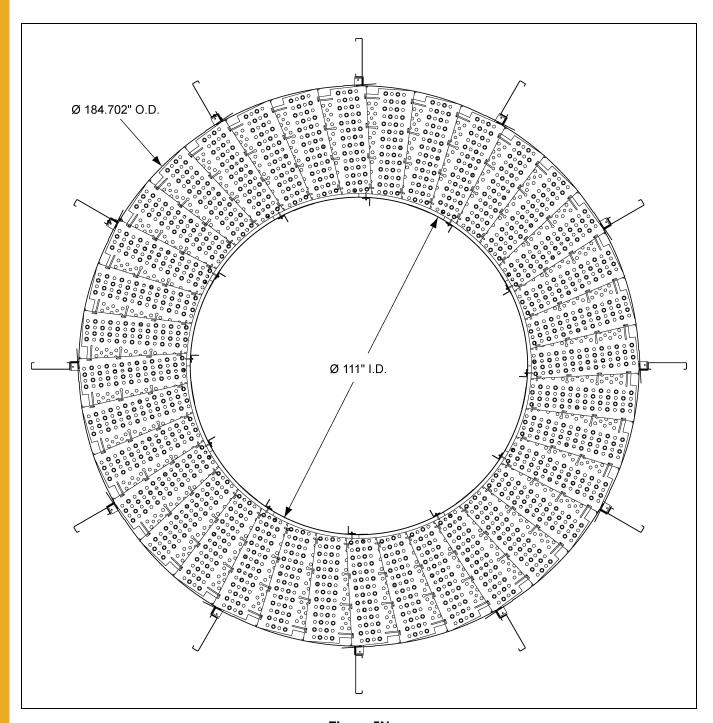


Figure 5N



18' Offset (GT4-1047-18F) and Roof Hatch (GT4-1051-18F) Fan Style Platform Assembly Instructions

Installing Z-Clips (GT1-2036)

1. Bolt Z-clips (GT1-2036) to vertical channels (GT1-0001). The Z-clip can be installed on each vertical channel as wall sheets are installed using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 6A, Figure 6B below, Figure 6C and Figure 6D on Page 41.)

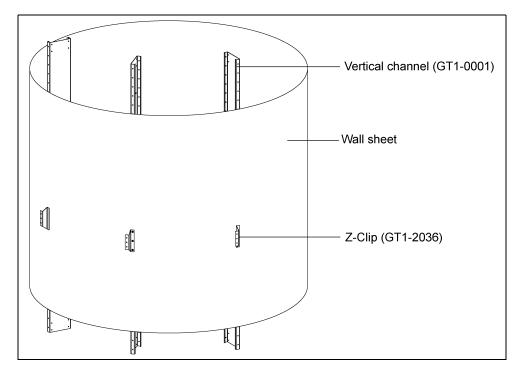


Figure 6A Offset Z-Clip Installation

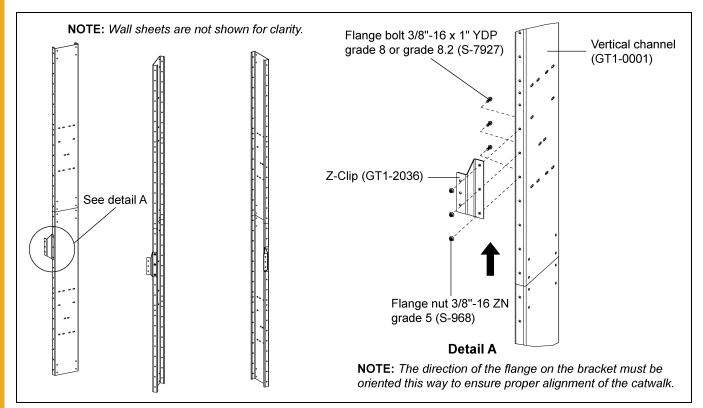


Figure 6B Offset Z-Clip Installation

Installing Z-Clips (GT1-2036) (Continued)

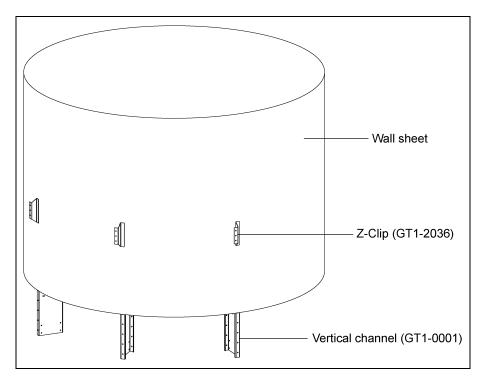


Figure 6C Roof Hatch Z-Clip Installation

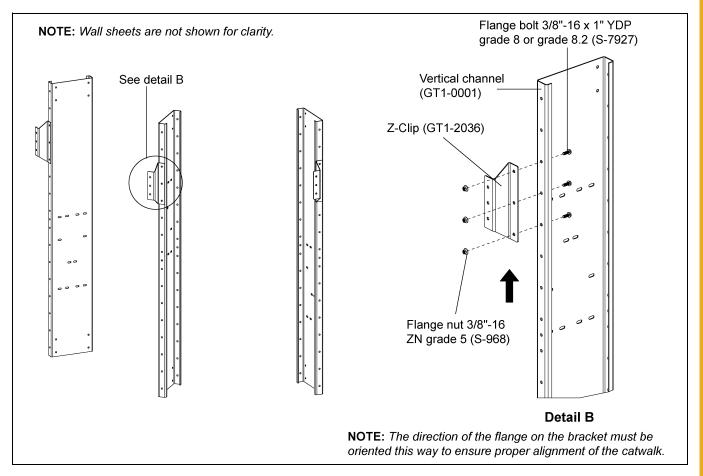


Figure 6D Roof Hatch Z-Clip Installation

Installing Swing Gate Stop (GT1-2045)

1. Install swing gate stops (GT1-2045) to the safety gate opening vertical channel and catwalk end vertical channel on offset catwalk as wall sheets are installed using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 grade 5 nuts (S-968). (See Figure 6E and Figure 6F.)

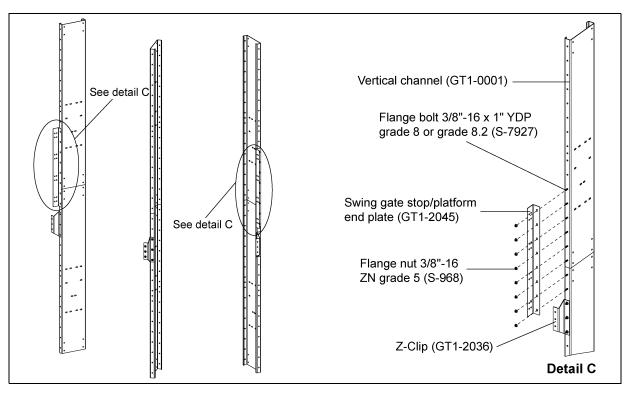


Figure 6E Offset Swing Gate Stop Installation

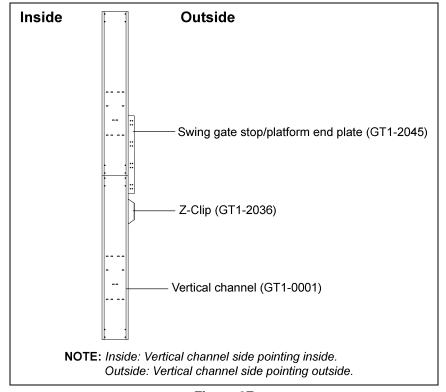


Figure 6F

Installing Catwalk Support Clip (GT1-2040-BS)

- 1. Install catwalk support clips (GT1-2040-BS) to vertical channels (GT1-0001). Support clip can be installed on each vertical channel as the wall sheets are installed using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 6G below and Figure 6I on Page 44.)
- 2. The distance between the Z-clip and support clip for 18' offset and roof hatch platform is 31-1/2". (See Figure 6H below and Figure 6J on Page 44.)

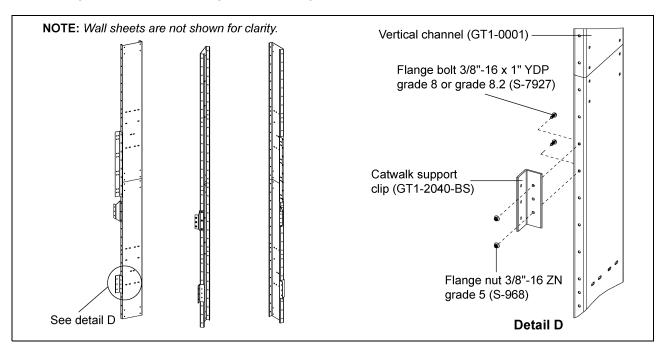


Figure 6G Offset Catwalk Support Clip Installation

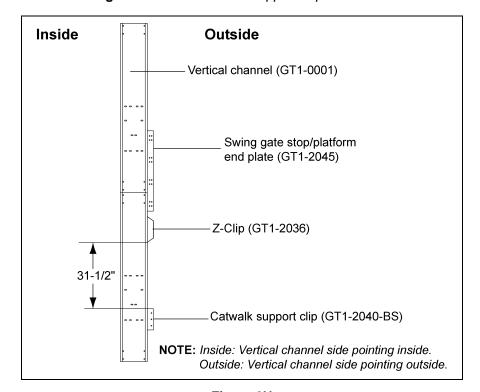


Figure 6H

Installing Catwalk Support Clip (GT1-2040-BS) (Continued)

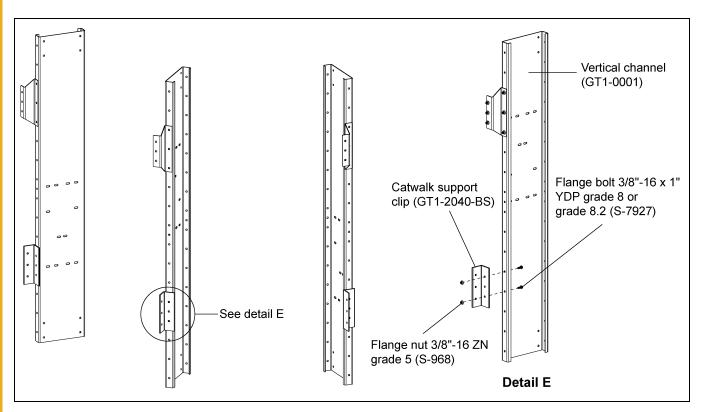


Figure 61 Roof Hatch Catwalk Support Clip Installation

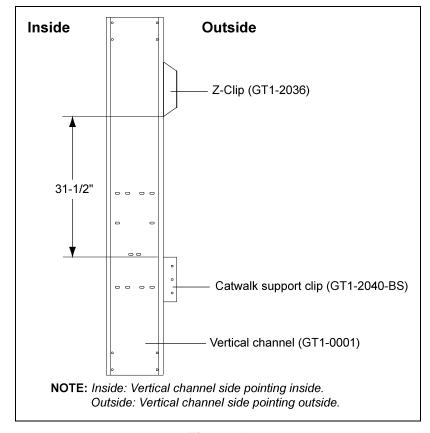


Figure 6J

Installing Inner Toe Board (GT1-2035)

- 1. Install the inner toe board (GT1-2035) to the Z-clips (GT1-2036). (See Figure 6K.)
- 2. All the toe boards should be installed between the Z-clips using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 6K.)

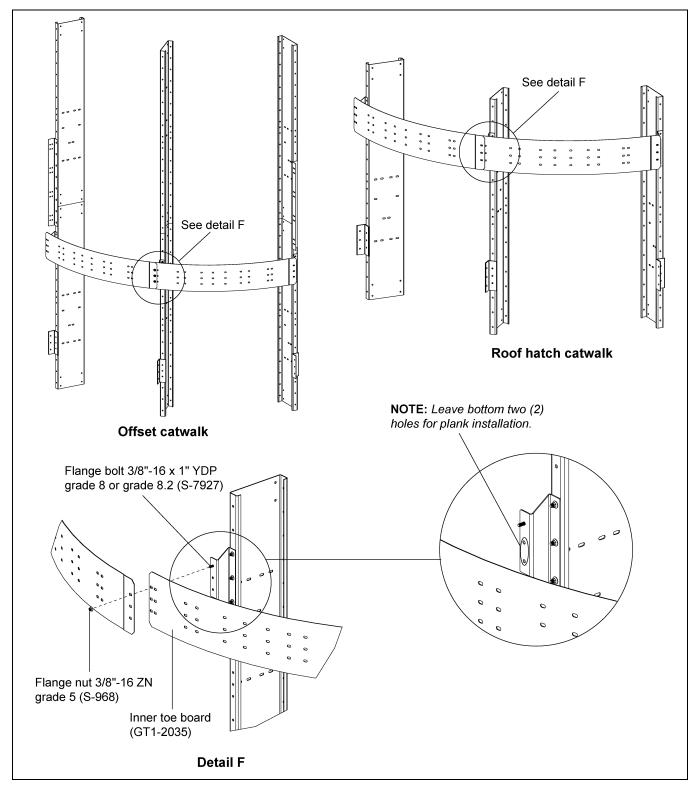


Figure 6K Inner Toe Board Installation for Offset and Roof Hatch Catwalks

Installing Inner Toe Board (GT1-2035) (Continued)

3. Inner toe board is arranged with overlap slots on each side. Install 18' offset and roof hatch inner toe boards (GT1-2035) to corresponding slots as shown in *Figure 6L*.

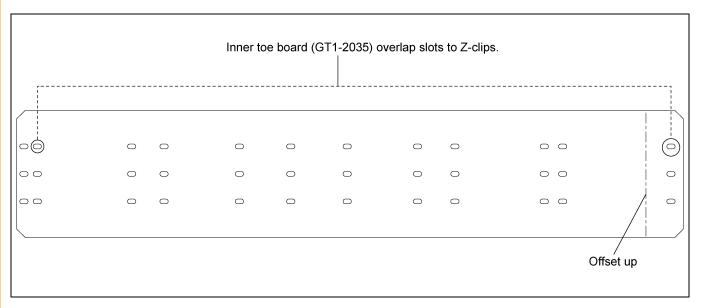


Figure 6L 18' Inner Toe Board (GT1-2035)

Installing Plank (GT1-2033) to Inner Toe Board (GT1-2035)

1. Install planks (GT1-2033) to bottom two (2) holes of the inner toe board (GT1-2035) using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 6M.)

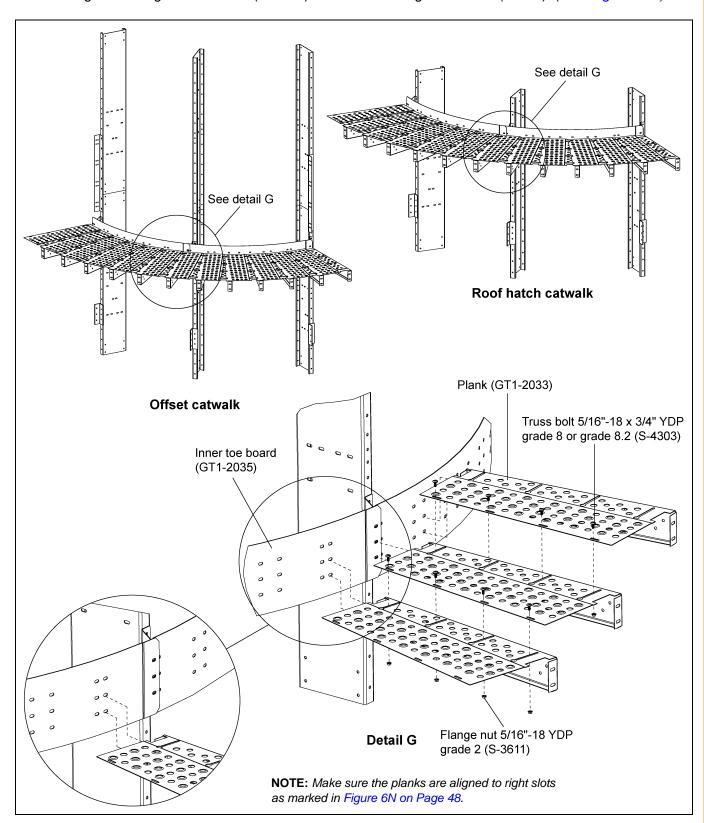


Figure 6M Inner Toe Board (GT1-2035) Plank Installation for Offset and Roof Hatch Catwalks

Installing Plank (GT1-2033) to Inner Toe Board (GT1-2035) (Continued)

2. Inner toe board (GT1-2035) is arranged with many slots to install plank. Install offset and roof hatch planks to corresponding slots as shown in *Figure 6N*.

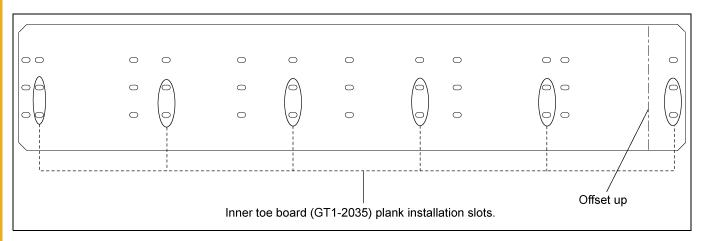


Figure 6N 18' Inner Toe Board (GT1-2035)

3. Install all the planks (GT1-2033) continuously around the dryer except at the jack pole locations. (See Figure 60.)

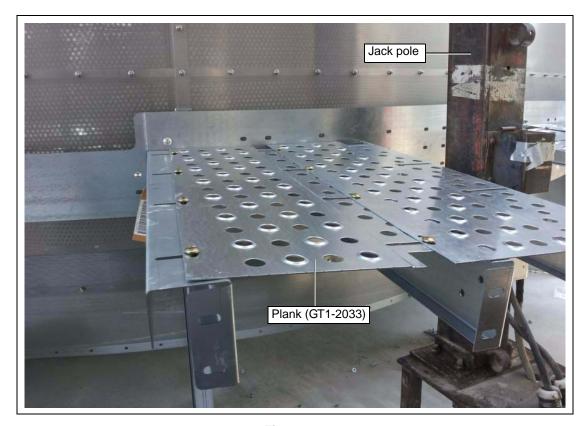


Figure 60

Installing Plank (GT1-2033) to Inner Toe Board (GT1-2035) (Continued)

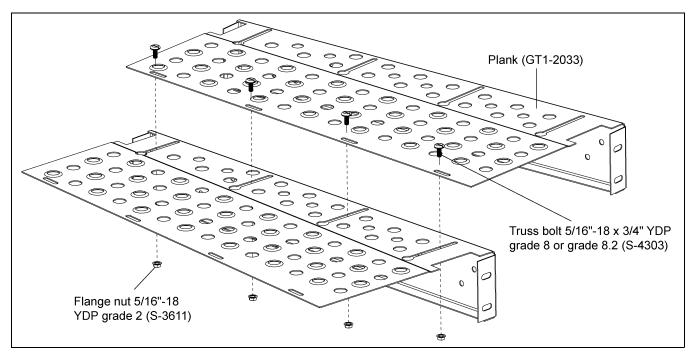


Figure 6P

4. Each plank should be overlapped at the edges and bolted with 5/16"-18 x 3/4" YPD grade 8 or grade 8.2 bolts (S-4303) and 5/16"-18 x 3/4" YPD grade 2 nuts (S-3611). (See Figure 6Q.)

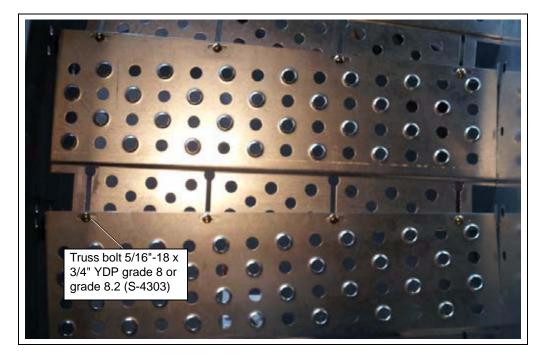


Figure 6Q

Installing Plank Support (GT1-2086)

1. Once the planks are installed, install the plank support (GT1-2086) at the catwalk closing end using 5/16"-18 x 3/4" YPD grade 8 or grade 8.2 bolts (S-4303) and 5/16"-18 YDP grade 2 nuts (S-3611). (See Figure 6R.)

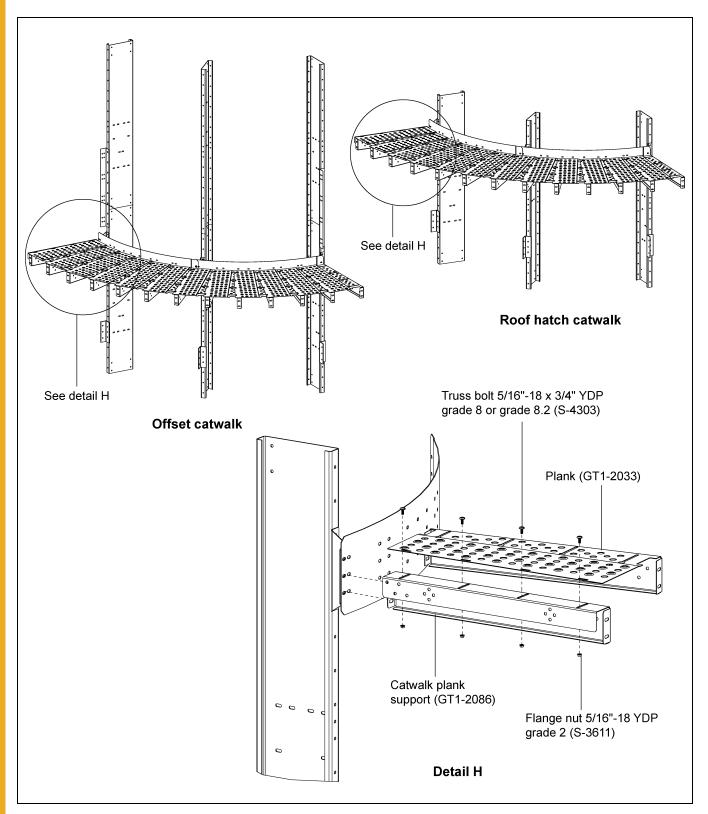


Figure 6R Plank Support (GT1-2086) Installation for Offset and Roof Hatch Catwalks

Installing Knee Support (GT1-2039-BS)

1. Install the knee support (GT1-2039-BS) around the dryer between the catwalk support clips (GT1-2040-BS) and the planks (GT1-2033) using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 6S.)

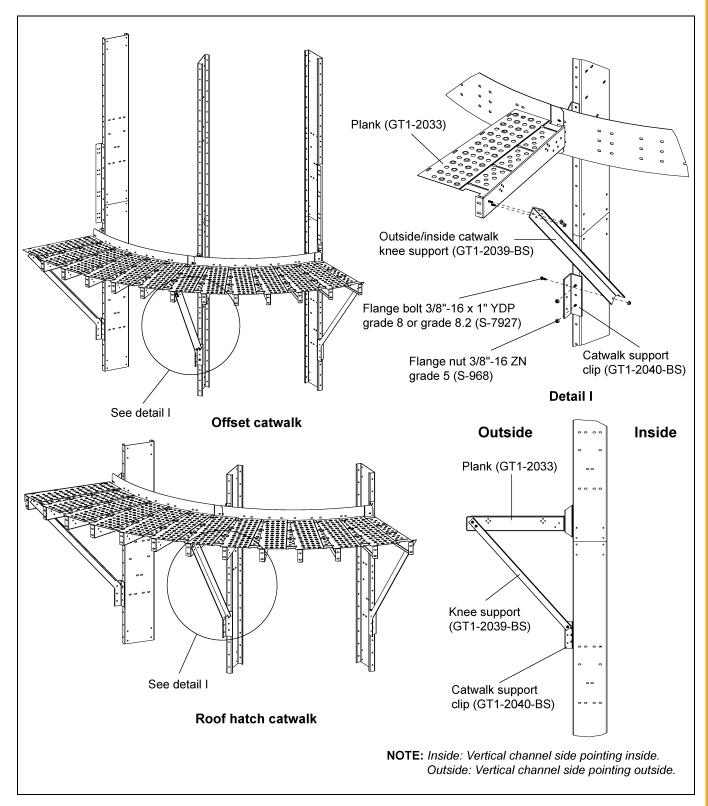


Figure 6S Knee Support (GT1-2039-BS) Installation for Offset and Roof Hatch Catwalks

Installing Outer Toe Board (GT1-2034) and Catwalk Vertical Support (GT1-2037-BS)

- 1. Install all the outer toe boards (GT1-2034) to the planks (GT1-2033). (See Figure 6T.)
- 2. When installing the outer toe board with planks, install the catwalk vertical support (GT1-2037-BS) simultaneously at proper locations using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 6T.)

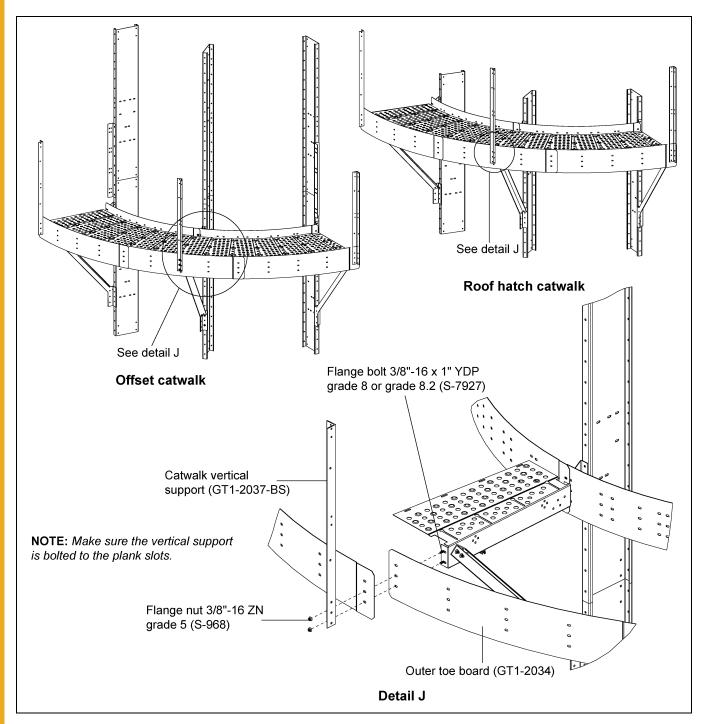


Figure 6T Outer Toe Board (GT1-2034) and Vertical Support (GT1-2037-BS) Installation for Offset and Roof Hatch Catwalks

Installing Long Handrails (GT1-2038-180)

- 1. Install the long handrail (GT1-2038-18O) to the catwalk vertical support (GT1-2037-BS) using 5/16"-18 ZN U-bolts (S-10171) and 5/16"-18 YDP grade 2 nuts (S-3611) to tighten the handrail with vertical post. (See Figure 6U.)
- 2. Use the self-tapping screw SDS #10-16 x 3/4" HWH ZN grade 2 (S-7466) at all handrail pipe joints. (See Figure 6U.)

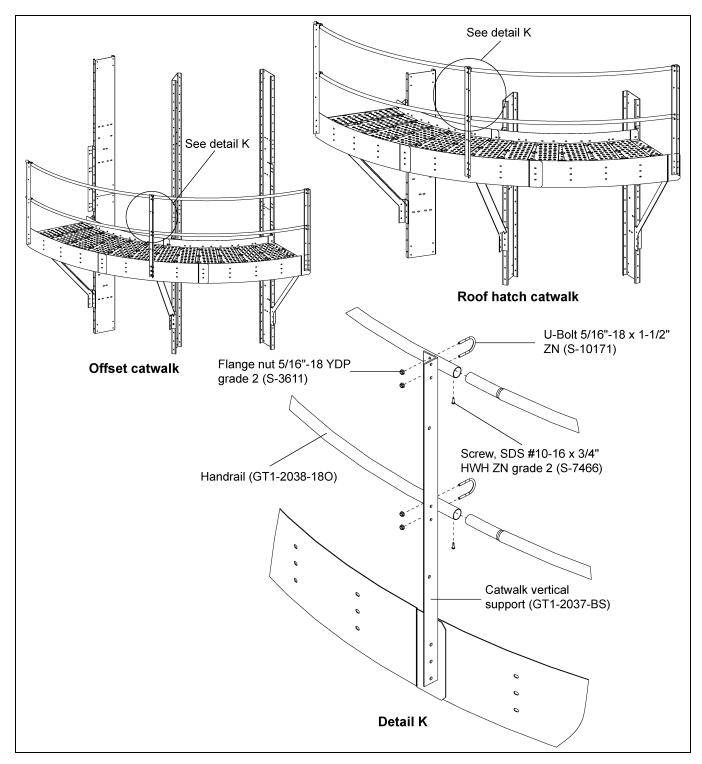


Figure 6U Handrail (GT1-2038-180) Installation for Offset and Roof Hatch Catwalks

Installing Long Handrails (GT1-2038) (Continued)

3. Install the platform end handrail (GT1-2044) to the catwalk vertical support (GT1-2037-BS) and the platform end plate (GT1-2045). (See Figure 6V below and Figure 6W on Page 55.)

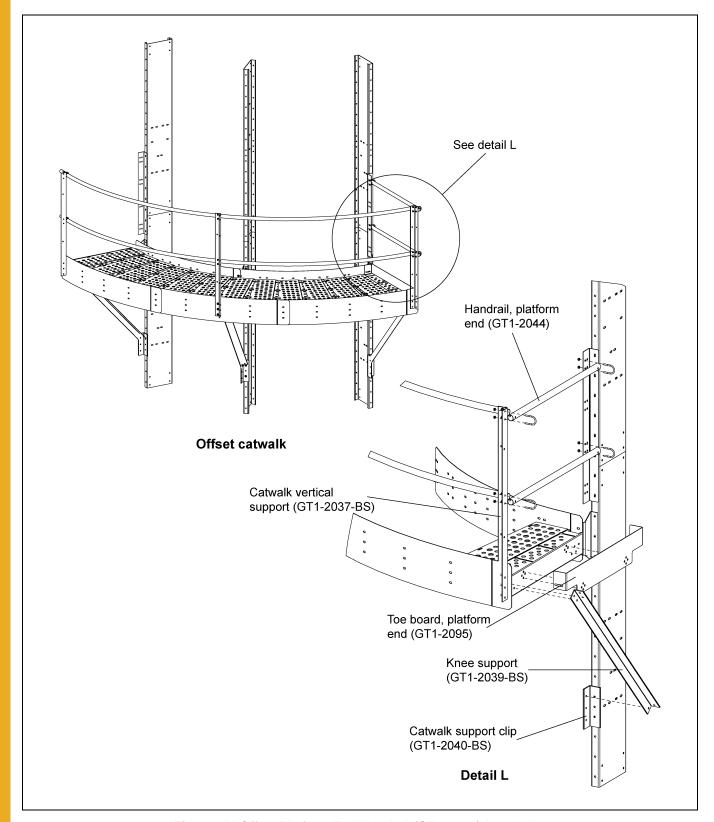


Figure 6V Offset Platform End Handrail (GT1-2044) Installation

Installing Long Handrails (GT1-2038) (Continued)

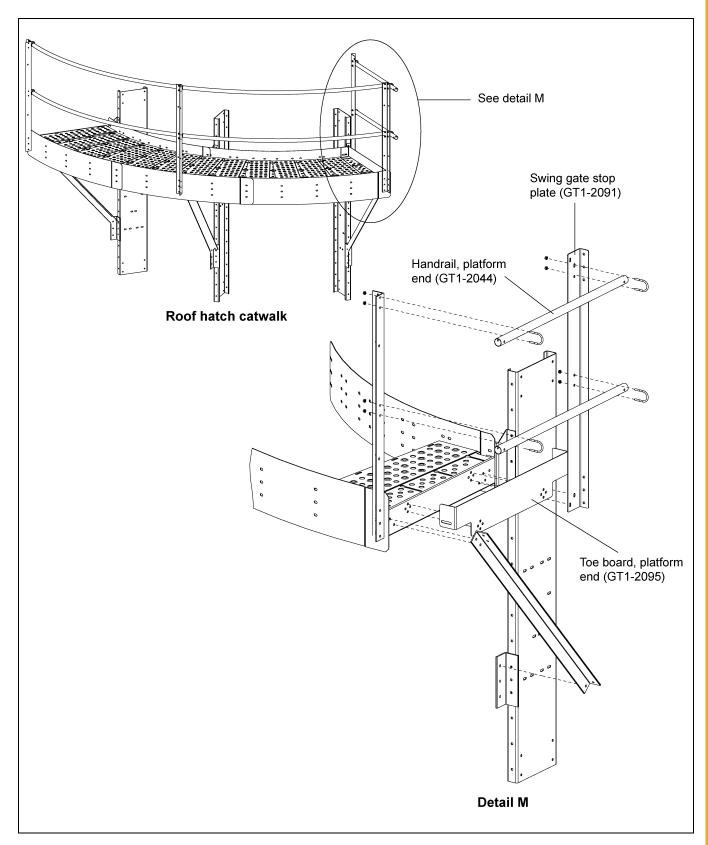


Figure 6W Roof Hatch Platform End Handrail (GT1-2044) Installation

Installing Safety Gate (GT4-1455) with Plank Support (GT1-2086)

- 1. Install the swing gate support (GT1-2087) with the plank support (GT1-2086).
- 2. Install two (2) catwalk handrails (GT1-0920) between the swing gate support (GT1-2087) and catwalk vertical support (GT1-2037-BS). (See Figure 6X.)

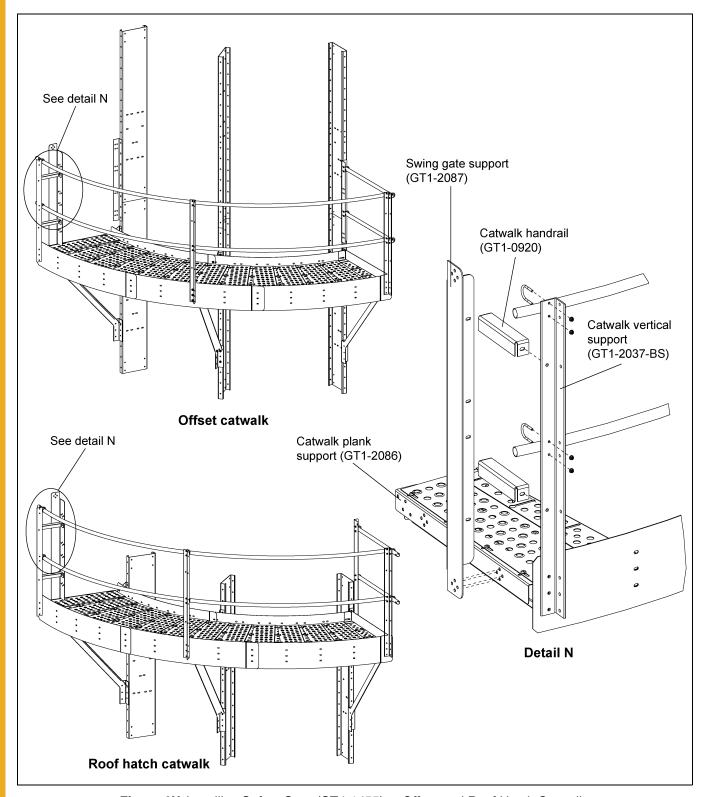


Figure 6X Installing Safety Gate (GT4-1455) to Offset and Roof Hatch Catwalks

Installing Safety Gate with Plank Support (Continued)

3. Install the ladder safety gate assembly (GT4-1455) to the swing gate support (GT1-2087) using 3/8"-16 x 1" YDP grade 8 or grade 8.2 bolts (S-7927) and 3/8"-16 ZN grade 5 nuts (S-968). The distance between the plank and handrail is 42". (See Figure 6Y below and Figure 6Z on Page 58.)

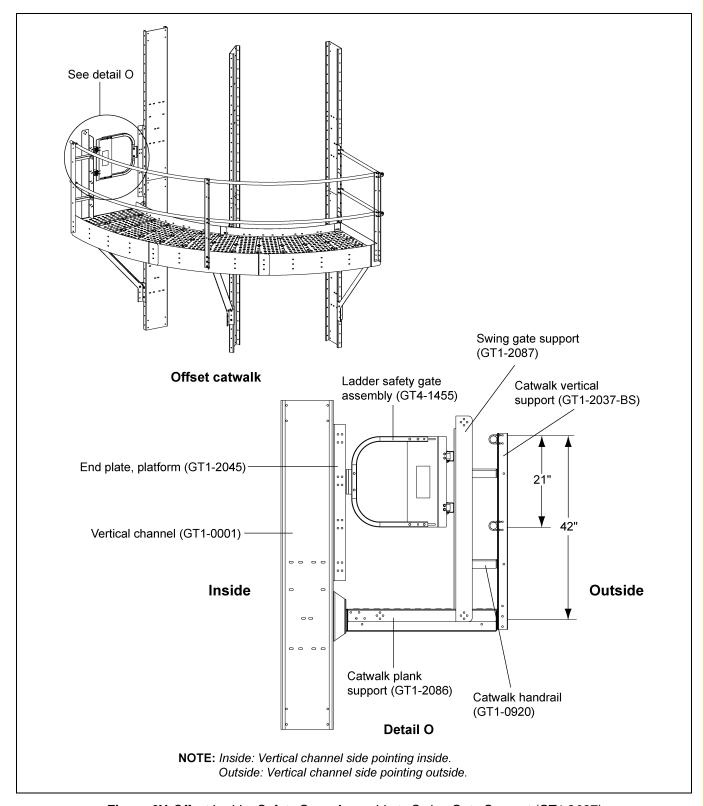


Figure 6Y Offset Ladder Safety Gage Assembly to Swing Gate Support (GT1-2087)

Installing Safety Gate with Plank Support (Continued)

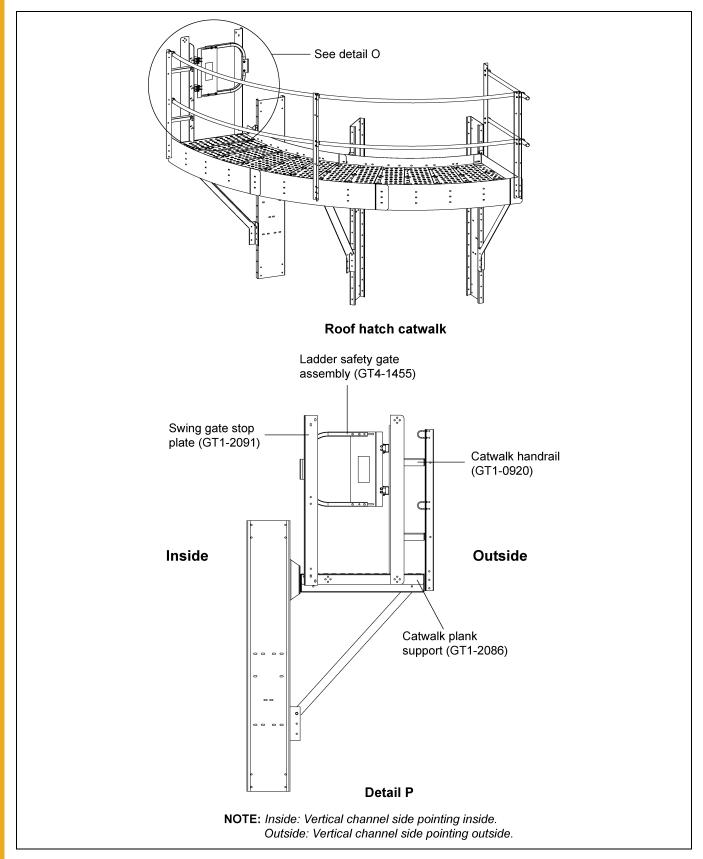
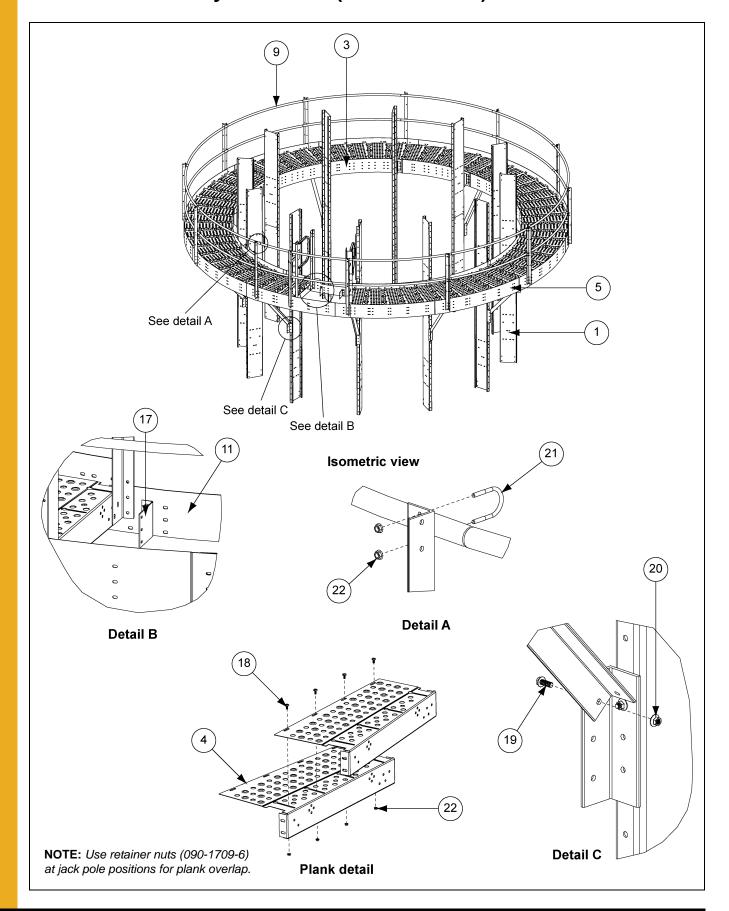


Figure 6Z Roof Hatch Ladder Safety Gage Assembly to Swing Gate Stop Plate (GT1-2091)

- 1. 18' Outside Fan Style Catwalk (GT4-1039-18F) (See Pages 60-63.)
- 2. 18' Inside Fan Style Catwalk (GT4-1043-18F) (See Pages 64-67.)
- 3. 18' Offset Fan Style Platform (GT4-1047-18F) (See Pages 68-71.)
- 4. 18' Roof Hatch Fan Style Platform (GT4-1051-18F) (See Pages 72-75.)

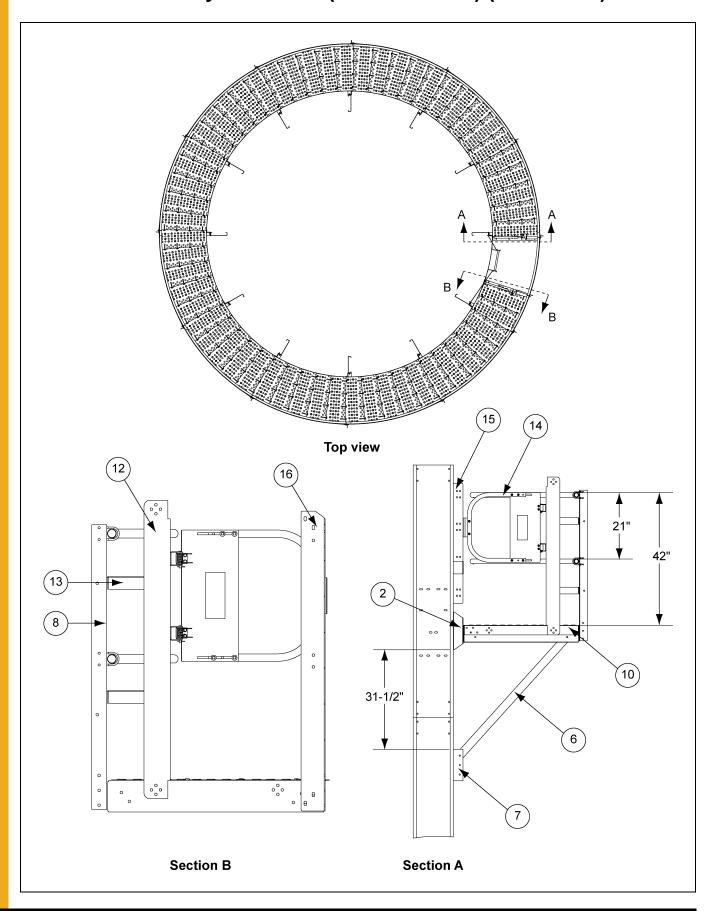
18' Outside Fan Style Catwalk (GT4-1039-18F)



18' Outside Fan Style Catwalk (GT4-1039-18F) Parts List

Ref #	Part #	Description	
1	GT1-0001	Vertical Channel	24
2	GT1-2036	Catwalk/Platform to Dryer Wall Bracket	
3	GT1-2035	Inner Toe Board	11
4	GT1-2033	Plank	57
5	GT1-2034	Outer Toe Board	12
6	GT1-2039-BS	Outside/Inside Catwalk Diagonal Support - Bin Silver	12
7	GT1-2040-BS	Catwalk Support Clip - Bin Silver	12
8	GT1-2037-BS	Catwalk Vertical Support - Bin Silver	13
9	GT1-2038-18O	18' Outside Catwalk/Platform Handrail	20
10	GT1-2086	Catwalk Plank Support	1
11	GT4-1465	Ladder Opening Inner Toe Board	
12	GT1-2087	Swing Gate Support	
13	GT1-0920	Catwalk End Handrail	
14	GT4-1455	Ladder Safety Gate	
15	GT1-2045	Platform End Plate	
16	GT1-2091	Swing Gate Stop Plate	1
17	GT1-2088	Ladder to Toe Board Bracket	2
18	S-4303	Truss Bolt 5/16"-18 x 3/4" YDP Grade 8 or Grade 8.2	250
19	S-7927	Flange Bolt 3/8"-16 x 1" YDP Grade 8 or Grade 8.2	466
20	S-968	Flange Nut 3/8"-16 ZN Grade 5 Wide Flange	466
21	S-10171	Bolt, U-Bolt 5/16"-18 for 1-1/4" Pipe ZN	30
22	S-3611	Flange Nut 5/16"-18 YDP Grade 2	282
N/S	090-1709-6	Retainer Nut 5/16"-18 x 0.120" ZN	
N/S	GT1-2144	Holding Plate, Inner Toe Board to Plank	
N/S	S-10175	Extruded Nut 3/8"-16, Tapped Hole, 050-0.200 Panel Range, Black	80

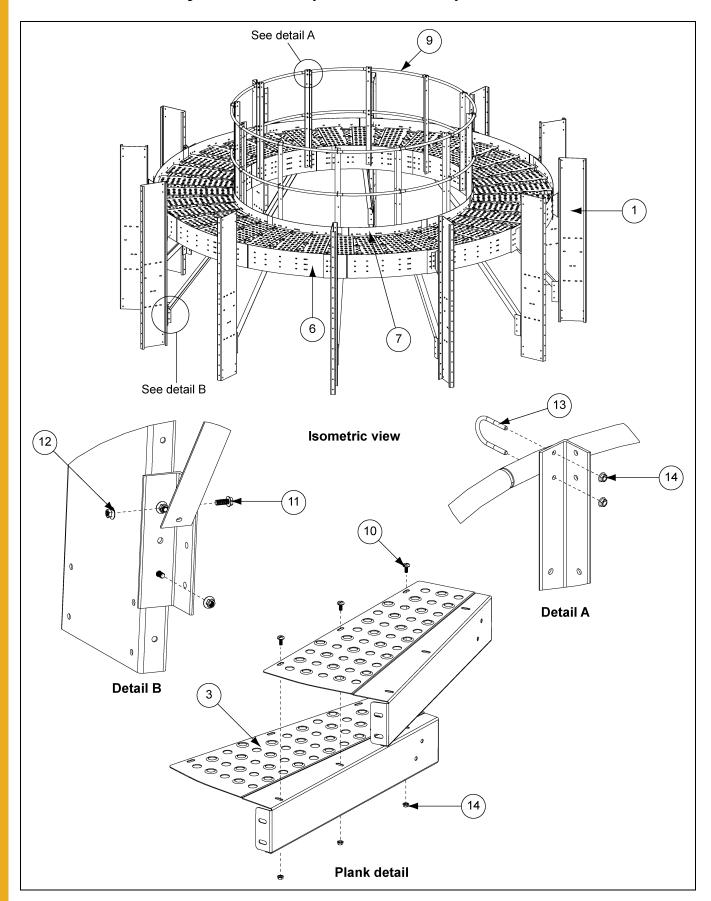
18' Outside Fan Style Catwalk (GT4-1039-18F) (Continued)



18' Outside Fan Style Catwalk (GT4-1039-18F) Parts List

Ref #	Part #	Description	Qty
1	GT1-0001	Vertical Channel	
2	GT1-2036	Catwalk/Platform to Dryer Wall Bracket	
3	GT1-2035	Inner Toe Board	11
4	GT1-2033	Plank	57
5	GT1-2034	Outer Toe Board	12
6	GT1-2039-BS	Outside/Inside Catwalk Diagonal Support - Bin Silver	12
7	GT1-2040-BS	Catwalk Support Clip - Bin Silver	12
8	GT1-2037-BS	Catwalk Vertical Support - Bin Silver	13
9	GT1-2038-18O	18' Outside Catwalk/Platform Handrail	20
10	GT1-2086	Catwalk Plank Support	1
11	GT4-1465	Ladder Opening Inner Toe Board	
12	GT1-2087	Swing Gate Support	
13	GT1-0920	Catwalk End Handrail	
14	GT4-1455	Ladder Safety Gate	
15	GT1-2045	Platform End Plate	
16	GT1-2091	Swing Gate Stop Plate	1
17	GT1-2088	Ladder to Toe Board Bracket	2
18	S-4303	Truss Bolt 5/16"-18 x 3/4" YDP Grade 8 or Grade 8.2	250
19	S-7927	Flange Bolt 3/8"-16 x 1" YDP Grade 8 or Grade 8.2	466
20	S-968	Flange Nut 3/8"-16 ZN Grade 5 Wide Flange	466
21	S-10171	Bolt, U-Bolt 5/16"-18 for 1-1/4" Pipe ZN	
22	S-3611	Flange Nut 5/16"-18 YDP Grade 2	282
N/S	090-1709-6	Retainer Nut 5/16"-18 x 0.120" ZN	79
N/S	GT1-2144	Holding Plate, Inner Toe Board to Plank	
N/S	S-10175	Extruded Nut 3/8"-16, Tapped Hole, 050-0.200 Panel Range, Black	

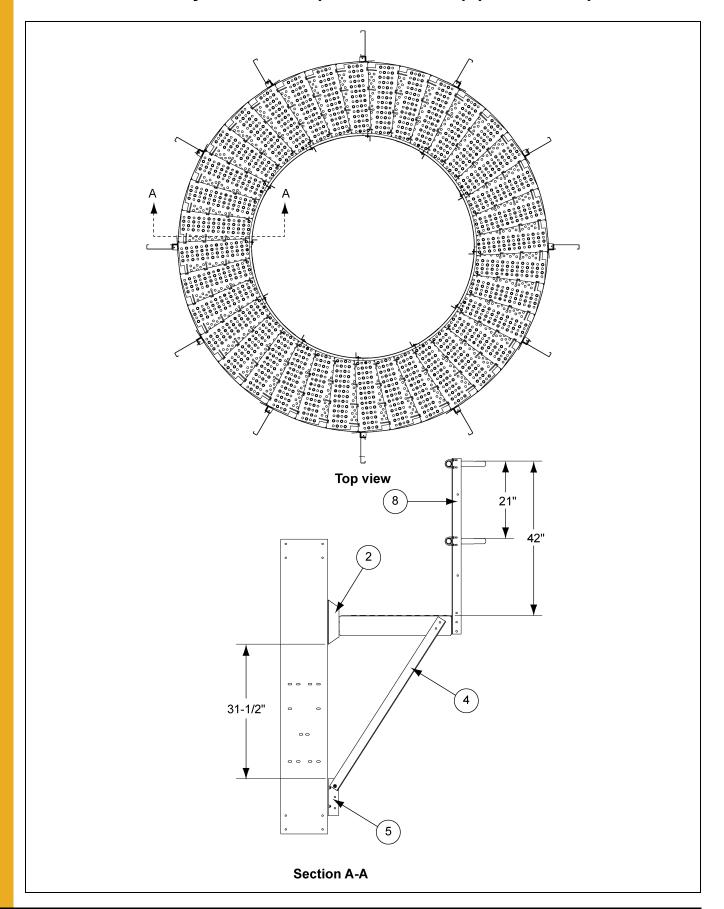
18' Inside Fan Style Catwalk (GT4-1043-18F)



18' Inside Fan Style Catwalk (GT4-1043-18F) Parts List

Ref #	Part #	Description	
1	GT1-0001	Vertical Channel	
2	GT1-2036	Catwalk/Platform to Dryer Wall Bracket	12
3	GT1-2033	Plank	36
4	GT1-2039-BS	Outside/Inside Catwalk Diagonal Support - Bin Silver	12
5	GT1-2040-BS	Catwalk Support Clip - Bin Silver	12
6	GT1-2062	Outer Toe Board	12
7	GT1-2061	Inner Toe Board	
8	GT1-2037-BS	Catwalk Vertical Support - Bin Silver	
9	GT1-2038-18I	18' Inside Catwalk Handrail	
10	S-4303	Truss Bolt 5/16"-18 x 3/4" YDP Grade 8 or Grade 8.2	160
11	S-7927	Flange Bolt 3/8"-16 x 1" YDP Grade 8 or Grade 8.2	290
12	S-968	Flange Nut 3/8"-16 ZN Grade 5 Wide Flange	290
13	S-10171	Bolt, U-Bolt 5/16"-18 for 1-1/4" Pipe ZN	28
14	S-3611	Flange Nut 5/16"-18 YDP Grade 2	210

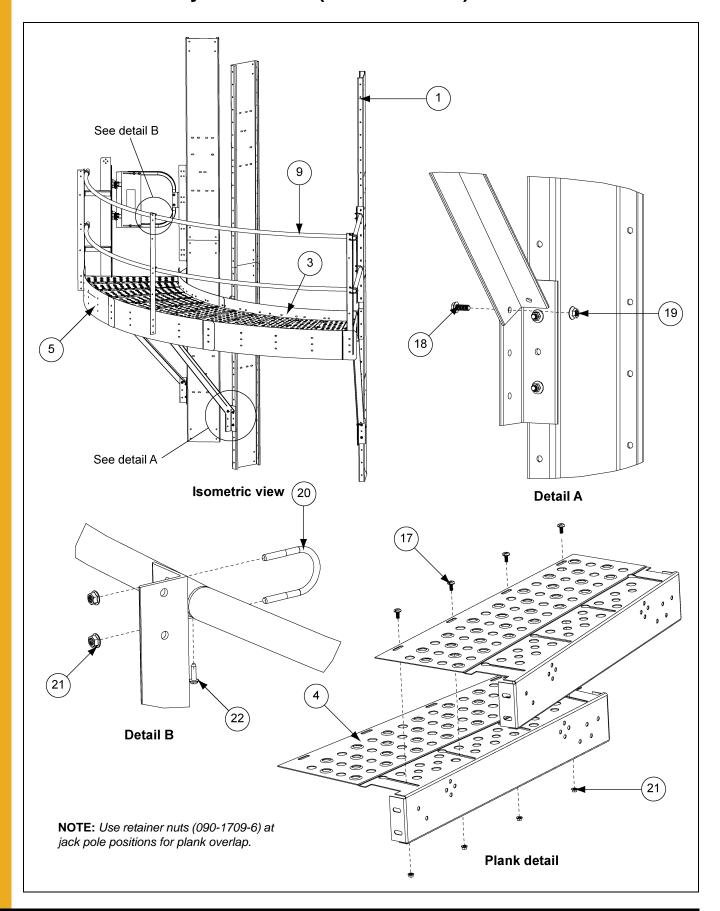
18' Inside Fan Style Catwalk (GT4-1043-18F) (Continued)



18' Inside Fan Style Catwalk (GT4-1043-18F) Parts List

Ref #	Part #	Description	
1	GT1-0001	Vertical Channel	
2	GT1-2036	Catwalk/Platform to Dryer Wall Bracket	12
3	GT1-2033	Plank	36
4	GT1-2039-BS	Outside/Inside Catwalk Diagonal Support - Bin Silver	12
5	GT1-2040-BS	Catwalk Support Clip - Bin Silver	12
6	GT1-2062	Outer Toe Board	12
7	GT1-2061	Inner Toe Board	
8	GT1-2037-BS	Catwalk Vertical Support - Bin Silver	
9	GT1-2038-18I	18' Inside Catwalk Handrail	
10	S-4303	Truss Bolt 5/16"-18 x 3/4" YDP Grade 8 or Grade 8.2	160
11	S-7927	Flange Bolt 3/8"-16 x 1" YDP Grade 8 or Grade 8.2	290
12	S-968	Flange Nut 3/8"-16 ZN Grade 5 Wide Flange	290
13	S-10171	Bolt, U-Bolt 5/16"-18 for 1-1/4" Pipe ZN	28
14	S-3611	Flange Nut 5/16"-18 YDP Grade 2	210

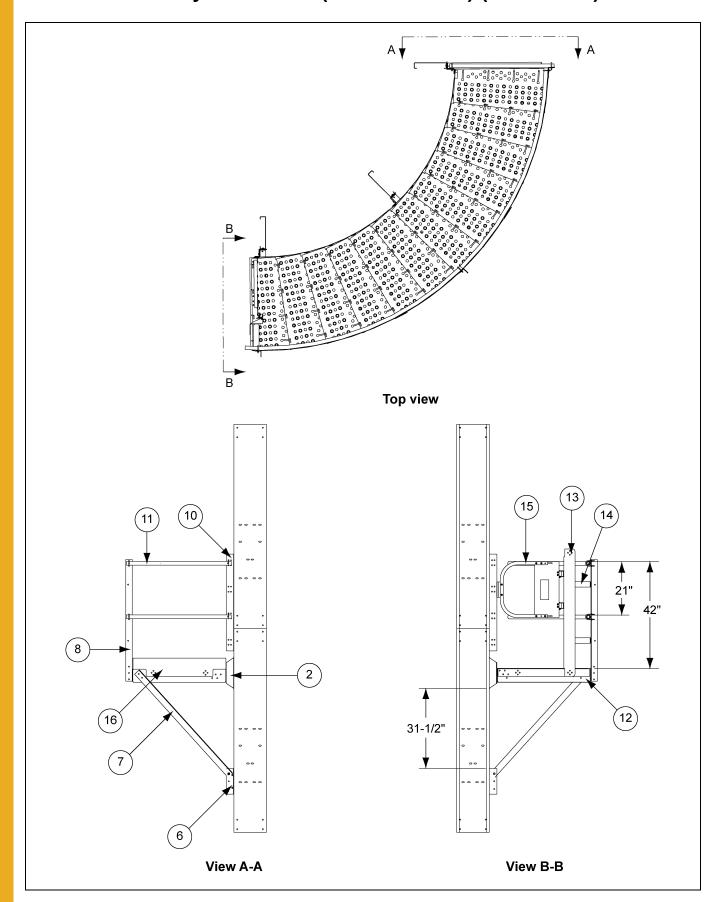
18' Offset Fan Style Platform (GT4-1047-18F)



18' Offset Fan Style Platform (GT4-1047-18F) Parts List

Ref #	Part #	Description	Qty
1	GT1-0001	Vertical Channel	6
2	GT1-2036	Catwalk/Platform to Dryer Wall Bracket	3
3	GT1-2035	Inner Toe Board	2
4	GT1-2033	Plank	10
5	GT1-2034	Outer Toe Board	2
6	GT1-2040-BS	Catwalk Support Clip - Bin Silver	3
7	GT1-2039-BS	Outside/Inside Catwalk Diagonal Support - Bin Silver	3
8	GT1-2037-BS	Catwalk Vertical Support - Bin Silver	3
9	GT1-2038-18O	18' Outside Catwalk/Platform Handrail	4
10	GT1-2045	Platform End Plate	2
11	GT1-2044	Platform End Handrail	2
12	GT1-2086	Catwalk Plank Support	1
13	GT1-2087	Swing Gate Support	1
14	GT1-0920	Catwalk End Handrail	2
15	GT4-1455	Ladder Safety Gate	1
16	GT1-2095	Platform End Toe Board	1
17	S-4303	Truss Bolt 5/16"-18 x 3/4" YDP Grade 8 or Grade 8.2	50
18	S-7927	Flange Bolt 3/8"-16 x 1" YDP Grade 8 or Grade 8.2	125
19	S-968	Flange Nut 3/8"-16 ZN Grade 5 Wide Flange	125
20	S-10171	Bolt, U-Bolt 5/16"-18 for 1-1/4" Pipe ZN	12
21	S-3611	Flange Nut 5/16"-18 YDP Grade 2	75
22	S-7466	Screw, SDS #10-16 x 3/4" HWH ZN Grade 2	5
N/S	090-1709-6	Retainer Nut 5/16"-18 x 0.120" ZN	12
N/S	GT1-2144	Holding Plate, Inner Toe Board to Plank	6
N/S	S-10175	Extruded Nut 3/8"-16, Tapped Hole, 050-0.200 Panel Range, Black	12

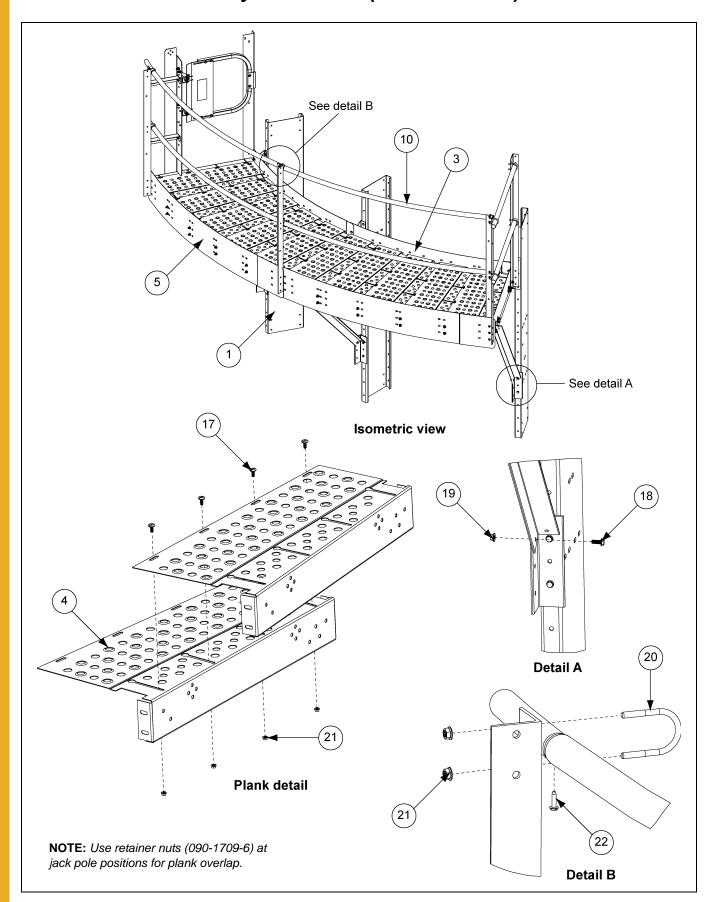
18' Offset Fan Style Platform (GT4-1047-18F) (Continued)



18' Offset Fan Style Platform (GT4-1047-18F) Parts List

Ref #	Part #	Description	Qty
1	GT1-0001	Vertical Channel	6
2	GT1-2036	Catwalk/Platform to Dryer Wall Bracket	3
3	GT1-2035	Inner Toe Board	2
4	GT1-2033	Plank	10
5	GT1-2034	Outer Toe Board	2
6	GT1-2040-BS	Catwalk Support Clip - Bin Silver	3
7	GT1-2039-BS	Outside/Inside Catwalk Diagonal Support - Bin Silver	3
8	GT1-2037-BS	Catwalk Vertical Support - Bin Silver	3
9	GT1-2038-18O	18' Outside Catwalk/Platform Handrail	4
10	GT1-2045	Platform End Plate	2
11	GT1-2044	Platform End Handrail	2
12	GT1-2086	Catwalk Plank Support	1
13	GT1-2087	Swing Gate Support	1
14	GT1-0920	Catwalk End Handrail	2
15	GT4-1455	Ladder Safety Gate	1
16	GT1-2095	Platform End Toe Board	1
17	S-4303	Truss Bolt 5/16"-18 x 3/4" YDP Grade 8 or Grade 8.2	50
18	S-7927	Flange Bolt 3/8"-16 x 1" YDP Grade 8 or Grade 8.2	125
19	S-968	Flange Nut 3/8"-16 ZN Grade 5 Wide Flange	125
20	S-10171	Bolt, U-Bolt 5/16"-18 for 1-1/4" Pipe ZN	12
21	S-3611	Flange Nut 5/16"-18 YDP Grade 2	75
22	S-7466	Screw, SDS #10-16 x 3/4" HWH ZN Grade 2	5
N/S	090-1709-6	Retainer Nut 5/16"-18 x 0.120" ZN	12
N/S	GT1-2144	Holding Plate, Inner Toe Board to Plank	6
N/S	S-10175	Extruded Nut 3/8"-16, Tapped Hole, 050-0.200 Panel Range, Black	12

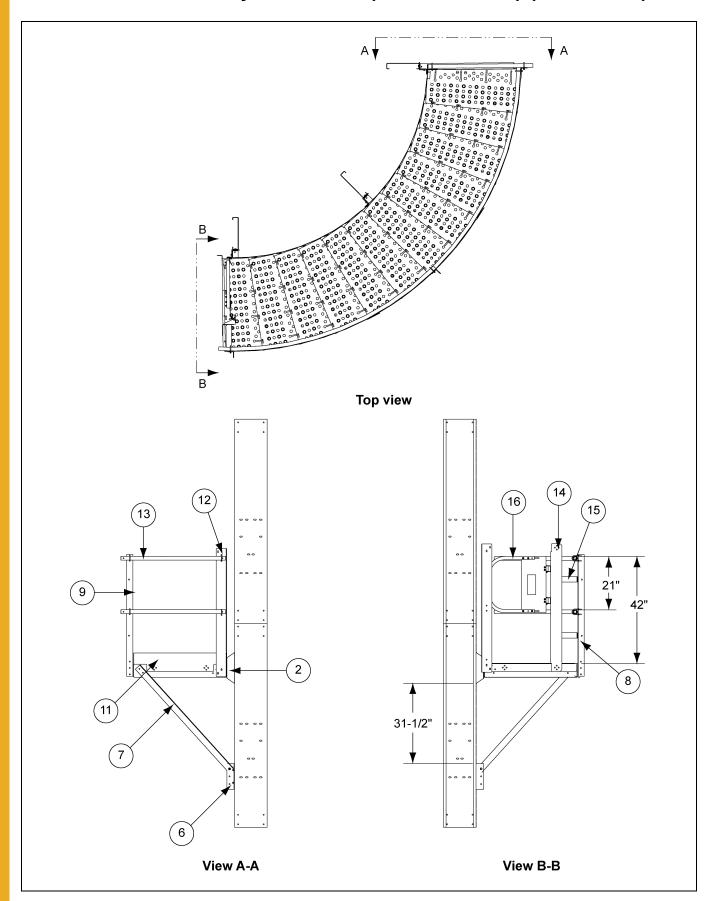
18' Roof Hatch Fan Style Platform (GT4-1051-18F)



18' Roof Hatch Fan Style Platform (GT4-1051-18F) Parts List

Ref #	Part #	Description	
1	GT1-0001	Vertical Channel	3
2	GT1-2036	Catwalk/Platform to Dryer Wall Bracket	3
3	GT1-2035	Inner Toe Board	2
4	GT1-2033	Plank	10
5	GT1-2034	Outer Toe Board	2
6	GT1-2086	Catwalk Plank Support	1
7	GT1-2040-BS	Catwalk Support Clip - Bin Silver	3
8	GT1-2039-BS	Outside/Inside Catwalk Diagonal Support - Bin Silver	3
9	GT1-2037-BS	Vertical Support Handrail - Bin Silver	3
10	GT1-2038-18O	18' Outside Catwalk/Platform Handrail	4
11	GT1-2044	Platform End Handrail	2
12	GT1-2087	Swing Gate Support	1
13	GT1-0920	Catwalk End Handrail	
14	GT4-1455	Ladder Safety Gate	
15	GT1-2095	Platform End Toe Board	1
16	GT1-2091	Swing Gate Stop Plate	2
17	S-4303	Truss Bolt 5/16"-18 x 3/4" YDP Grade 8 or Grade 8.2	50
18	S-7927	Flange Bolt 3/8"-16 x 1" YDP Grade 8 or Grade 8.2	125
19	S-968	Flange Nut 3/8"-16 ZN Grade 5 Wide Flange	125
20	S-10171	Bolt, U-Bolt 5/16"-18 for 1-1/4" Pipe ZN	12
21	S-3611	Flange Nut 5/16"-18 YDP Grade 2	75
22	S-7466	Screw, SDS #10-16 x 3/4" HWH ZN Grade 2	5
N/S	090-1709-6	Retainer Nut 5/16"-18 x 0.120" ZN	12
N/S	GT1-2144	Holding Plate, Inner Toe Board to Plank	6
N/S	S-10175	Extruded Nut 3/8"-16, Tapped Hole, 050-0.200 Panel Range, Black	12

18' Roof Hatch Fan Style Platform (GT4-1051-18F) (Continued)



18' Roof Hatch Fan Style Platform (GT4-1051-18F) Parts List

Ref #	Part #	Description	Qty
1	GT1-0001	Vertical Channel	3
2	GT1-2036	Catwalk/Platform to Dryer Wall Bracket	
3	GT1-2035	Inner Toe Board	2
4	GT1-2033	Plank	10
5	GT1-2034	Outer Toe Board	2
6	GT1-2086	Catwalk Plank Support	1
7	GT1-2040-BS	Catwalk Support Clip - Bin Silver	3
8	GT1-2039-BS	Outside/Inside Catwalk Diagonal Support - Bin Silver	3
9	GT1-2037-BS	Vertical Support Handrail - Bin Silver	3
10	GT1-2038-18O	18' Outside Catwalk/Platform Handrail	4
11	GT1-2044	Platform End Handrail	2
12	GT1-2087	Swing Gate Support	1
13	GT1-0920	Catwalk End Handrail	
14	GT4-1455	Ladder Safety Gate	1
15	GT1-2095	Platform End Toe Board	
16	GT1-2091	Swing Gate Stop Plate	2
17	S-4303	Truss Bolt 5/16"-18 x 3/4" YDP Grade 8 or Grade 8.2	50
18	S-7927	Flange Bolt 3/8"-16 x 1" YDP Grade 8 or Grade 8.2	125
19	S-968	Flange Nut 3/8"-16 ZN Grade 5 Wide Flange	125
20	S-10171	Bolt, U-Bolt 5/16"-18 for 1-1/4" Pipe ZN	12
21	S-3611	Flange Nut 5/16"-18 YDP Grade 2	75
22	S-7466	Screw, SDS #10-16 x 3/4" HWH ZN Grade 2	5
N/S	090-1709-6	Retainer Nut 5/16"-18 x 0.120" ZN	12
N/S	GT1-2144	Holding Plate, Inner Toe Board to Plank	6
N/S	S-10175	Extruded Nut 3/8"-16, Tapped Hole, 050-0.200 Panel Range, Black	12

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	
	Performer Series Direct Drive Fan Motor	3 Years	* Warranty prora 0 to 3 years - r 3 to 5 years - e
AP Fans and Flooring	All Fiberglass Housings	Lifetime	
	All Fiberglass Propellers	Lifetime	
	Feeder System Pan Assemblies	5 Years **	5 to 7 years - 7 to 10 years
Cumberland Feeding/Watering	Feed Tubes (1-3/4" and 2.00")	10 Years *	** Warranty pro
Systems	Centerless Augers	10 Years *	0 to 3 years
	Watering Nipples	10 Years *	3 to 5 years
Grain Systems	Grain Bin Structural Design	5 Years	l Mataus burns
Grain Systems	Portable and Tower Dryers	2 Years	† Motors, burne and moving p
Farm Fans Zimmerman	Portable and Tower Dryer Frames and Internal Infrastructure †	5 Years	Portable drye Tower dryer s

* 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 (12th) month from the date of purchase and continuing until the sixtieth (60th) 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.

9101239_1_CR_rev7.DOC (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.

GSIGROUP



GSI Group 1004 E. Illinois St. Assumption, IL 62510-0020 Phone: 1-217-226-4421 Fax: 1-217-226-4420

www.gsiag.com