



# 23'-4" Tower Dryer Fan Style Catwalk and Ladder Assembly

Installation Manual

PNEG-2287

Version: 2.1

Date: **09-29-20**



PNEG-2287

---

**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.**

## Contents

<b>Chapter 1 Introduction .....</b>	<b>5</b>
<b>Chapter 2 Safety .....</b>	<b>6</b>
Safety Guidelines .....	6
Cautionary Symbols Definitions .....	7
Safety Cautions .....	8
Safety Sign-Off Sheet .....	12
<b>Chapter 3 Decals .....</b>	<b>13</b>
<b>Chapter 4 23'-4" Outside Catwalk Installation Instructions .....</b>	<b>16</b>
Installing the Z-Clips (GT1-2036) .....	16
Installing the Swing Gate Stop (GT1-2045) .....	17
Installing the Catwalk Support Clip (GT1-2040-BS) .....	18
Installing the Inner Toe Board (GT1-2657) and Ladder Opening Toe Board (GT1-2659) .....	19
Installing the Plank (GT3-1669) to the Inner Toe Board (GT1-2657) .....	21
Installing the Plank Support (GT1-2086) .....	24
Installing the Knee Support (GT1-2039-BS) .....	25
Installing the Outer Toe Board (GT1-2656) and Catwalk Vertical Support (GT1-2037-BS) .....	26
Installing the Handrails (GT1-2658-23O) .....	28
Installing the Swing Gate Support (GT1-2087) .....	30
Installing the Safety Gate Assembly (LDR-5218) with Swing Gate Support (GT1-2087) .....	31
Installing the Ladder Bracket (GT1-2447-L and GT1-2447-R) .....	32
Installing the Planks at Jack Pole Locations .....	33
Outside Catwalk Walk Surface .....	35
<b>Chapter 5 23'-4" Inside Catwalk Installation Instructions .....</b>	<b>38</b>
Installing the Z-Clips (GT1-2036) .....	38
Installing the Catwalk Support Clip (GT1-2040-BS) .....	39
Installing the Outer Toe Board (GT1-2660) .....	40
Installing the Planks (GT3-1669) to the Outer Toe Board (GT1-2660) .....	41
Installing the Knee Support (GT1-2039-BS) .....	43
Installing the Inner Toe Board (GT1-2661) and Catwalk Vertical Support (GT1-2037-BS) .....	44
Installing the Handrail (GT1-2658-23I) .....	45
Inside Catwalk Walk Surface .....	46
<b>Chapter 6 23'-4" Offset and Roof Hatch Platform Installation Instructions .....</b>	<b>48</b>
Installing the Z-Clips (GT1-2036) .....	48
Installing the Swing Gate Stop (GT1-2045) .....	50
Installing the Catwalk Support Clip (GT1-2040-BS) .....	51
Installing the Inner Toe Board (GT1-2657) .....	53
Installing the Plank (GT3-1669) to the Inner Toe Board (GT1-2657) .....	55
Installing the Plank Support (GT1-2086) .....	58
Installing the Knee Support (GT1-2039-BS) .....	59
Installing the Outer Toe Board (GT1-2656) and Catwalk Vertical Support (GT1-2037-BS) .....	60
Installing the Long Handrails (GT1-2658-23O) .....	61
Installing the Platform End Handrails (GT1-2044) and Platform End Toe Board (GT1-2095) .....	62
Installing the Swing Gate Support (GT1-2087) .....	64
Installing the Safety Gate Assembly (LDR-5218) with Swing Gate Support (GT1-2087) .....	65
Installing the Braces (Only for Roof Hatch Platform) .....	67

# Table of Contents

---

<b>Chapter 7 Ladder Assembly</b> .....	<b>70</b>
Ladder Part Numbers .....	70
Installing the Ladder Assembly at Eave .....	70
Installing the Ladder Braces .....	72
Installing the End Cap to the Ladder .....	73
Installing the Ladder Assembly to the Dryer .....	74
Installing the Ladder Assembly at the Base .....	75
Installing the Fall Protection System .....	76
<b>Chapter 8 Parts List</b> .....	<b>77</b>
23'-4" Outside Fan Style Catwalk (GT4-1648-23F) .....	78
23'-4" Inside Fan Style Catwalk (GT4-1650-23F) .....	82
23'-4" Offset Fan Style Platform (GT4-1649-23F) .....	86
23'-4" Roof Hatch Fan Style Platform (GT4-1651-23F) .....	90
<b>Chapter 9 Warranty</b> .....	<b>95</b>

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

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 Symbols 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.



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.**



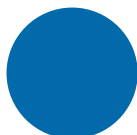
This symbol is used to address practices not related to personal injury.



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

- 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.



ST-0002-1



### Maintain Equipment and Work Area

- Understand service procedures before doing work. Keep area clean and dry.
- Never service equipment while it is operating. Keep hands, feet, and clothing away from moving parts
- Keep your equipment in proper working condition. Replace worn or broken parts immediately.



ST-0003-1

### Stay Clear of Hoisted Equipment

- Always use proper lifting or hoisting equipment when assembling or disassembling equipment.
- Do not walk or stand under hoisted equipment.
- Always use sturdy and stable supports when needed for installation. Not following these safety precautions creates the risk of falling equipment, which can crush personnel and cause serious injury or death.



ST-0047-1

### Install and Operate Electrical Equipment Properly

- Electrical controls must be installed by a qualified electrician and must meet the standards set by applicable local codes (National Electrical Code for the US, Canadian Electric Code, or EN60204 along with applicable European Directives for Europe).
- Lock-out power source before making adjustments, cleaning, or maintaining equipment.
- Make sure all equipment and bins are properly grounded.



ST-0075-1

### Sharp Edge Hazard

- This product has sharp edges, which can cause serious injury.
- To avoid injury, handle sharp edges with caution and always use proper protective clothing and equipment



ST-0036-2

## 2. Safety

### Fall Hazard

- Keep access door closed while on a platform to avoid falls.
- Always use proper personal protective equipment and proper clothing when using equipment. Failure to follow safety precautions can result in severe injury or death.



ST-0042-2

### Fall Hazard

- Ladders, stairways and platforms are for use by competent and trained personnel only. Do not allow children or other unauthorized persons to have access to the equipment.
- Access to the equipment must be restricted by the use of security fencing and lockable gates.
- Lower sections of ladders must be fitted with a lockable safety gate to prevent unauthorized access.
- Make sure that hot surfaces have had adequate time to cool before working on or in the equipment.
- Lock out and tag out power supplies and fuel supplies to all equipment.
- Do not attach lifting equipment to ladders or platforms.
- Do not go outside of the safety rails provided on elevated platforms.
- Do not work at heights during high winds, rain, snow, or ice storms.



ST-0056-1

### Platform Load Limit

- The platform load limit is 500 LBS (2.25 kN). Do not exceed this weight.
- Excessive load will damage the platform and cause platform to fall. Severe injury or death will result.



ST-0044-2

### Confined Space Hazards and Entry Procedures

- Note that the interior of this equipment is considered a confined space. Maintenance of this equipment can require access to the confined space.
- Access doors must be shut and locked except when access is required.
- Doors giving access to dangerous equipment must be safety interlocked.
- The following entry procedures must be followed:
  - Be aware of all possible hazards present inside the confined space and wear personal protective equipment (PPE) as needed.
  - Complete a permit to work and follow all permit required confined space entry procedures defined by the site manager.
  - Make sure that the area has been purged of any hazardous products or gases. Check the atmosphere for harmful gases or vapors with a suitable gas analyzer and make sure levels are safe before entering.
  - Do not smoke or use naked flames.
  - Lock out and tag out power supplies and fuel supplies to all equipment.
  - Do not work alone. Work in teams of at least three so that help is immediately available in the event of an emergency.
  - Confirm that all personnel have safely exited the equipment and tools have been recovered once work is complete.



ST-0055-1



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

 <h1 style="margin: 0;">DANGER</h1>	
	<p><b>DO NOT EXCEED PLATFORM LOAD LIMIT</b></p> <p><b>Load limit = 1000 LBS. (4.50 kN)</b></p> <p>Excessive load will damage platform and cause platform to fall.</p> <p>Injury or death will result.</p> <p style="text-align: right; font-size: small;">DC-2188</p>
<p><b>DC-2188</b></p> <p>Background: White Colors: Black, Safety Red (PMS 485C), Safety Yellow (PMS 109C) Size: 3.0" x 7.0"</p>	

---

# NOTES



# **23'-4" Outside Fan Style Catwalk Assembly Instructions (GT4-1648-23F)**

## 4. 23'-4" Outside Catwalk Installation Instructions

### Installing the Z-Clips (GT1-2036)

1. Bolt Z-clip (GT1-2036) to all vertical channels (801-1444-0). The Z-clip can be installed on each vertical channel as wall sheets are installed using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 4A and Figure 4B.)

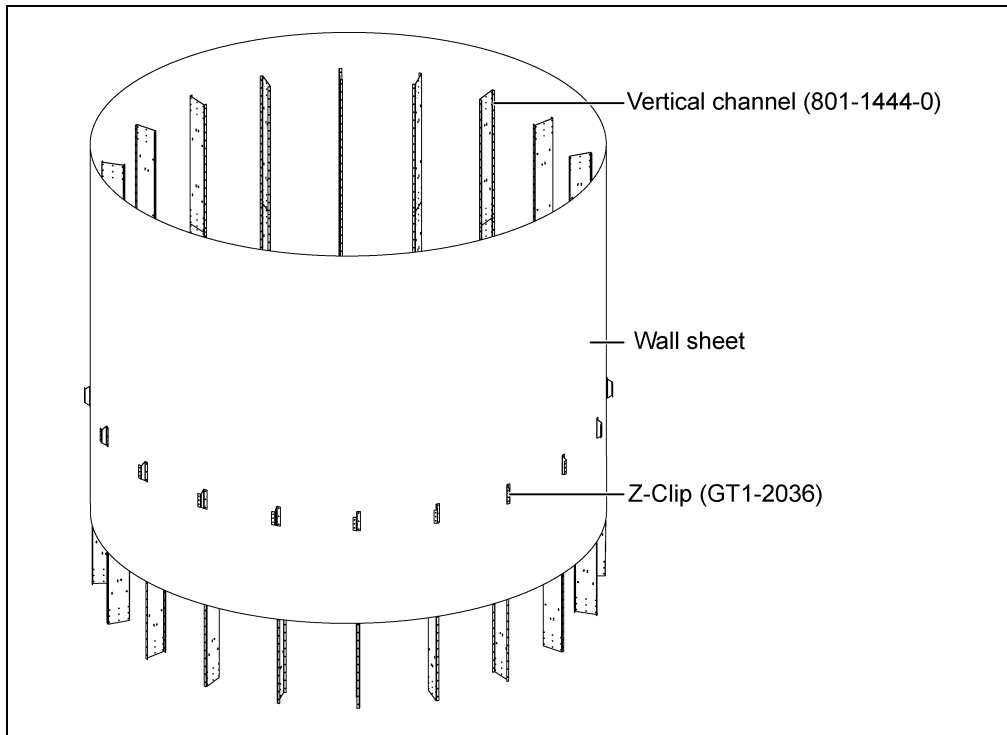


Figure 4A

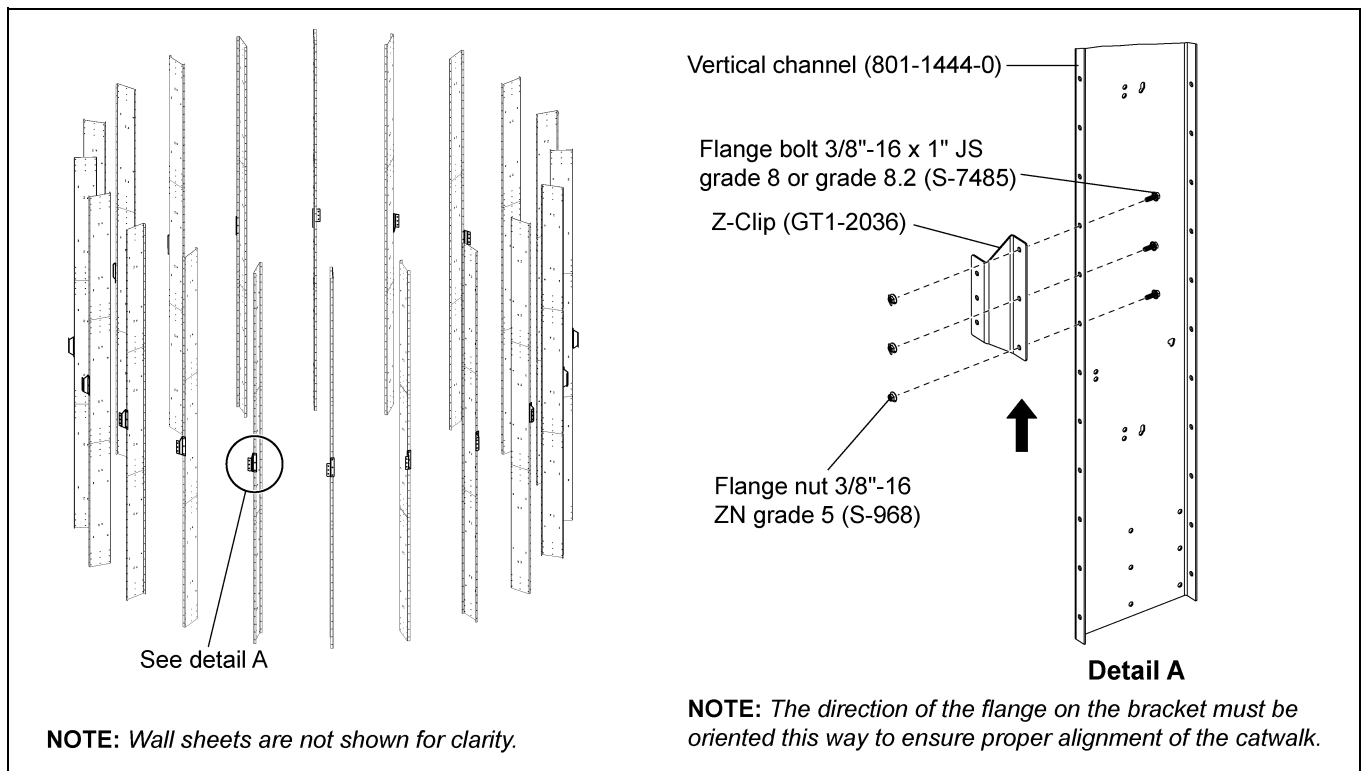


Figure 4B



## Installing the Swing Gate Stop (GT1-2045)

1. Identify the ladder opening vertical channel and install the swing gate stop (GT1-2045) to the vertical channel (801-1444-0) as wall sheets are installed using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 4C and Figure 4D.)

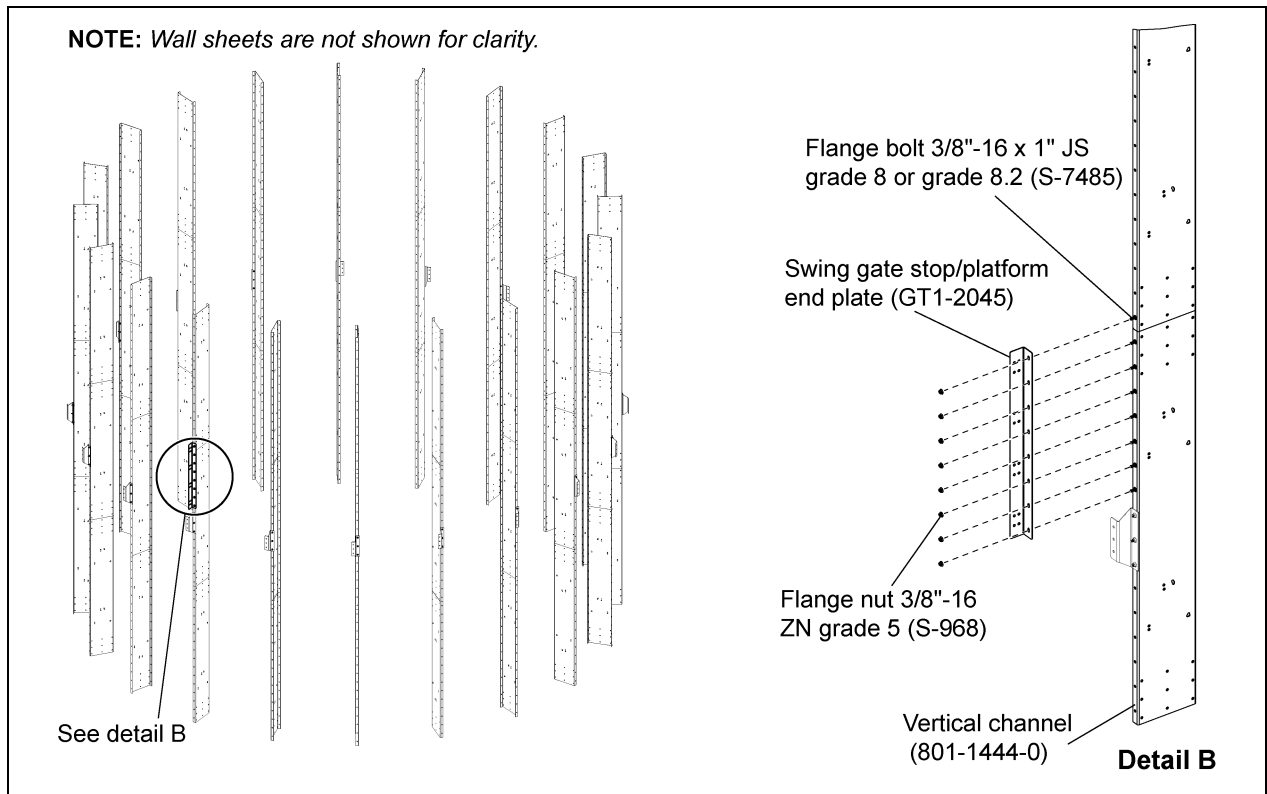


Figure 4C

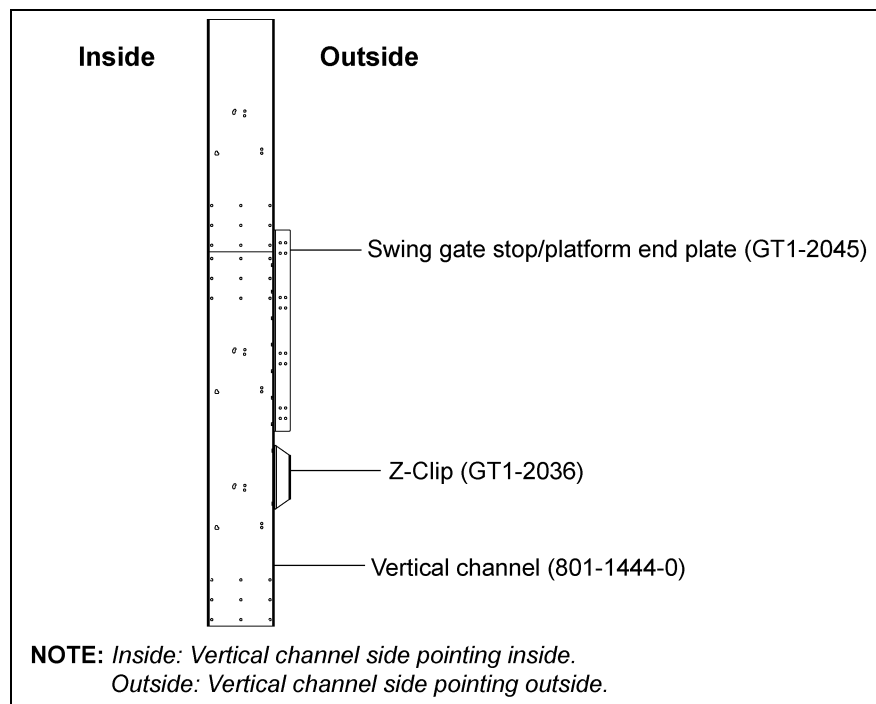


Figure 4D

## 4. 23'-4" Outside Catwalk Installation Instructions

### Installing the Catwalk Support Clip (GT1-2040-BS)

1. Install catwalk support clips (GT1-2040-BS) to all vertical channels (801-1444-0). Support clip can be installed on each vertical channel as the wall sheets are installed using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 4E.)
2. The distance between the Z-clip and support clip for 23'-4" outside catwalk is 31-1/2". (See Figure 4F.)

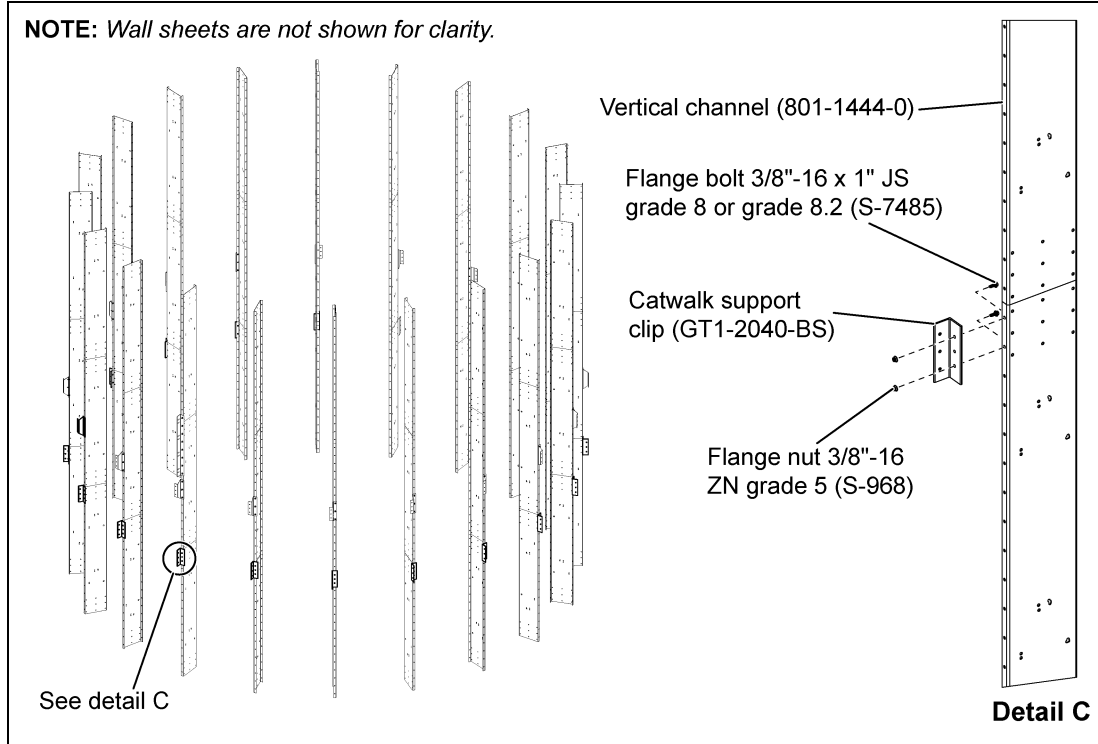


Figure 4E

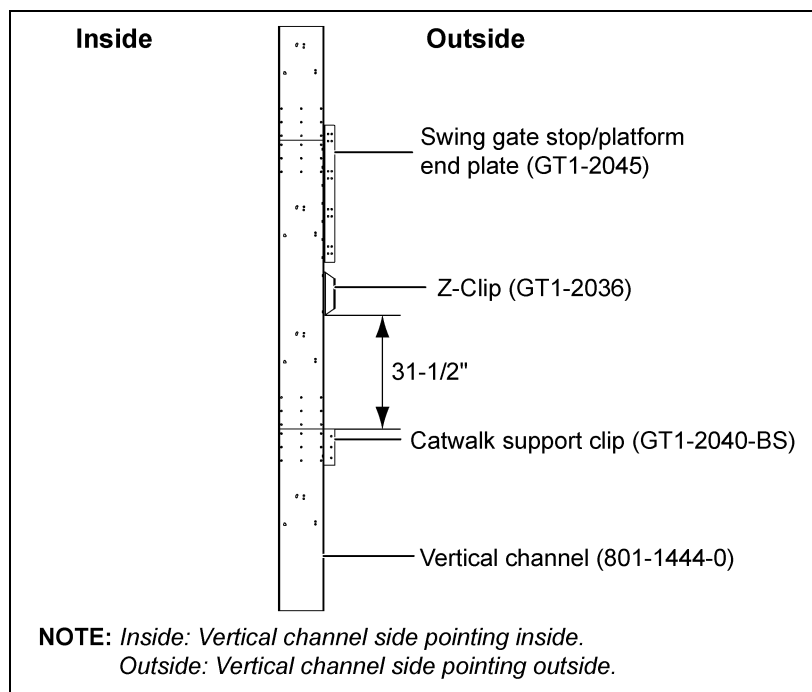


Figure 4F

## Installing the Inner Toe Board (GT1-2657) and Ladder Opening Toe Board (GT1-2659)

1. Install the inner toe board (GT1-2657) to the Z-clips (GT1-2036). All toe boards should be installed between the Z-clips using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 4G.)
2. At the ladder location, install the ladder opening toe board (GT1-2659) to Z-clips using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) 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 20.)

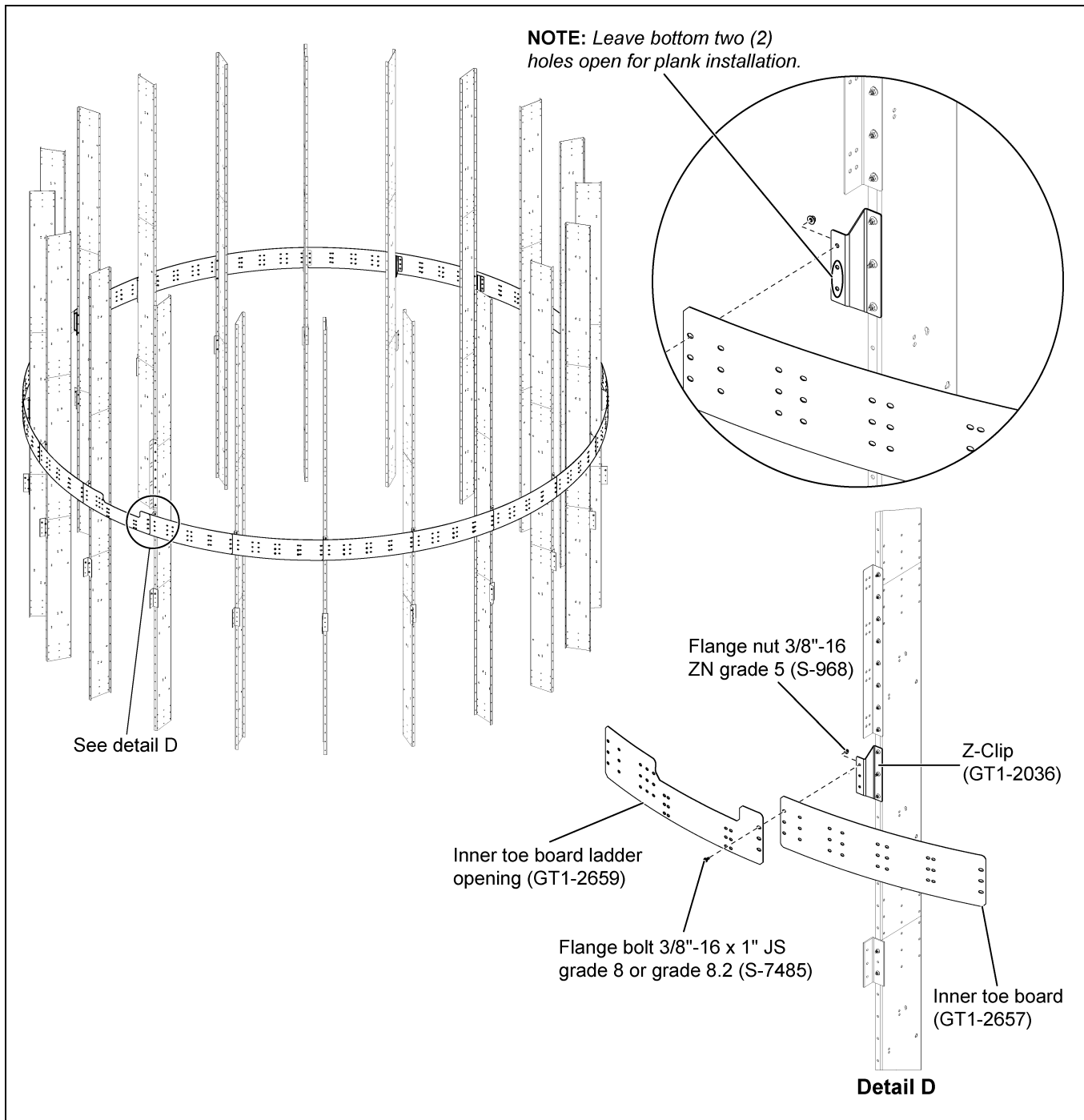
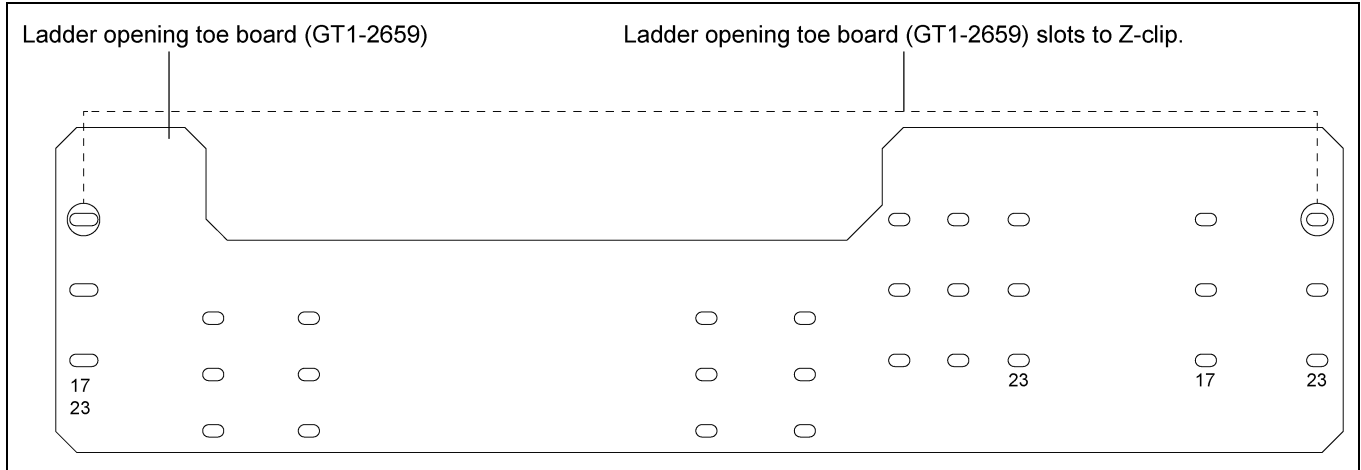


Figure 4G

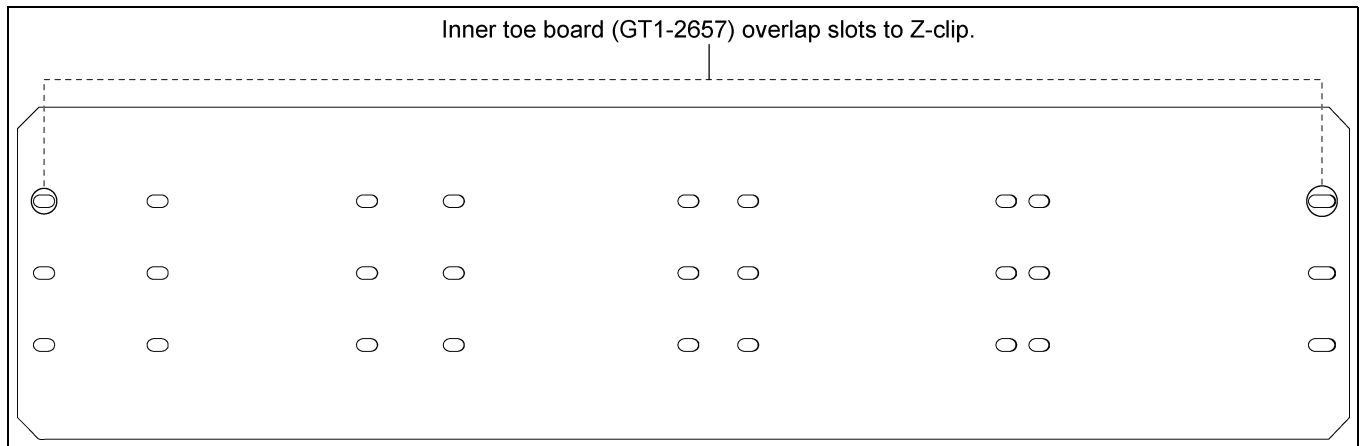
## 4. 23'-4" Outside Catwalk Installation Instructions

### Installing the Inner Toe Board (GT1-2657) and Ladder Opening Toe Board (GT1-2659) (Continued)



**Figure 4H** 23'-4" Ladder Opening Toe Board (GT1-2659)

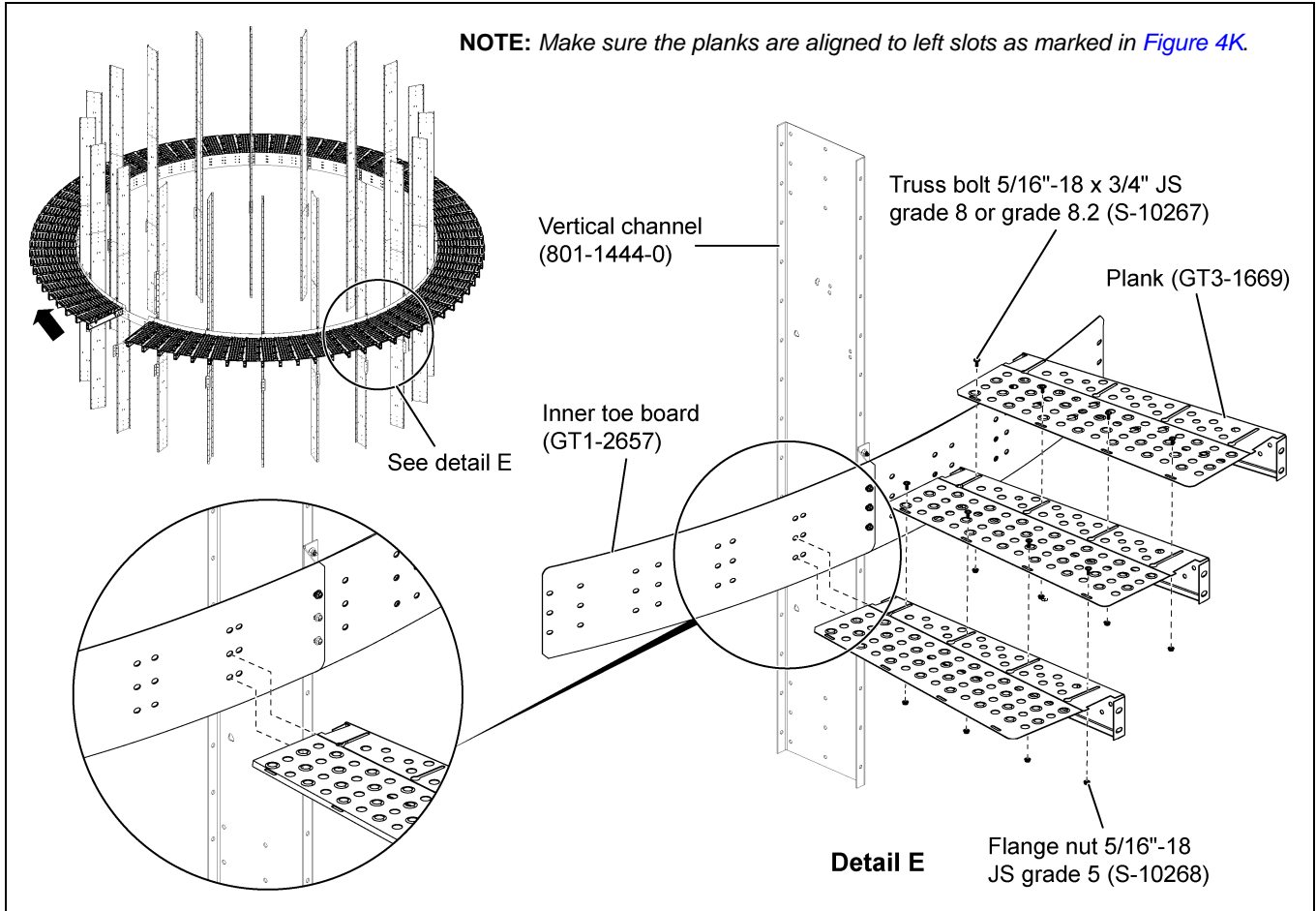
3. Inner toe board is arranged with overlap slots on each side. Install 23'-4" inner toe boards (GT1-2657) to corresponding slots as shown in [Figure 4I](#).



**Figure 4I** 23'-4" Inner Toe Board (GT1-2657)

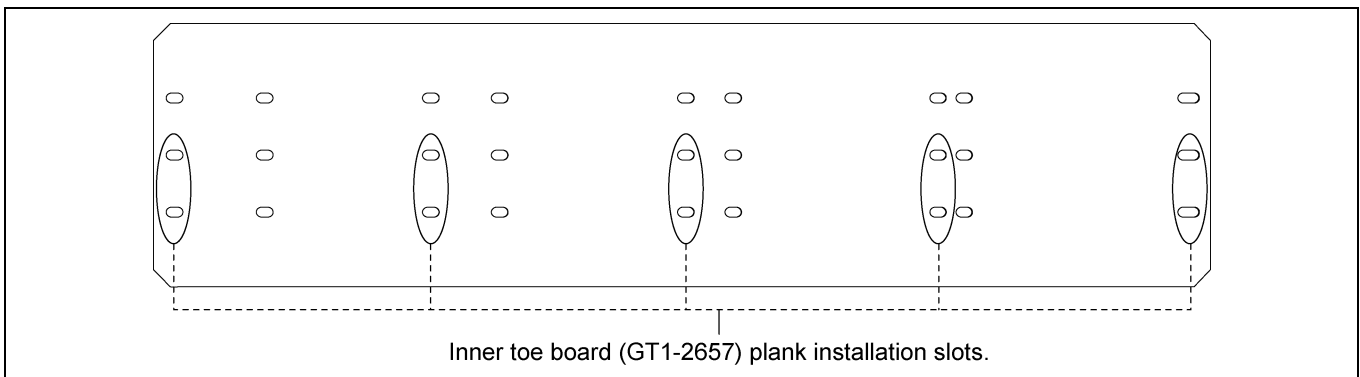
## Installing the Plank (GT3-1669) to the Inner Toe Board (GT1-2657)

1. Install planks (GT3-1669) around the dryer on inner toe board (GT1-2657) starting from ladder opening toe board (GT1-2659) as shown by arrow in the [Figure 4J](#).
2. Planks (GT3-1669) are installed to bottom two (2) holes of the inner toe board (GT1-2657) using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968).  
(See [Figure 4J](#).)



**Figure 4J**

3. Inner toe board (GT1-2657) is arranged with many slots to install plank. Install planks to corresponding slots as shown in [Figure 4K](#).



**Figure 4K** 23'-4" Inner Toe Board (GT1-2657)

## 4. 23'-4" Outside Catwalk Installation Instructions

### Installing the Planks (GT3-1669) to the Inner Toe Board (GT1-2657) (Continued)

4. Install all the planks (GT3-1669) continuously around the dryer except at the jack pole locations.  
(See Figure 4L and Figure 4M.)

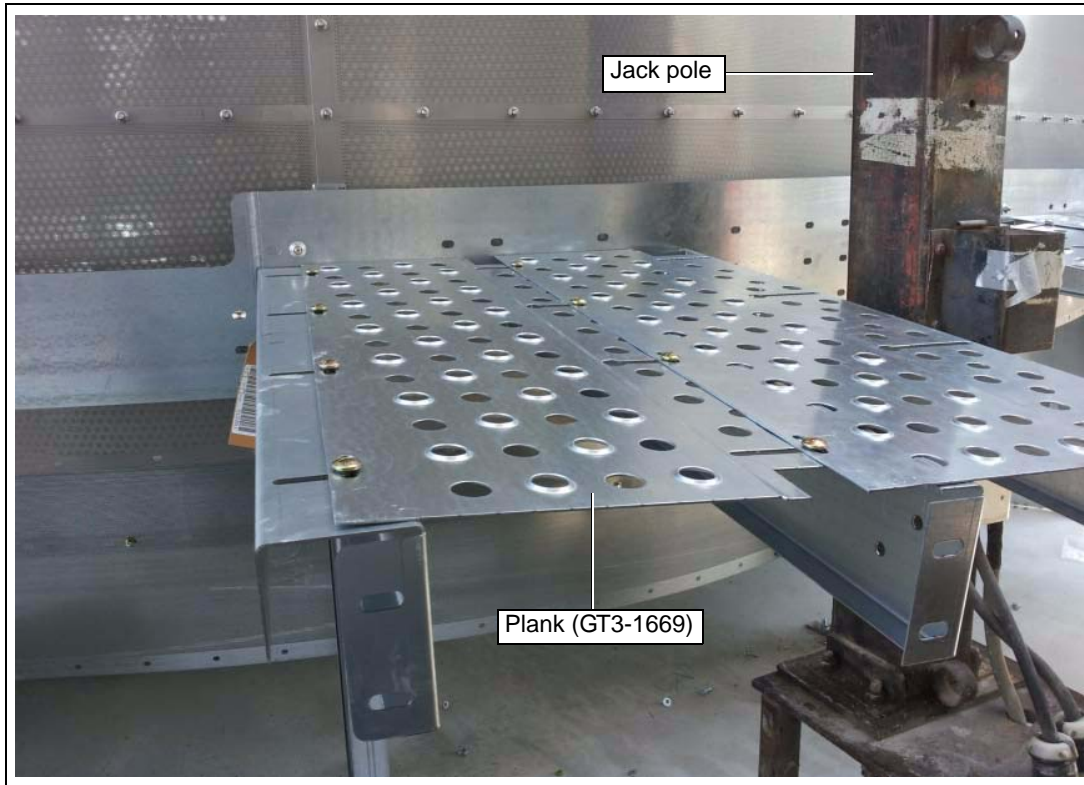


Figure 4L

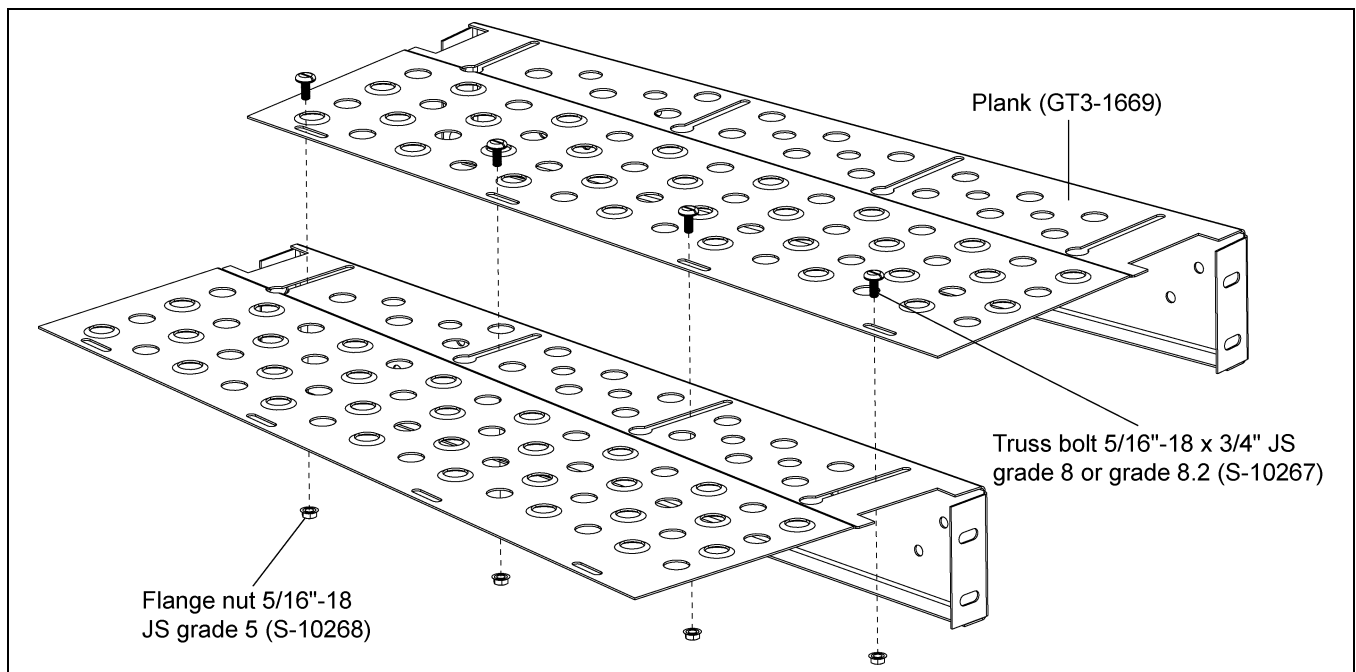


Figure 4M

## Installing the Planks (GT3-1669) to the Inner Toe Board (GT1-2657) (Continued)

5. Each plank should be overlapped at the edges and bolted with 5/16"-18 x 3/4" JS grade 8 or grade 8.2 bolts (S-10267) and 5/16"-18 JS grade 5 nuts (S-10268). (See [Figure 4N.](#))

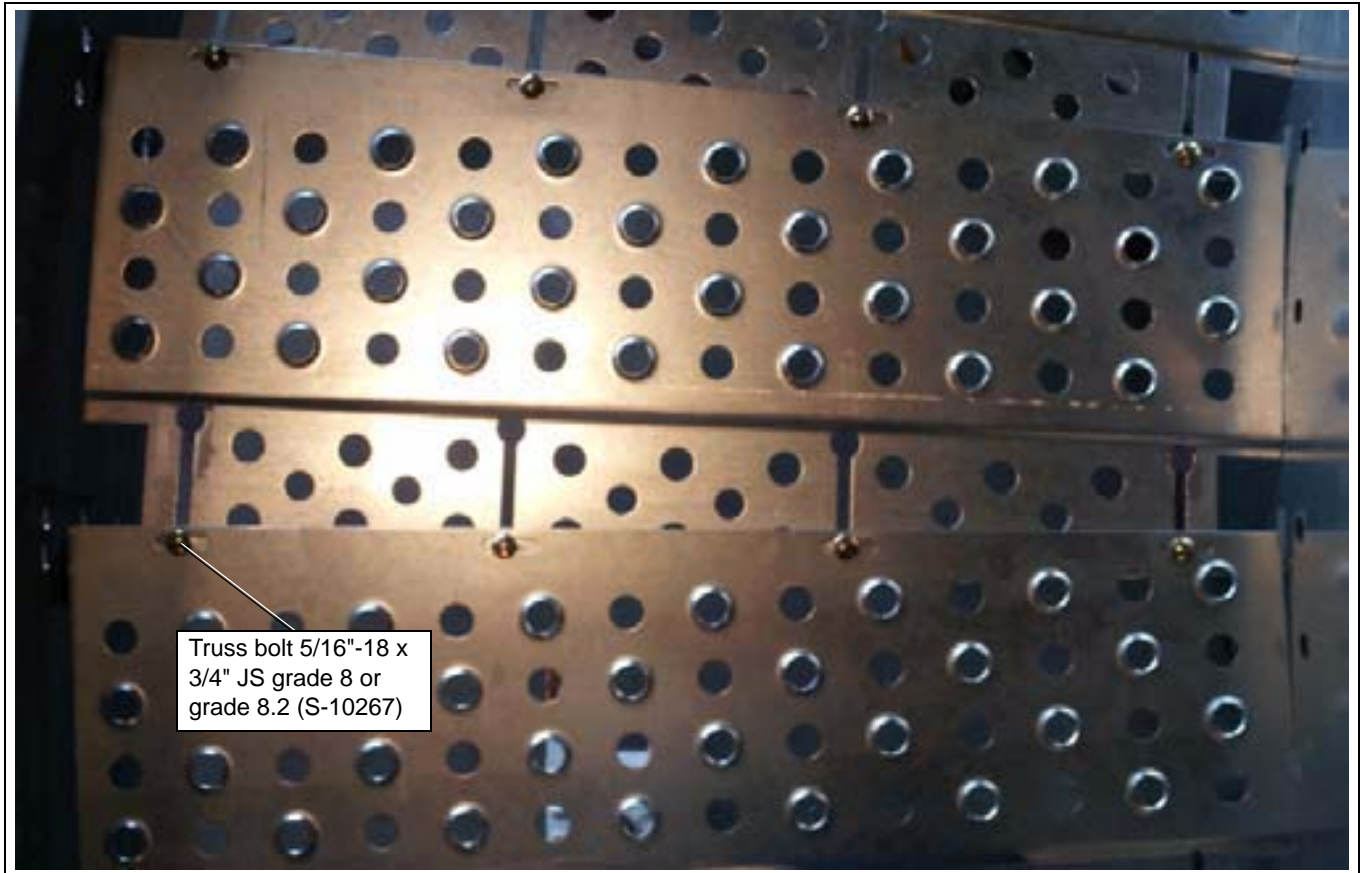


Figure 4N

## 4. 23'-4" Outside Catwalk Installation Instructions

### Installing the Plank Support (GT1-2086)

1. Once the planks are installed, install the plank support (GT1-2086) to the last plank (GT3-1669) using 5/16"-18 x 3/4" JS grade 8 or grade 8.2 bolts (S-10267) and 5/16"-18 JS grade 5 nuts (S-10268) and to the toe board (GT1-2657) using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 40.)

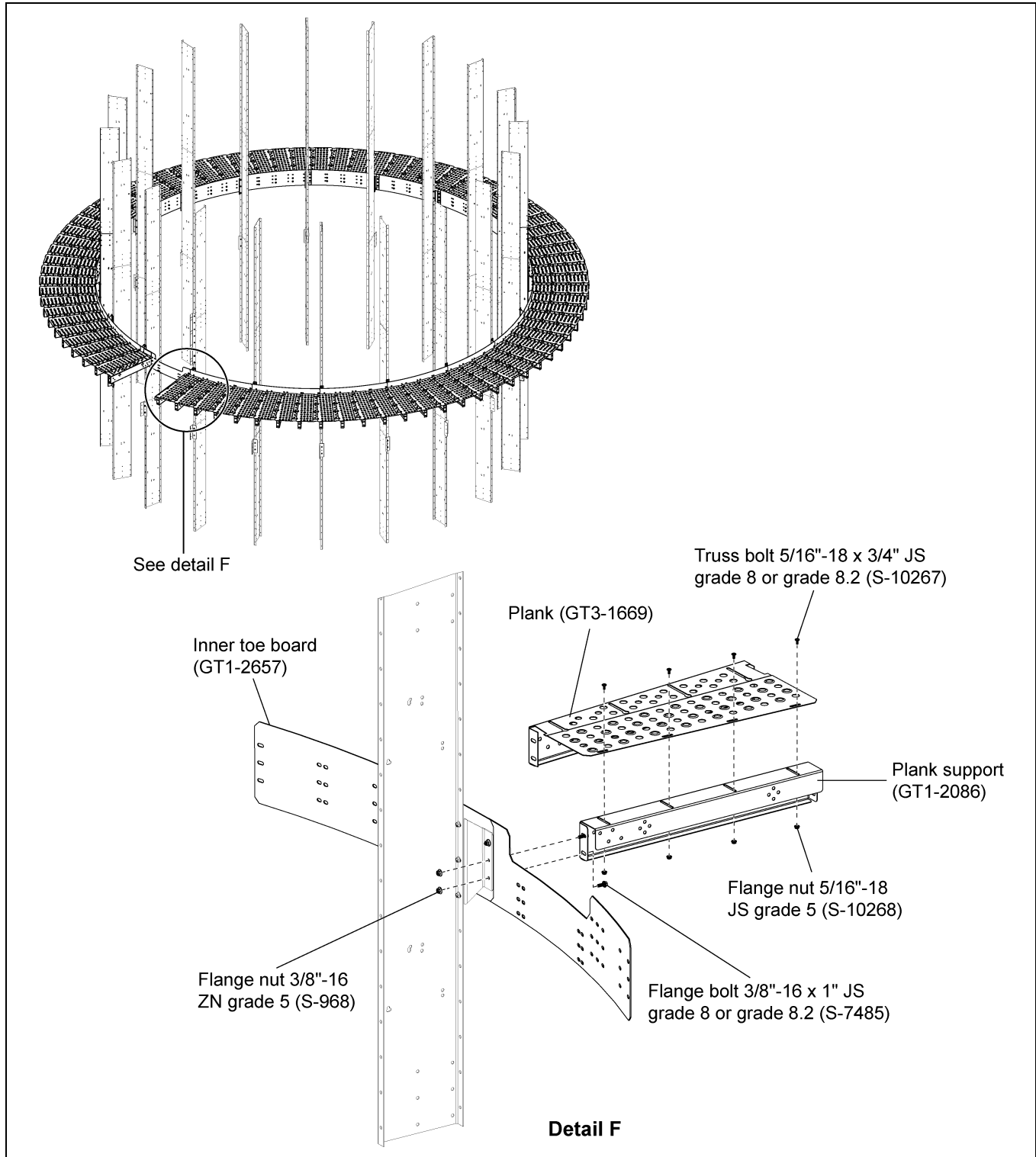


Figure 40



## Installing the 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 (GT3-1669) using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 4P and Figure 4Q.)

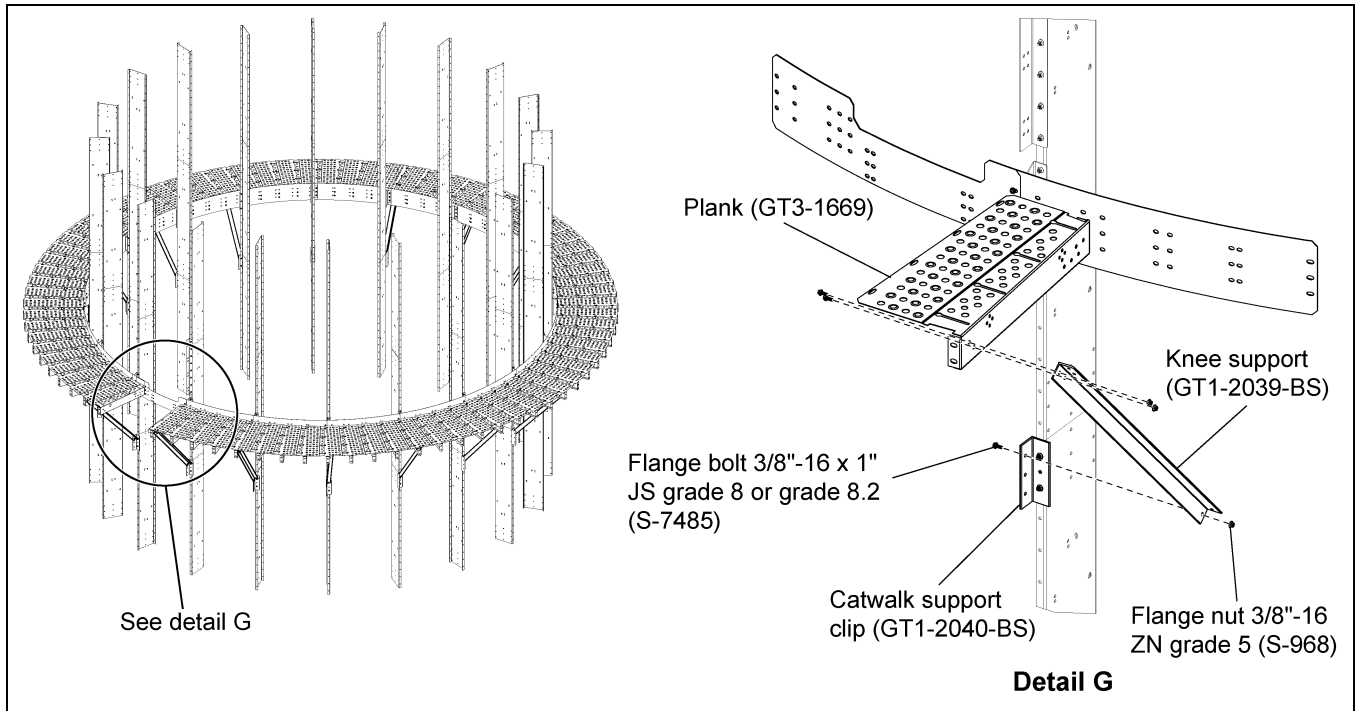


Figure 4P

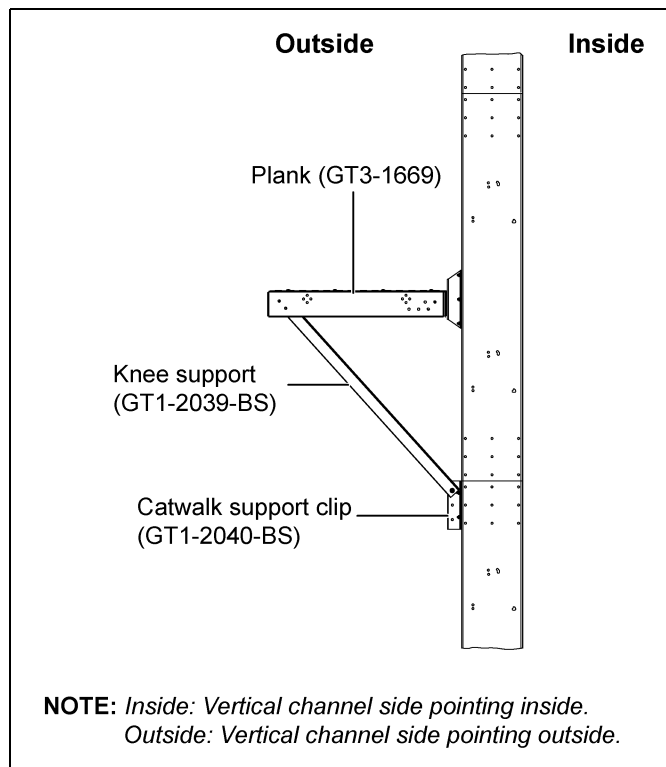


Figure 4Q

## 4. 23'-4" Outside Catwalk Installation Instructions

### Installing the Outer Toe Board (GT1-2656) and Catwalk Vertical Support (GT1-2037-BS)

1. Install all the outer toe boards (GT1-2656) to the planks (GT3-1669). (See Figure 4R.)
2. When installing the outer toe board (GT1-2656) with planks (GT3-1669), install the catwalk vertical support (GT1-2037-BS) simultaneously at proper locations using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 4R and Figure 4T on Page 27.)

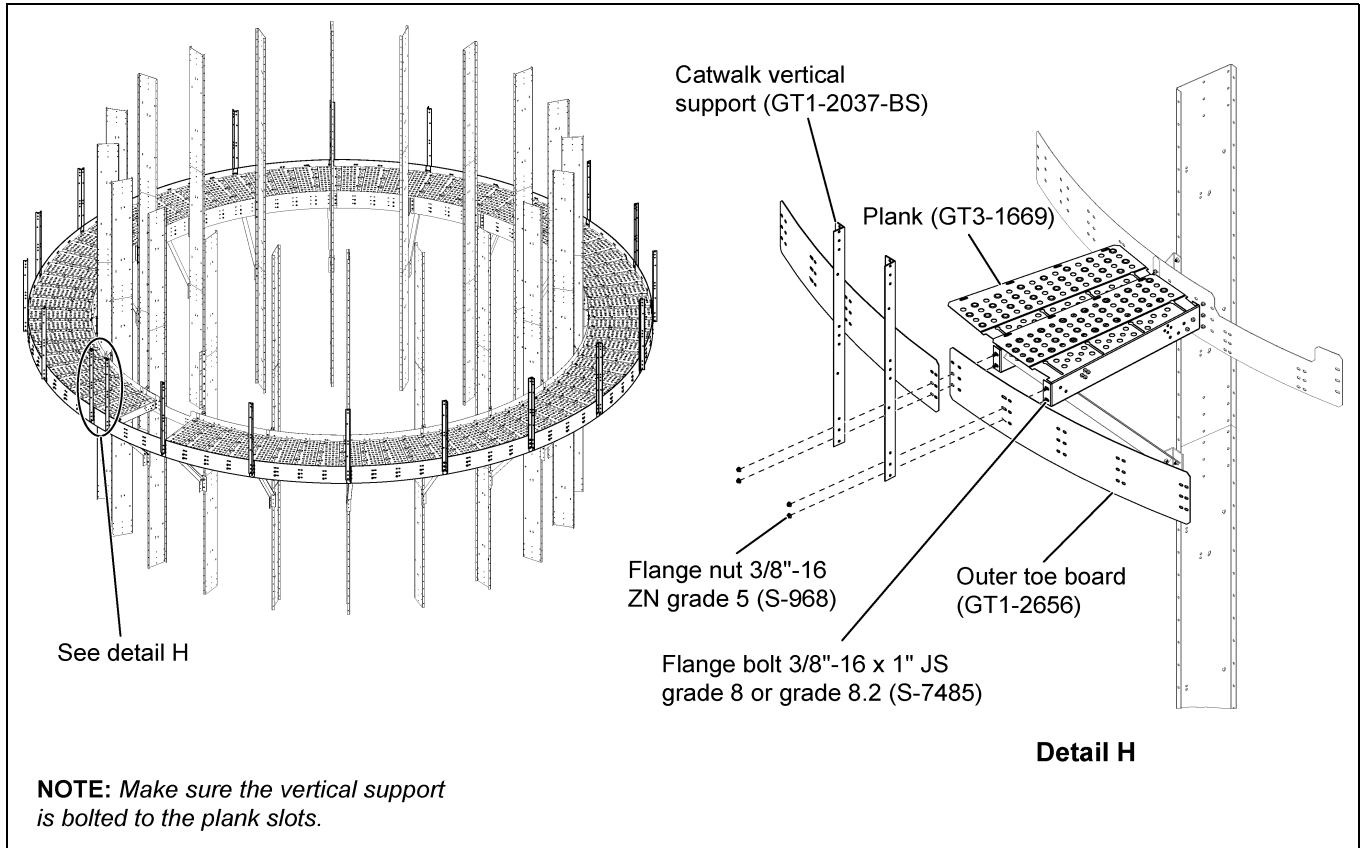


Figure 4R

3. Outer toe board (GT1-2656) is aligned and attached to the planks with the corresponding slots as shown in Figure 4S.

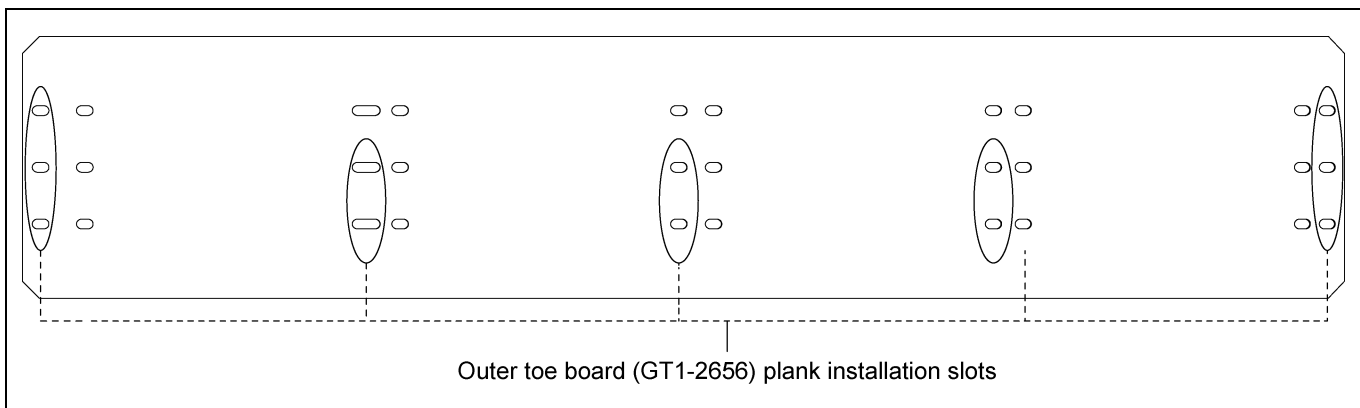


Figure 4S

## Installing the Outer Toe Board (GT1-2656) and Catwalk Vertical Support (GT1-2037-BS) (Continued)

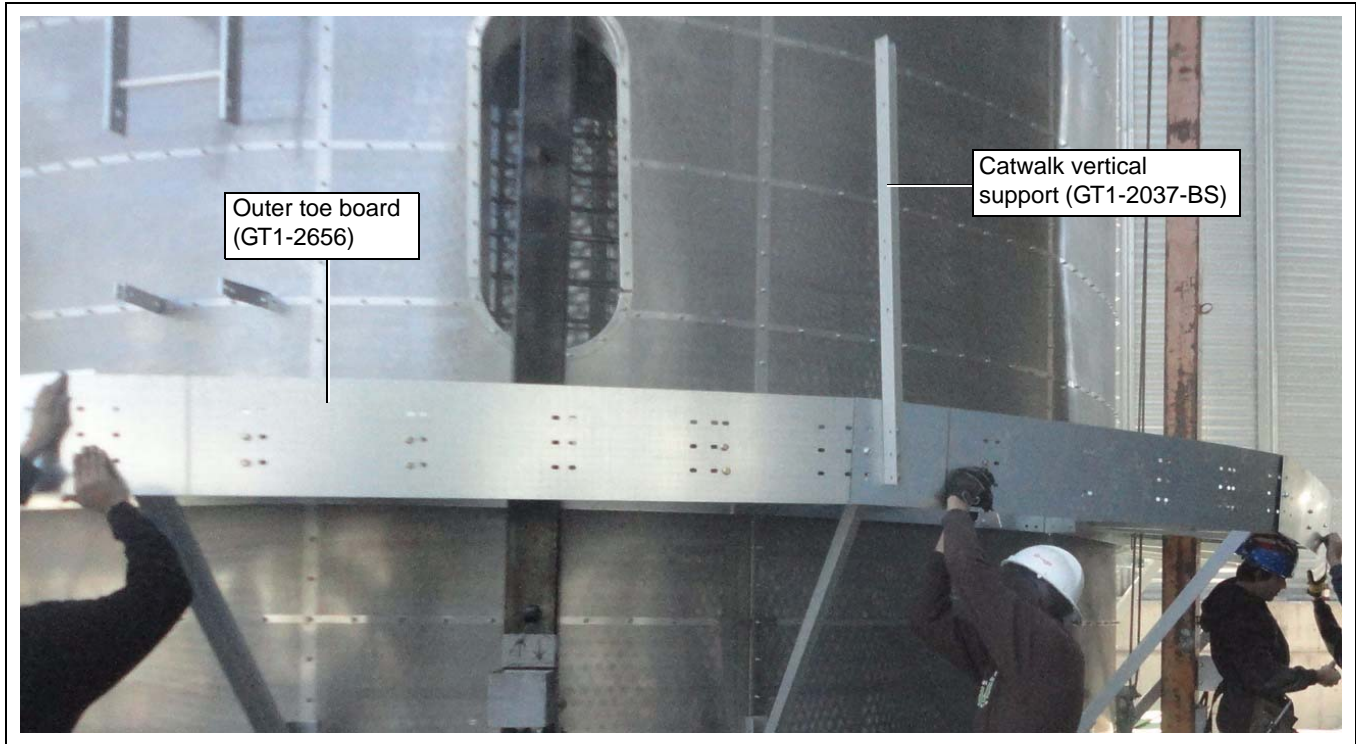


Figure 4T

## 4. 23'-4" Outside Catwalk Installation Instructions

### Installing the Handrails (GT1-2658-230)

1. Install the handrail (GT1-2658-230) to the catwalk vertical support (GT1-2037-BS) using 5/16"-18 ZN U-bolts (S-10171) and 5/16"-18 JS grade 5 nuts (S-10268) to tighten the handrail with vertical post. (See Figure 4U.) (See Page 29.)

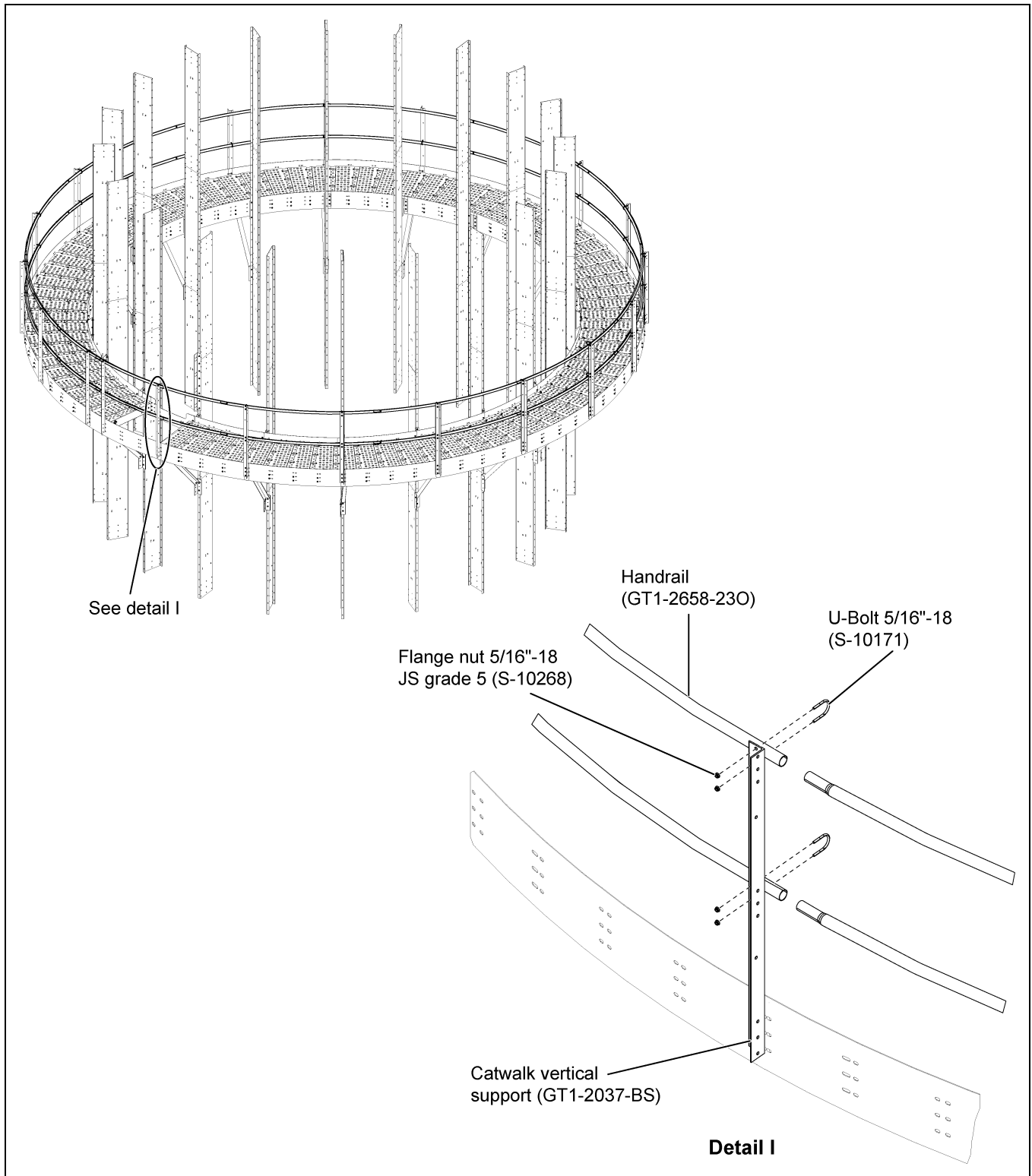


Figure 4U

### Installing the Handrails (GT1-2658-23O) (Continued)



Figure 4V

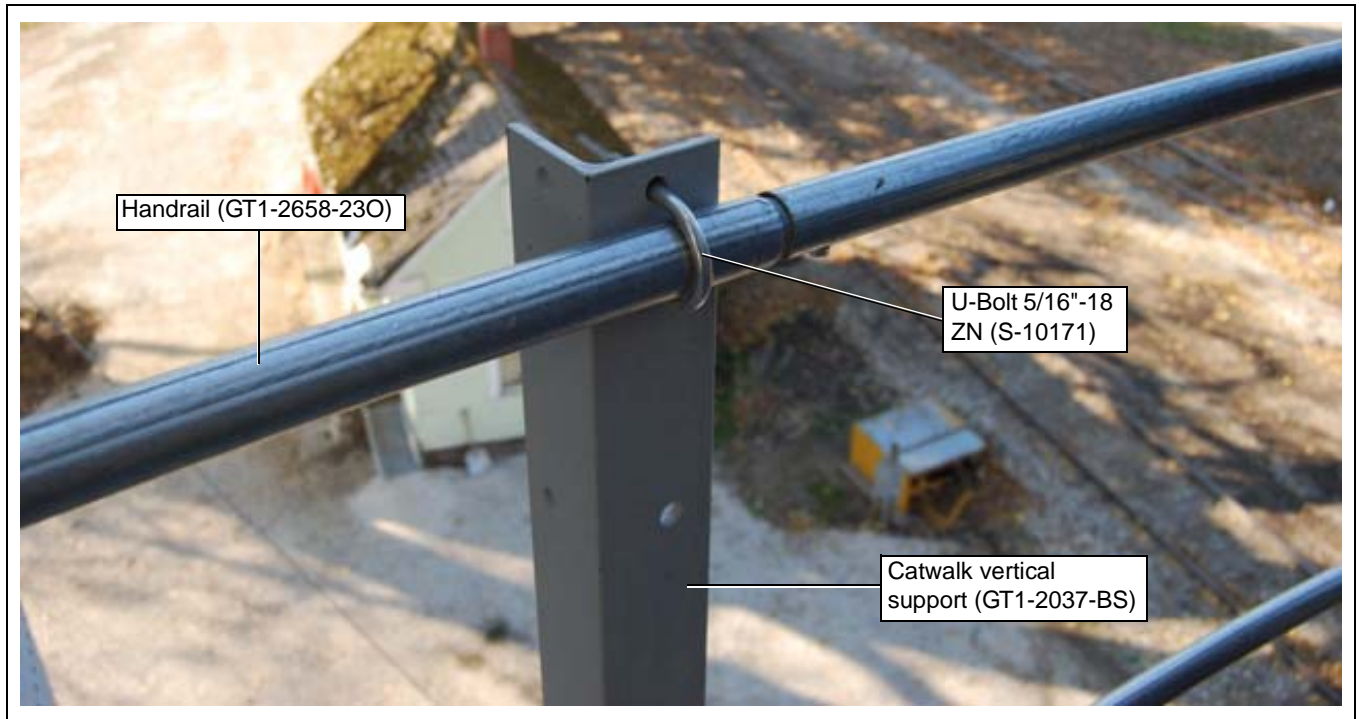


Figure 4W

## 4. 23'-4" Outside Catwalk Installation Instructions

### Installing the Swing Gate Support (GT1-2087)

1. Install the swing gate support (GT1-2087) and the gate end toe board (GT1-2665) to the plank support (GT1-2086) using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See detail J in [Figure 4X](#).)
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" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See detail J in [Figure 4X](#).)
3. On the other side, install the swing gate support (GT1-2087) and the gate end toe board (GT1-2671) to the plank (GT3-1669) using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See detail K in [Figure 4X](#).)
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" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See detail K in [Figure 4X](#).)

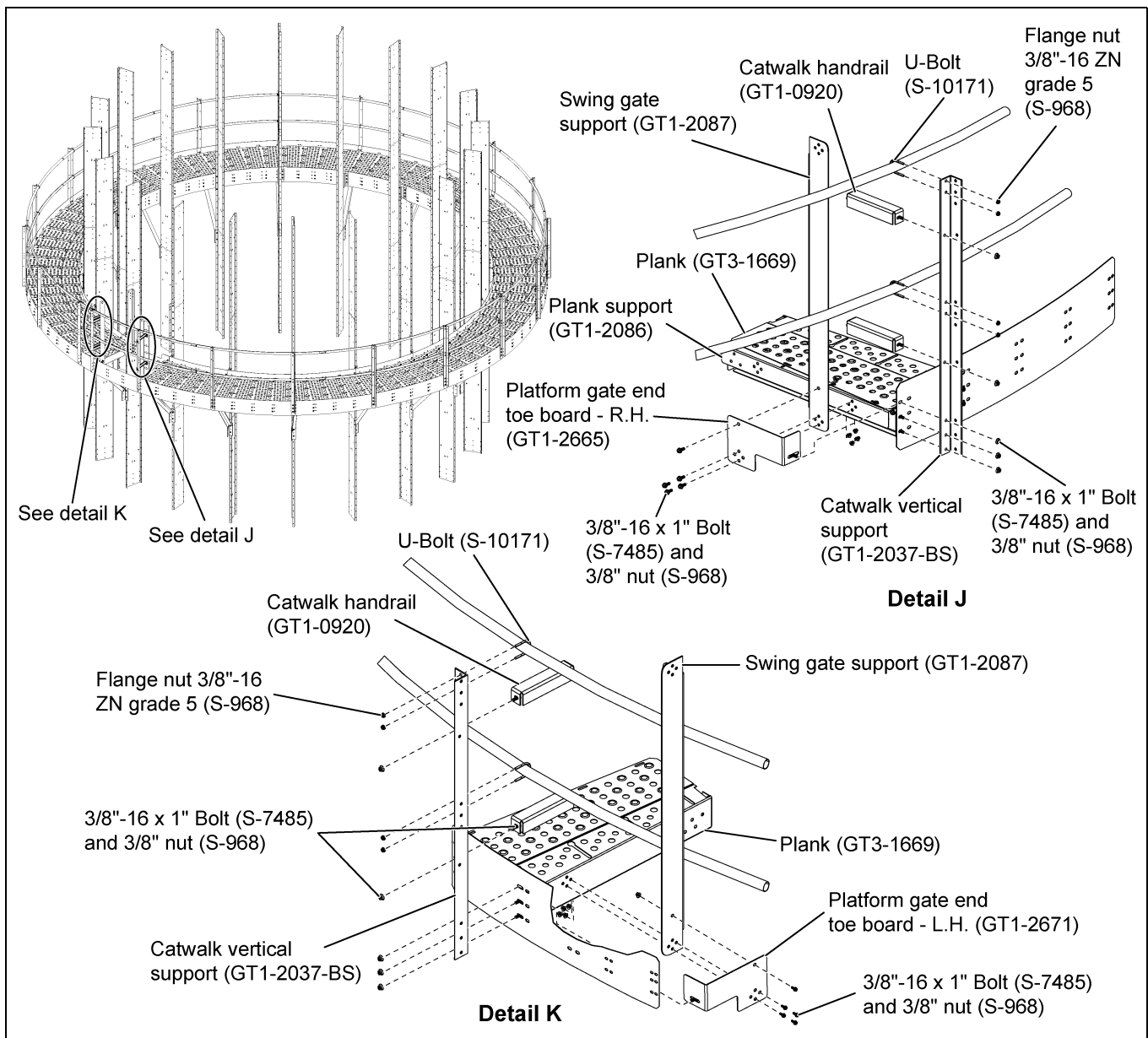


Figure 4X

## Installing the Safety Gate Assembly (LDR-5218) with Swing Gate Support (GT1-2087)

1. Install the ladder safety gate assembly (LDR-5218) to the swing gate support (GT1-2087) using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See detail L in [Figure 4Y](#).)
2. Install the ladder safety gate (LDR-5218) to the swing gate support (GT1-2087) and attach the stop plate (GT1-2091) to the ladder opening toe board (GT1-2659) and the plank (GT3-1669) using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See detail M in [Figure 4Y](#).) The distance between the plank and handrail is 42".

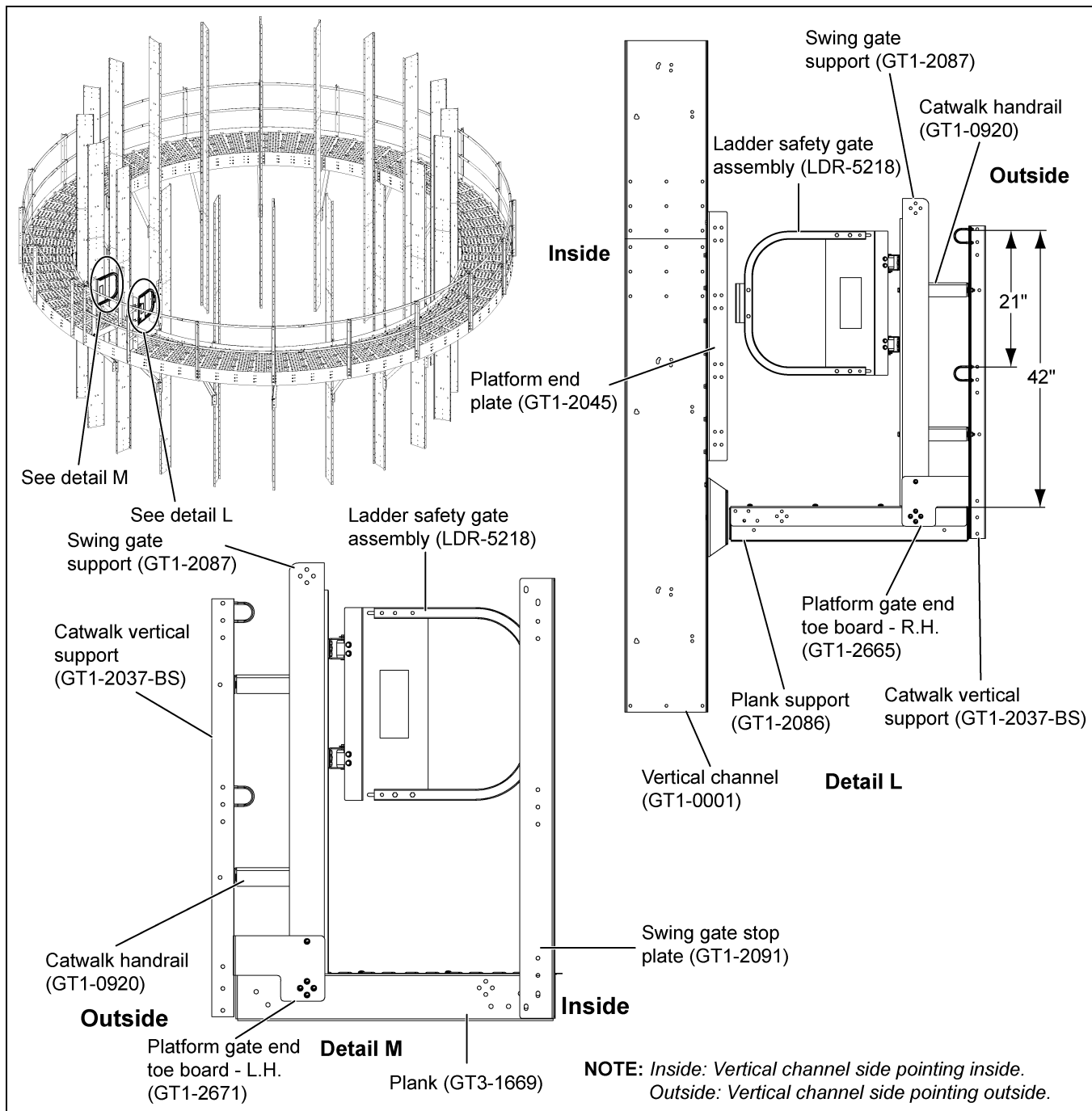


Figure 4Y

## 4. 23'-4" Outside Catwalk Installation Instructions

### Installing the Ladder Bracket (GT1-2447-L and GT1-2447-R)

1. Install the ladder brackets (GT1-2447-L and GT1-2447-R) to the ladder opening toe board (GT1-2659) using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 4Z.)

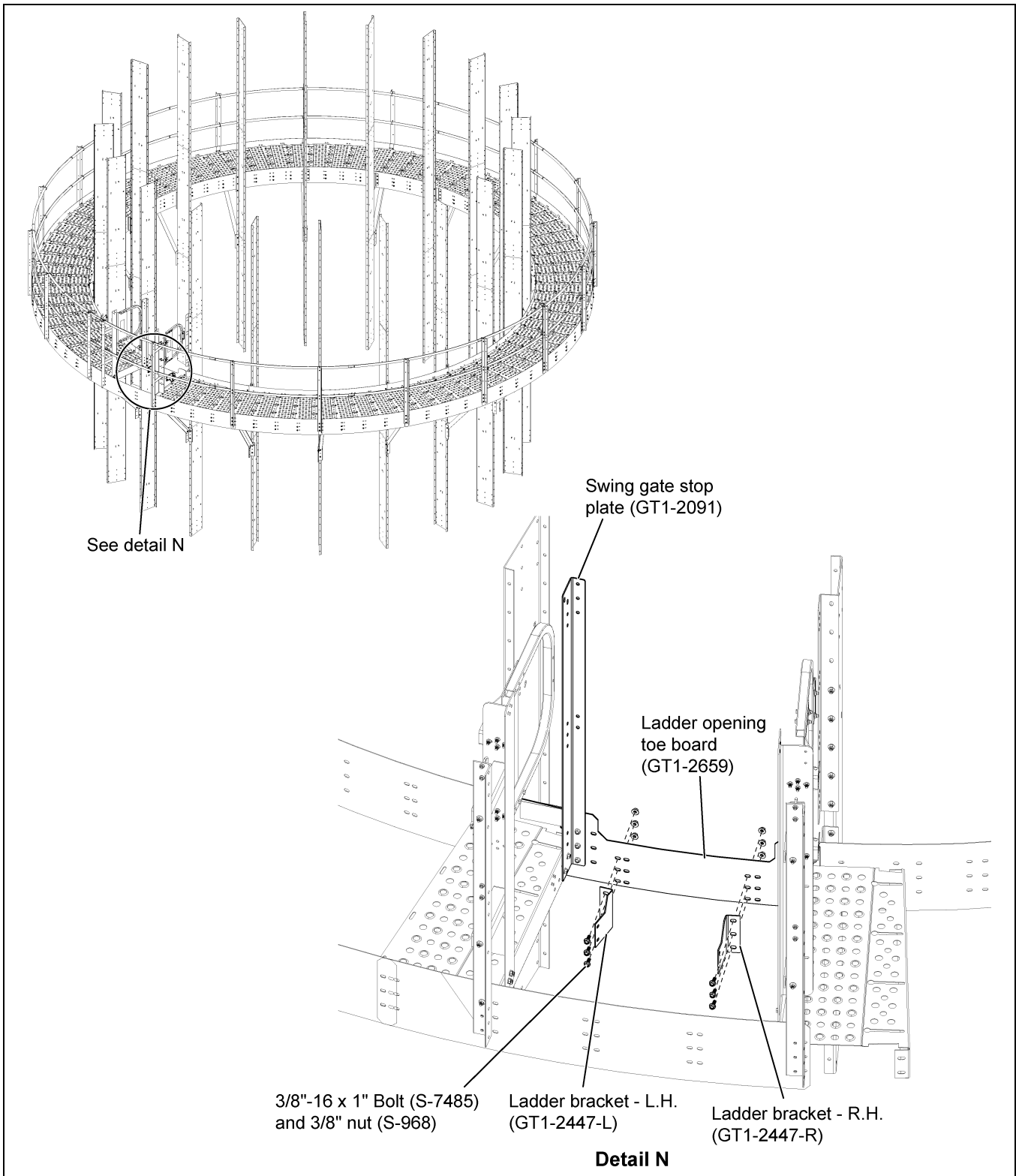


Figure 4Z



### Installing the 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" JS grade 8 or grade 8.2 bolts (S-10267) and retainer nuts (090-1709-6). (See Figure 4AA.)



Figure 4AA

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 4AB.
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-10267) as shown in the detail P of Figure 4AB.

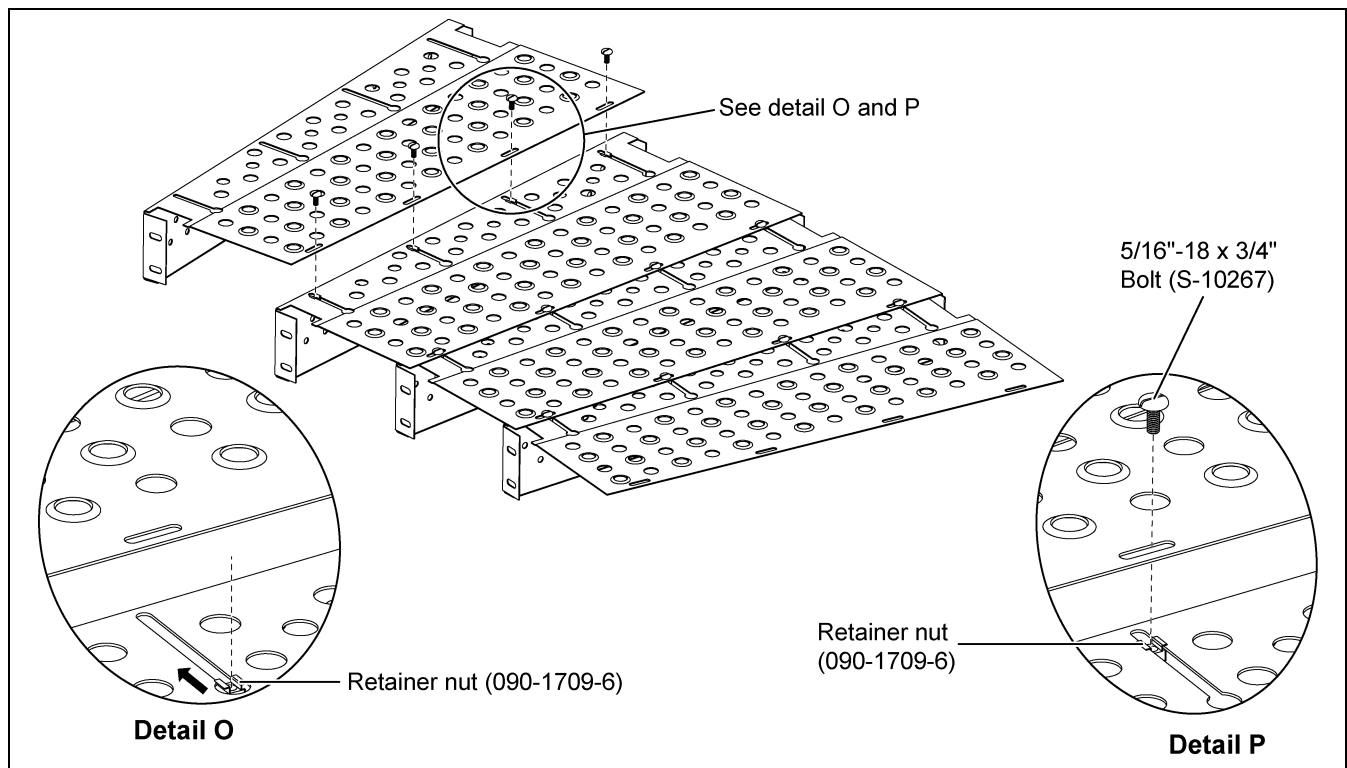


Figure 4AB

## 4. 23'-4" Outside Catwalk Installation Instructions

### Installing the 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" JS grade 8 or grade 8.2 bolt (S-7485) and 3/8"-16 ZN grade 5 nut (S-968). (See Figure 4AC.)
4. Now adjust the plank to align with the slot and bolt from outside the toe board. (See Figure 4AC.)

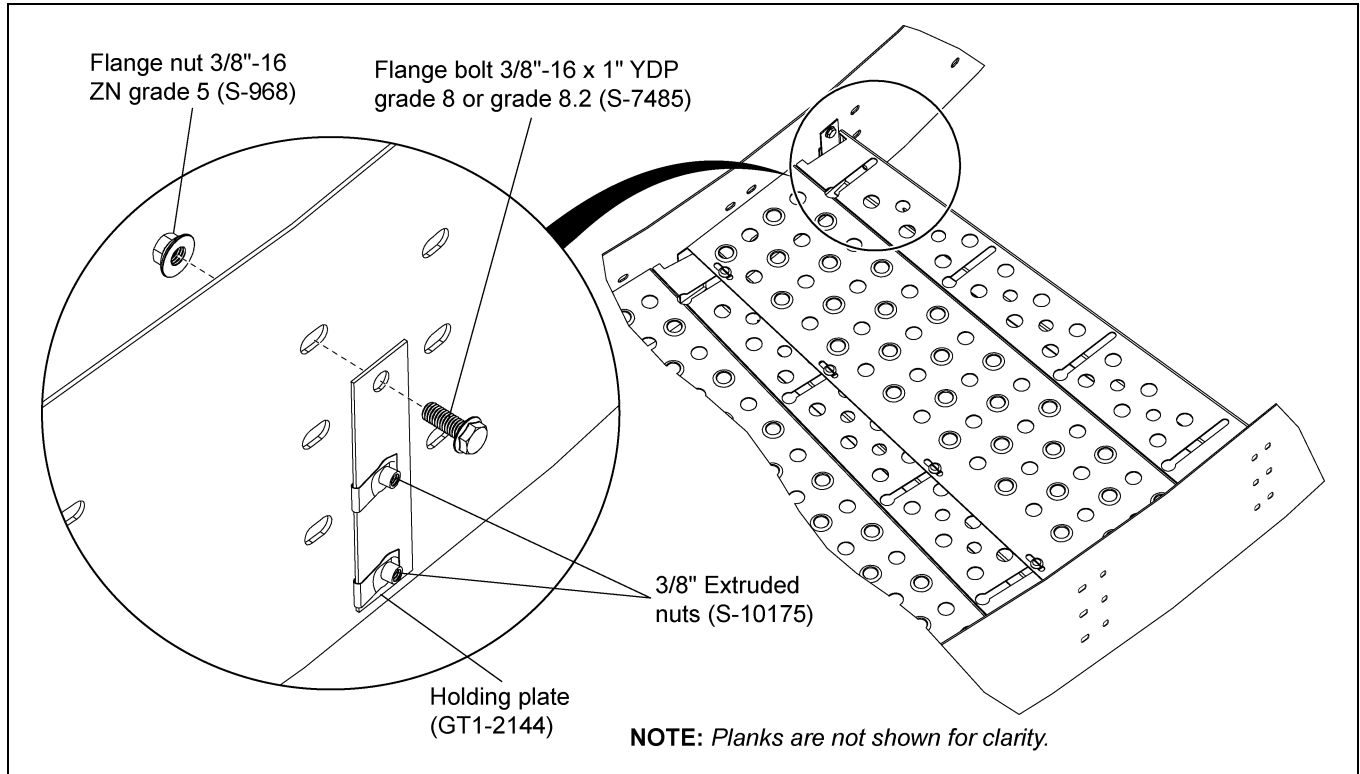


Figure 4AC

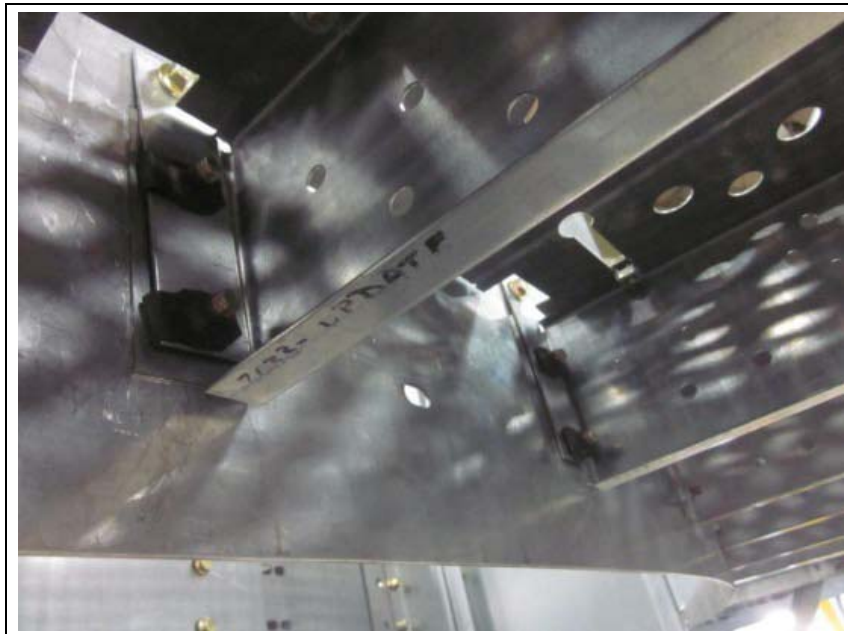


Figure 4AD

## Outside Catwalk Walk Surface

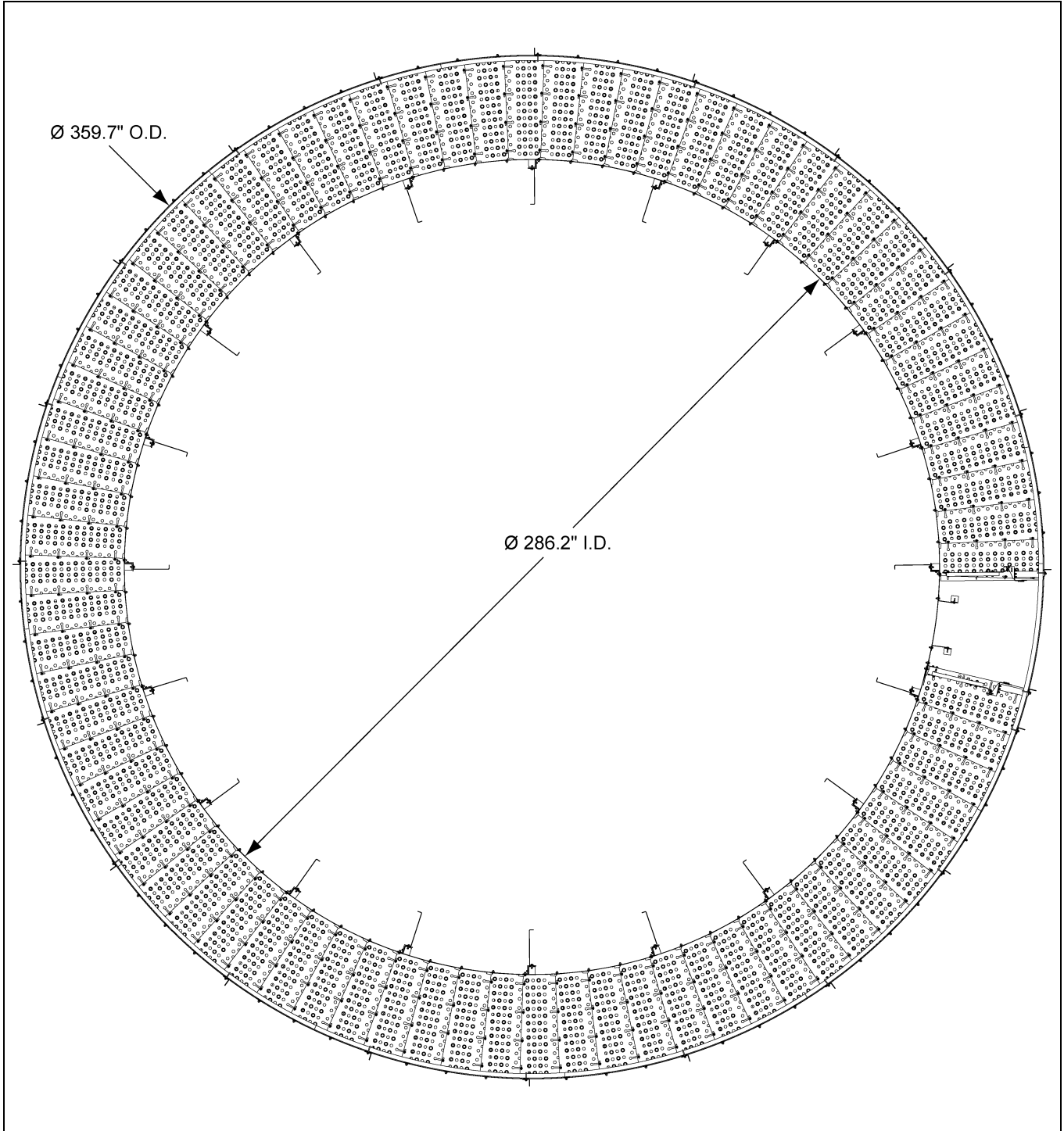


Figure 4AE

---

# NOTES



# **23'-4" Inside Fan Style Catwalk Assembly Instructions (GT4-1650-23F)**

## 5. 23'-4" Inside Catwalk Installation Instructions

### Installing the Z-Clips (GT1-2036)

1. Bolt Z-clips (GT1-2036) to all vertical channels (801-1444-0). The Z-clip can be installed on each vertical channel as inner wall sheets are installed using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 5A.)

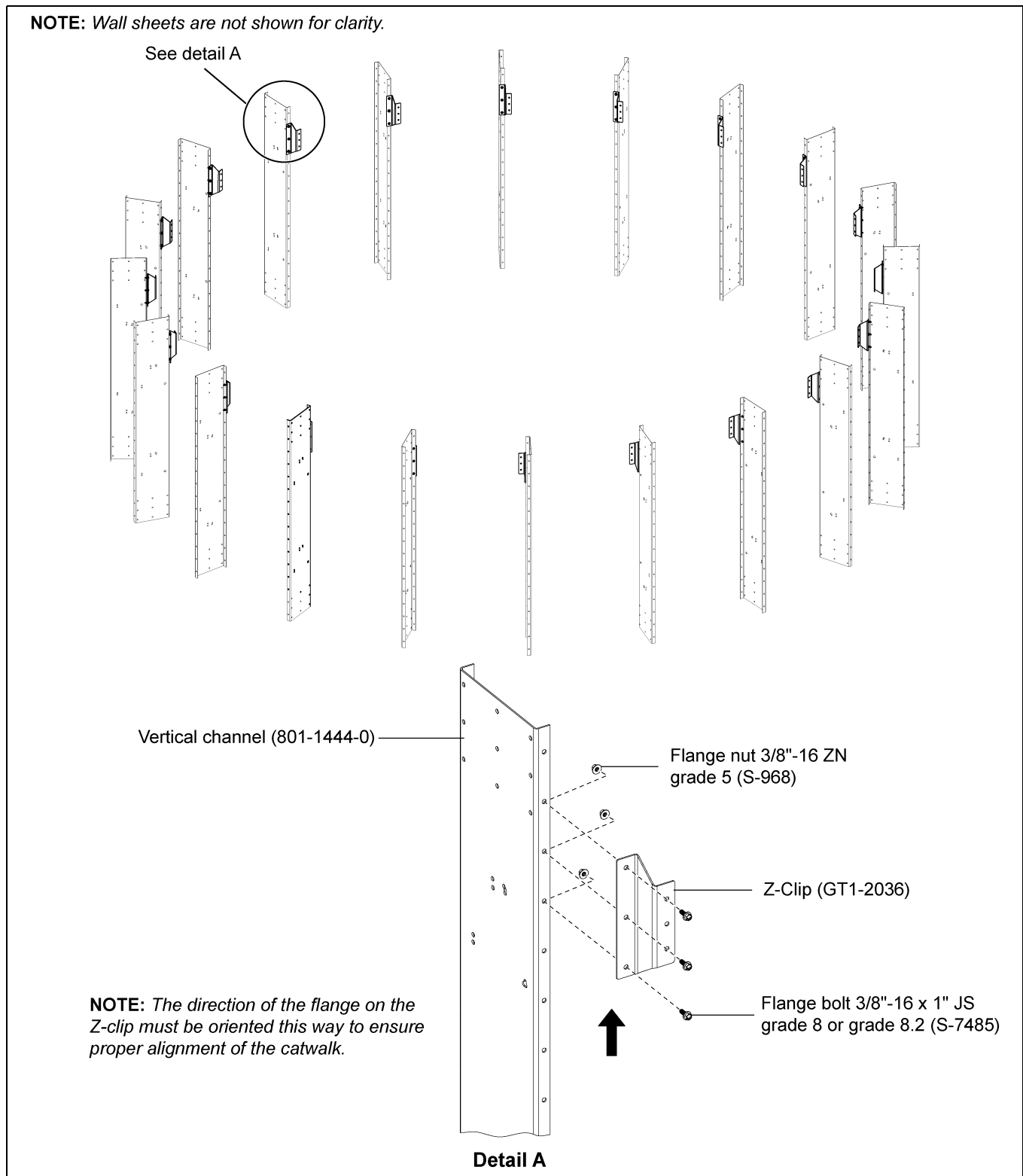


Figure 5A

## Installing the Catwalk Support Clip (GT1-2040-BS)

1. Install catwalk support clips (GT1-2040-BS) to vertical channels (801-1444-0). Support clip can be installed on each vertical channel as the inner wall sheets are installed using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 5B.)
2. The distance between the Z-clip and support clip for 23'-4" inside catwalk is 31-1/2". (See Figure 5C.)

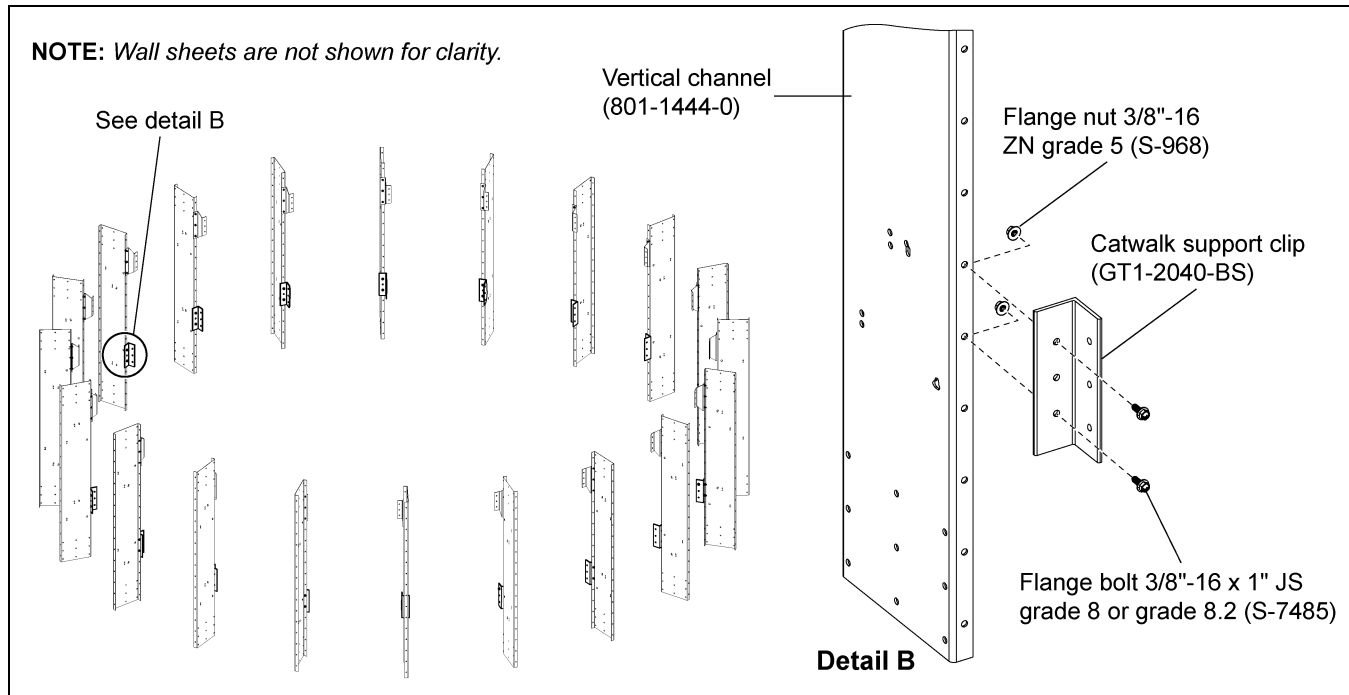


Figure 5B

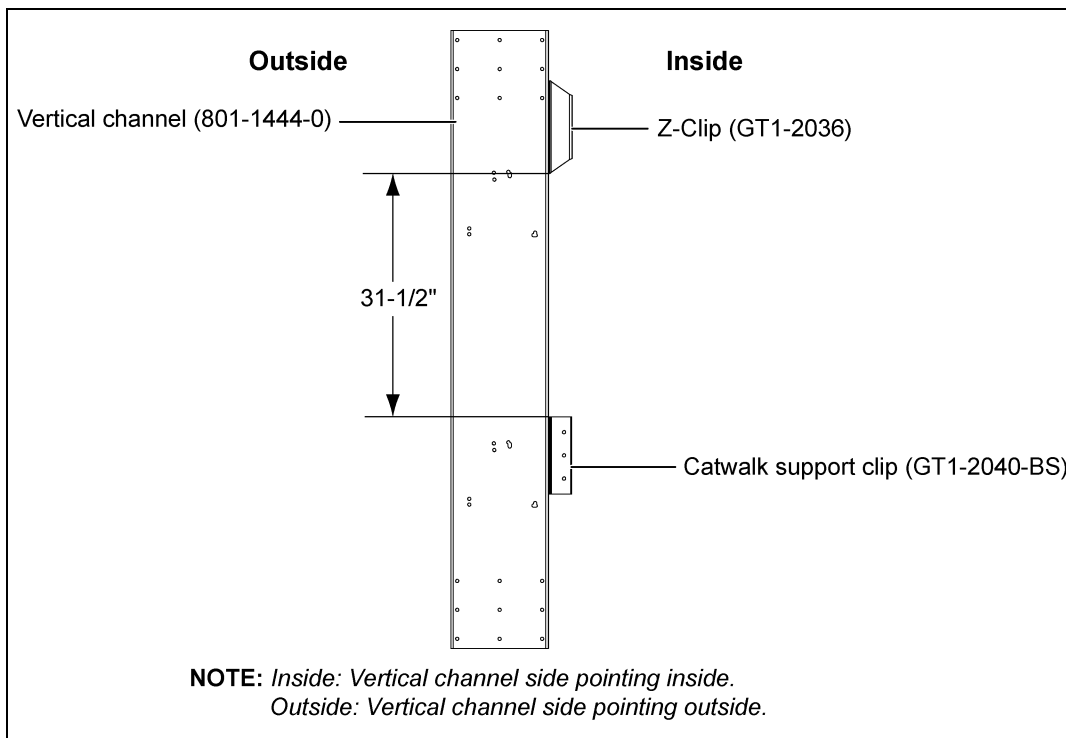


Figure 5C

## 5. 23'-4" Inside Catwalk Installation Instructions

### Installing the Outer Toe Board (GT1-2660)

1. Install the outer toe board (GT1-2660) to the Z-clips (GT1-2036). All toe boards should be installed between the Z-clips using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 5D.)

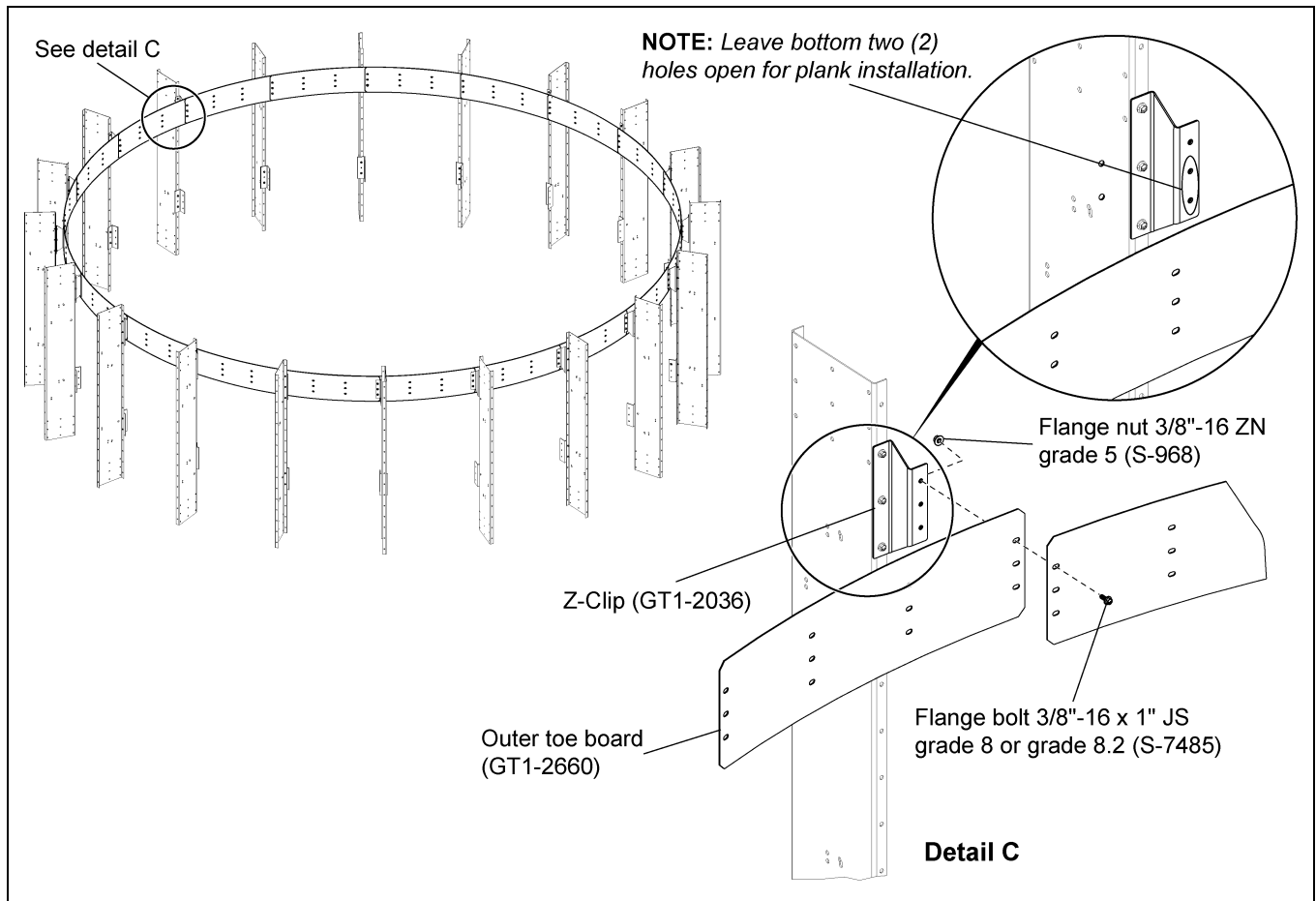


Figure 5D

2. Outer toe board is arranged with overlap slots on each side. Install 23'-4" outer toe boards (GT1-2660) to corresponding slots as shown in Figure 5E.

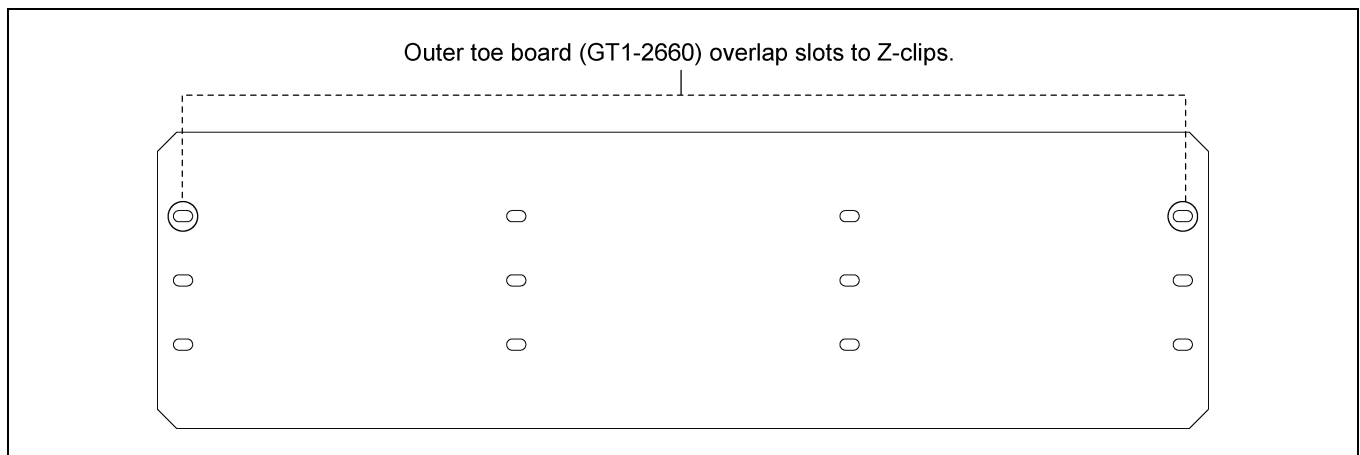


Figure 5E 23'-4" Outer Toe Board (GT1-2660)



## Installing the Planks (GT3-1669) to the Outer Toe Board (GT1-2660)

1. Install the planks (GT3-1669) to the outer toe board (GT1-2660) using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 5F.)
2. Each plank should be overlapped at the edges and bolted with 5/16"-18 x 3/4" JS grade 8 or grade 8.2 bolts (S-10267) and 5/16"-18 JS grade 5 nuts (S-10268).

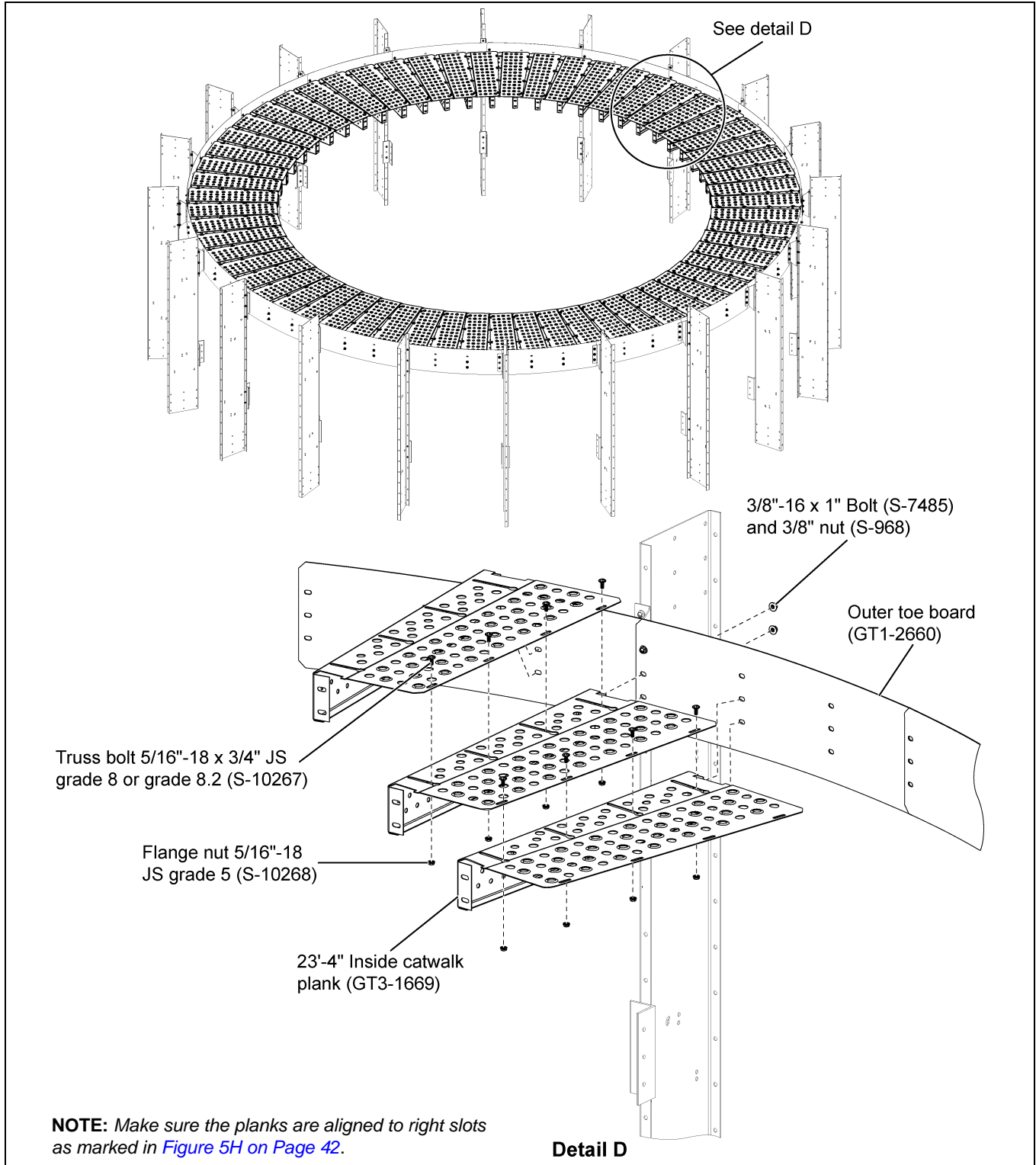
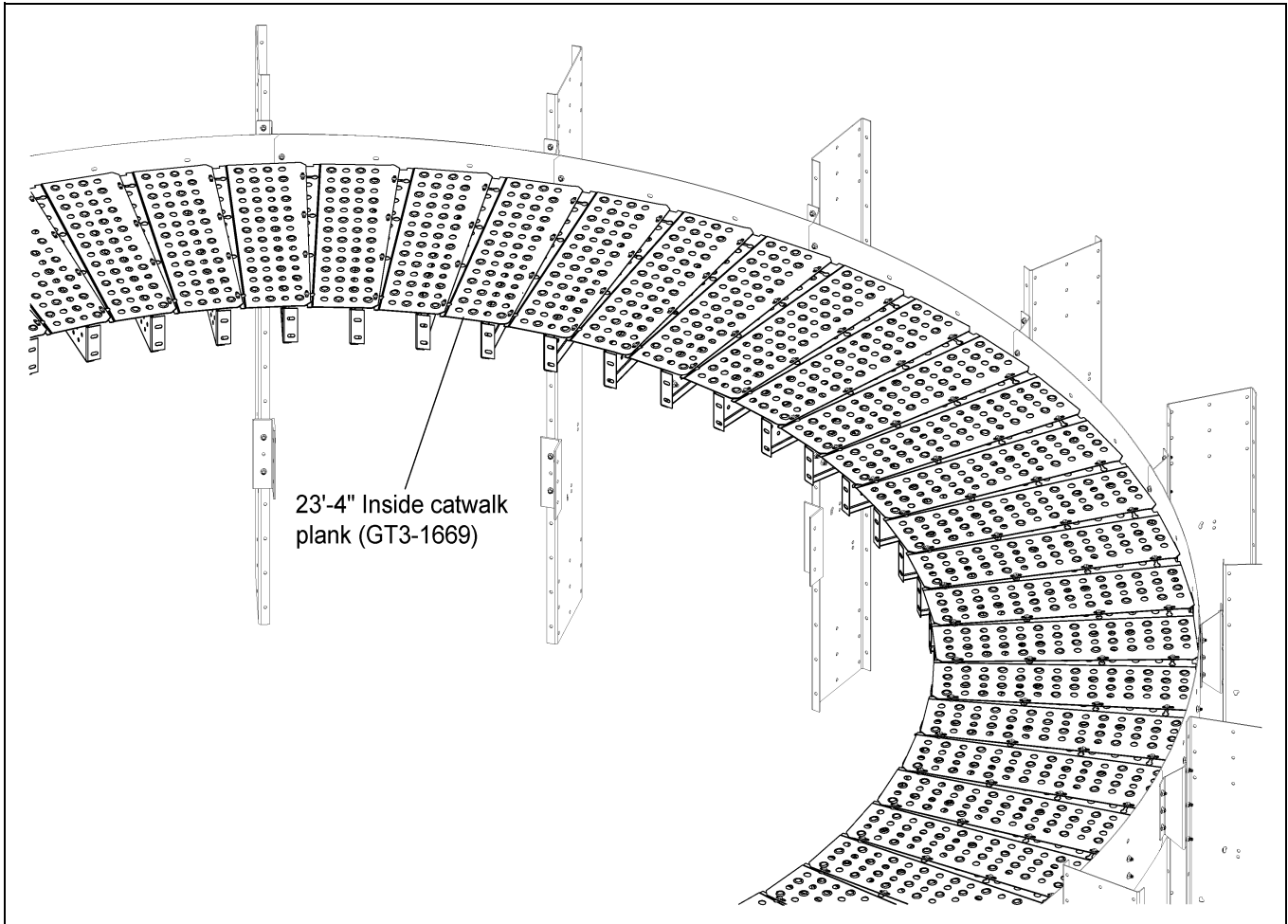


Figure 5F

## 5. 23'-4" Inside Catwalk Installation Instructions

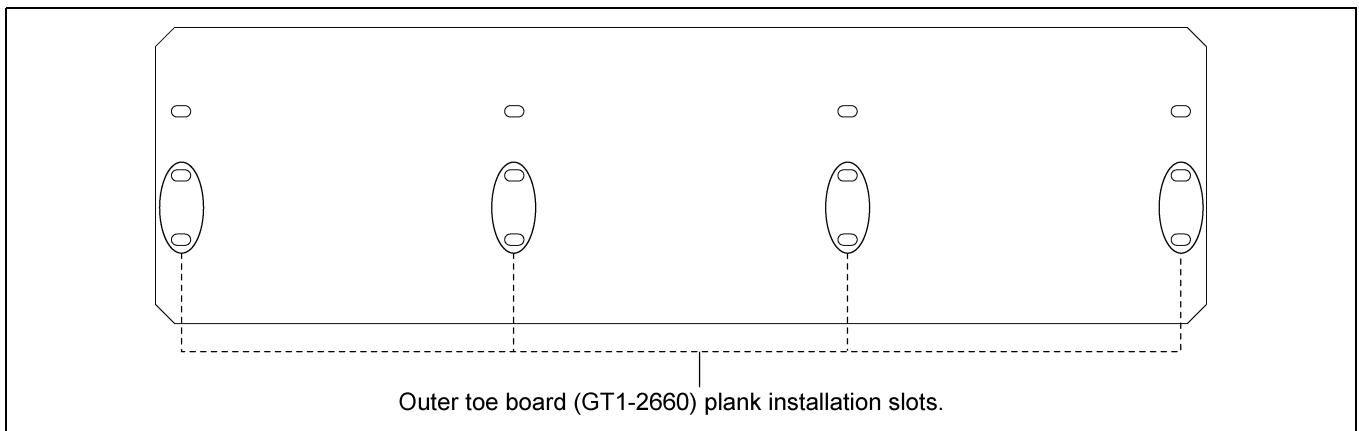
### Installing the Planks (GT3-1669) to the Outer Toe Board (GT1-2660) (Continued)

3. Install all the planks (GT3-1669) continuously around the dryer. (See [Figure 5G.](#))



**Figure 5G**

4. Outer toe board (GT1-2660) is arranged with many slots to install plank. Install planks to corresponding slots as shown in [Figure 5H.](#)



**Figure 5H 23'-4" Outer Toe Board (GT1-2660)**

## Installing the 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 (GT3-1669) using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 5I.)

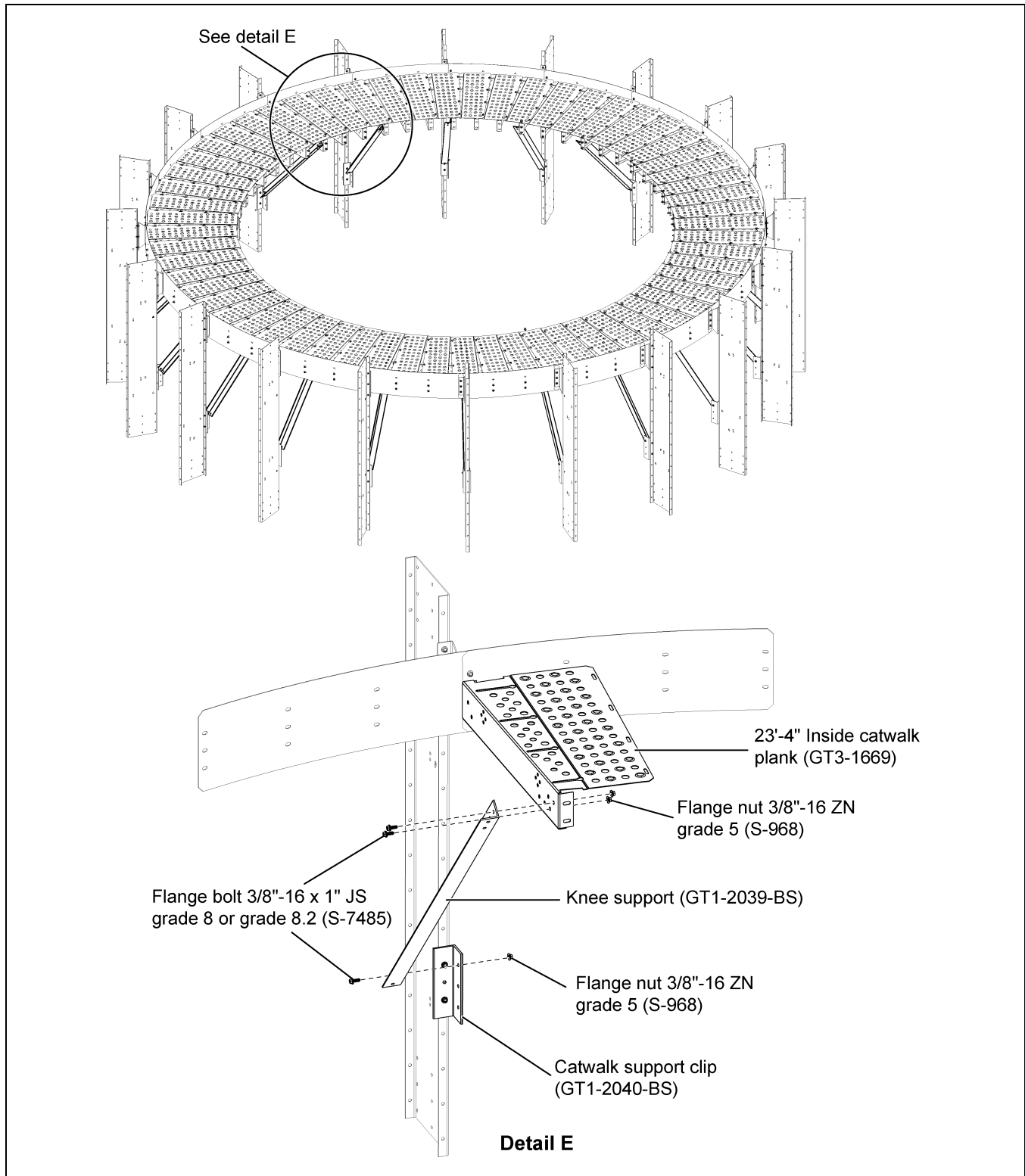


Figure 5I

## 5. 23'-4" Inside Catwalk Installation Instructions

### Installing the Inner Toe Board (GT1-2661) and Catwalk Vertical Support (GT1-2037-BS)

1. Install all the inner toe boards (GT1-2661) to the planks (GT3-1669). (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" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 5J.)

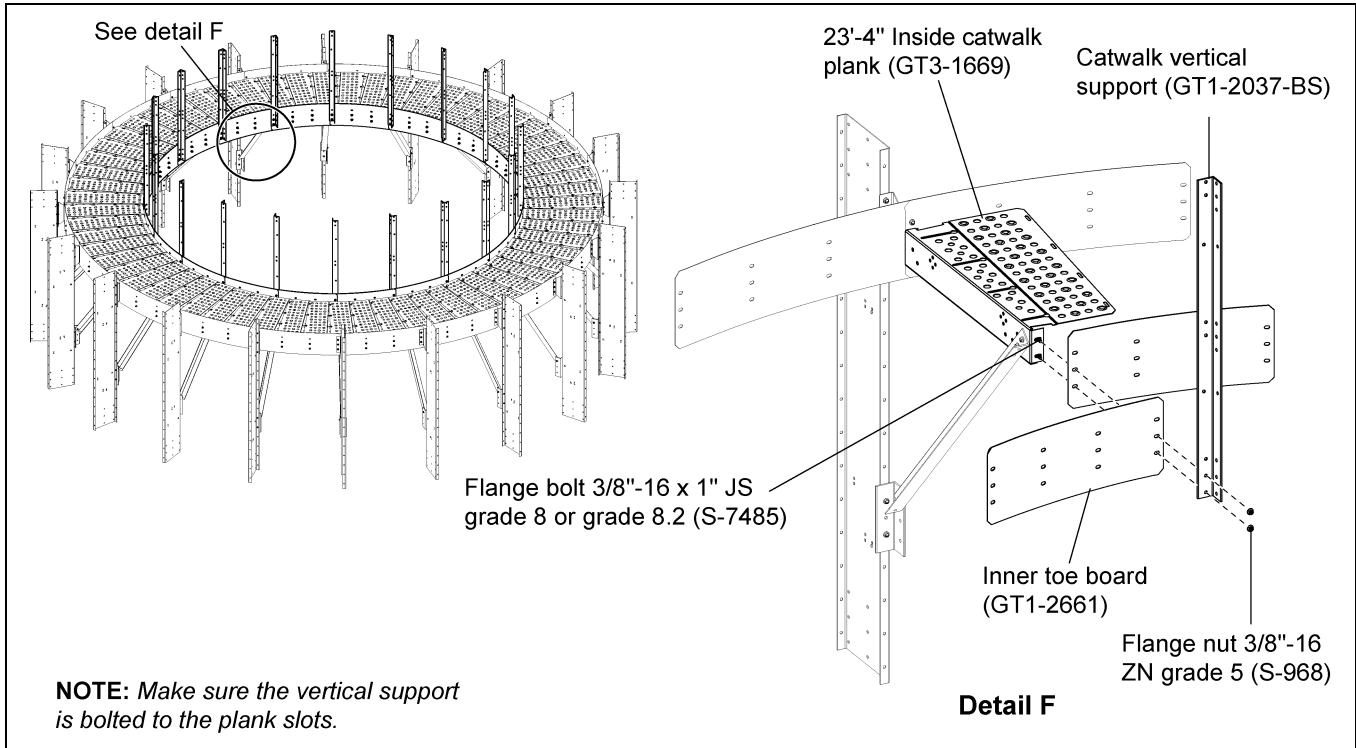


Figure 5J

3. Inner toe board is arranged with overlap slots on each side and plank installation slots. Install 23'-4" inner toe boards (GT1-2661) to corresponding overlap and plank installation slots as shown in Figure 5K

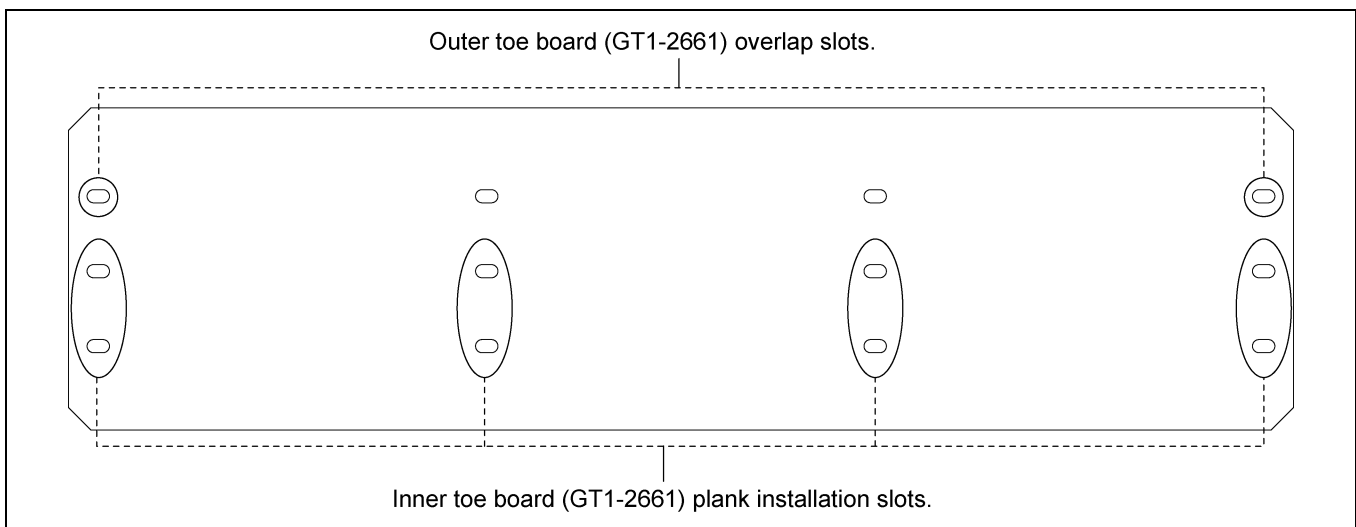


Figure 5K 23'-4" Inner Toe Board (GT1-2661)

## Installing the Handrail (GT1-2658-23I)

1. Install the handrail (GT1-2658-23I) to the catwalk vertical support (GT1-2037-BS) using 5/16"-18 ZN U-bolts (S-10171) and 5/16"-18 JS grade 5 nuts (S-10268) to tighten the handrail with vertical post. (See [Figure 5L](#) and [Figure 5M](#).)

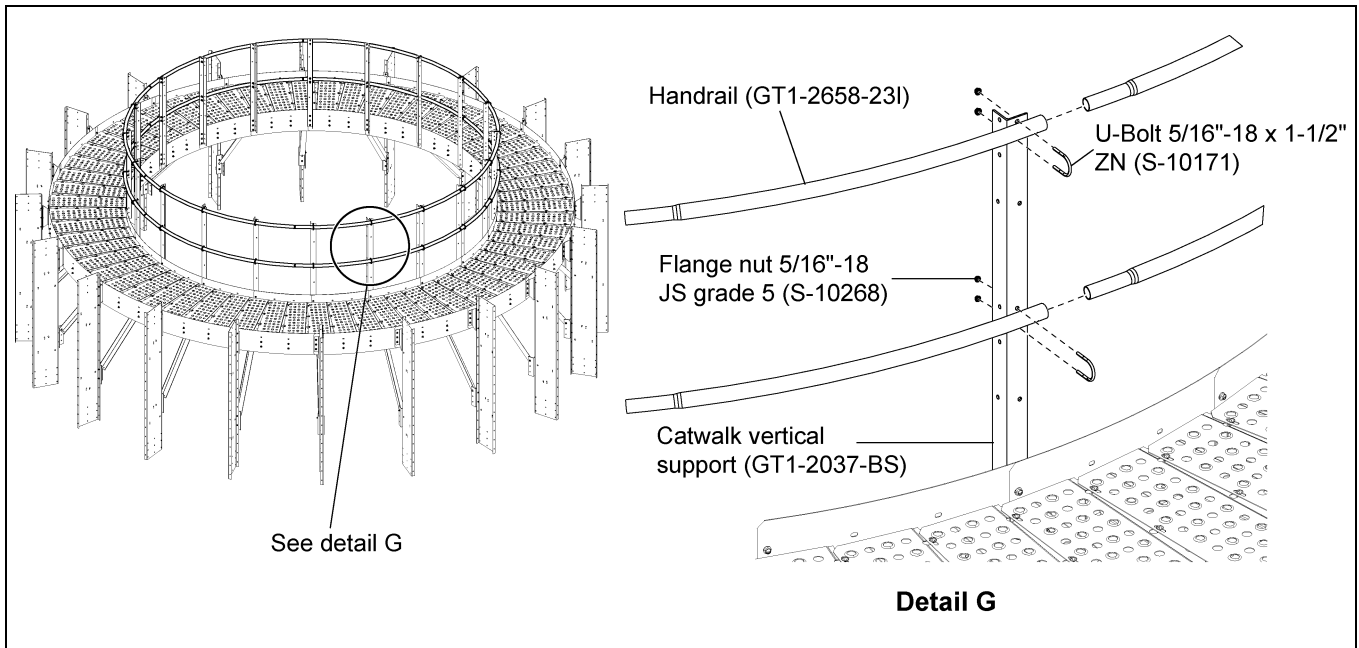


Figure 5L

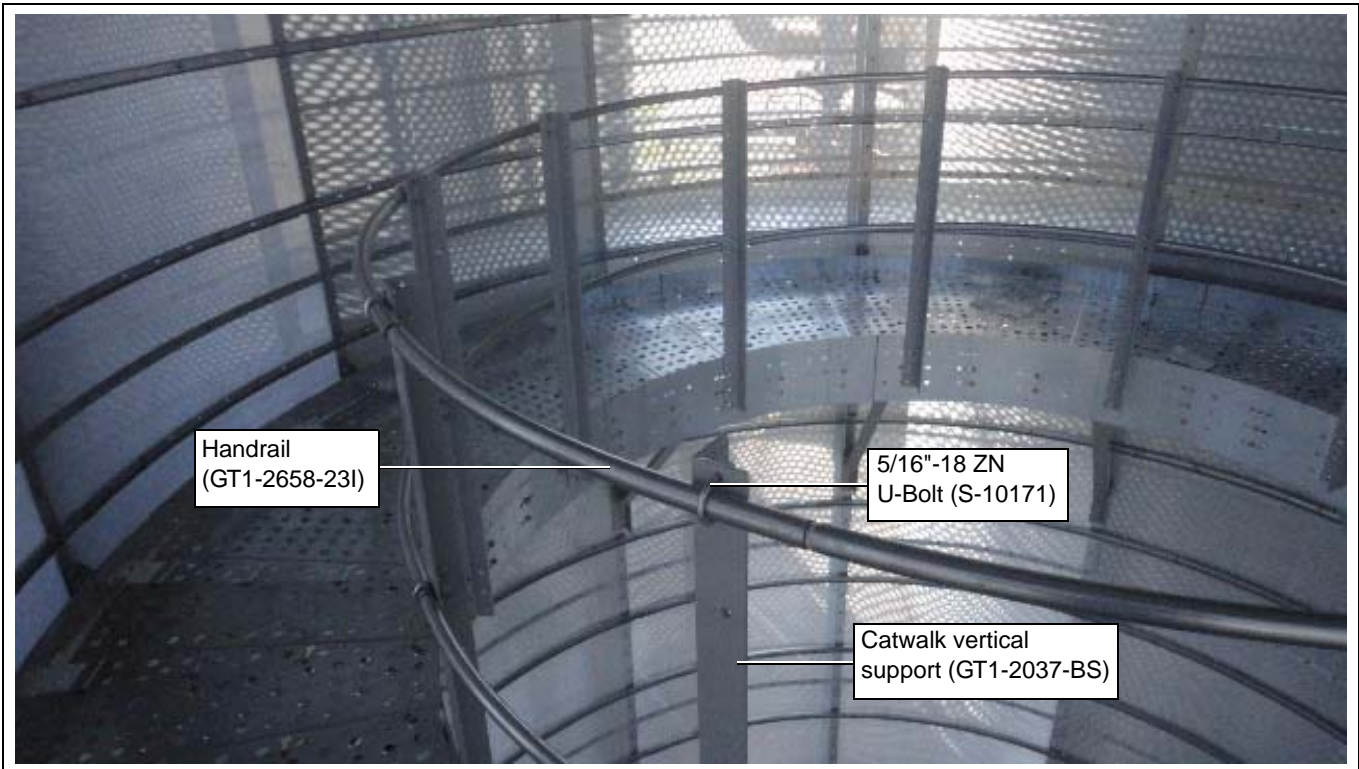


Figure 5M

### Inside Catwalk Walk Surface

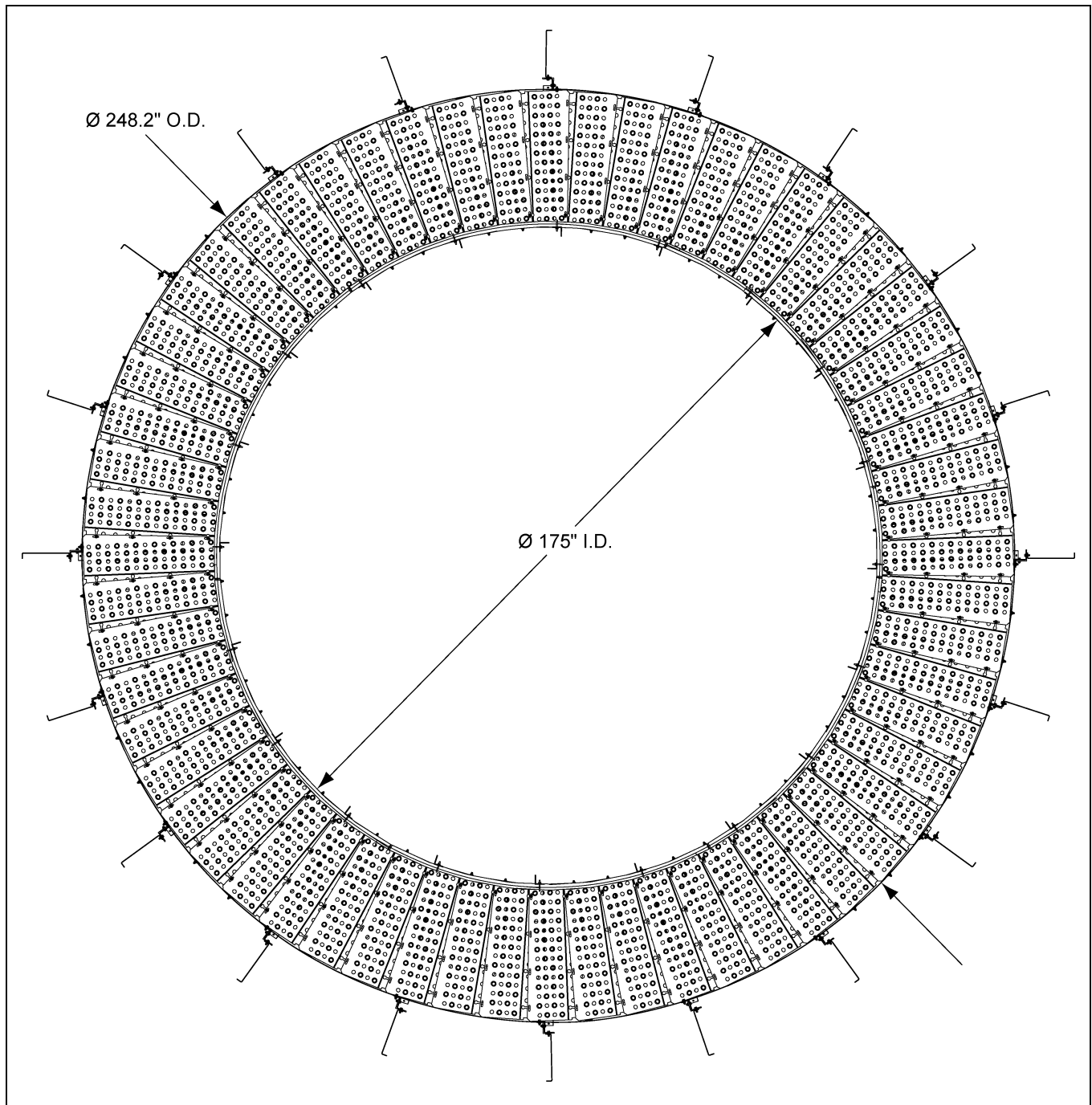


Figure 5N



**23'-4" Offset (GT4-1649-23F)  
and Roof Hatch (GT4-1651-23F)  
Fan Style Platform Assembly  
Instructions**

## 6. 23'-4" Offset and Roof Hatch Platform Installation Instructions

### Installing the Z-Clips (GT1-2036)

1. Bolt Z-clips (GT1-2036) to vertical channels (801-1444-0). The Z-clip can be installed on each vertical channel as wall sheets are installed using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 6A, Figure 6B below, Figure 6C and Figure 6D on Page 49.)

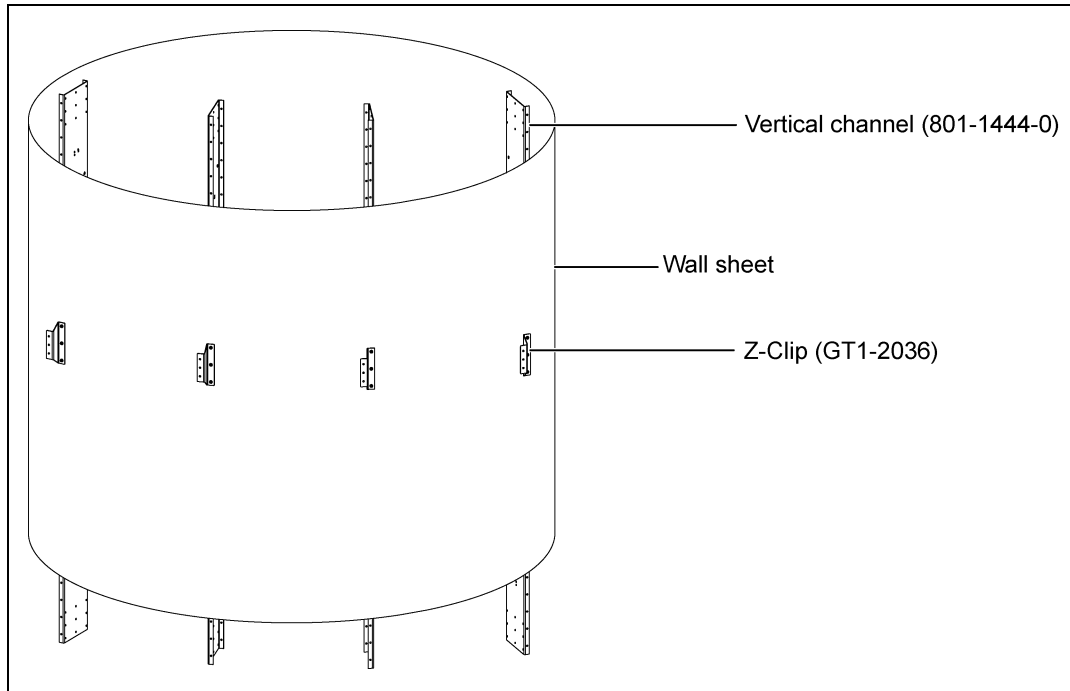


Figure 6A Offset Z-Clip Installation

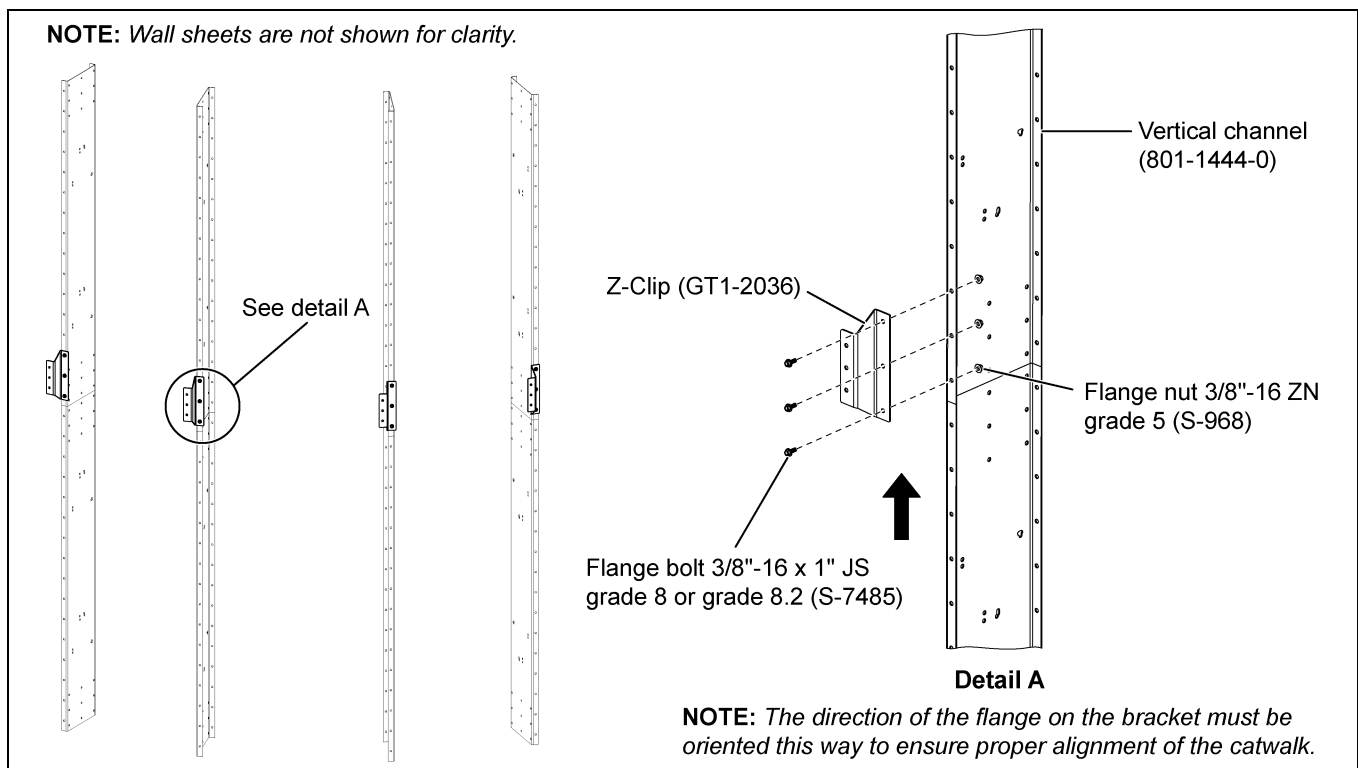
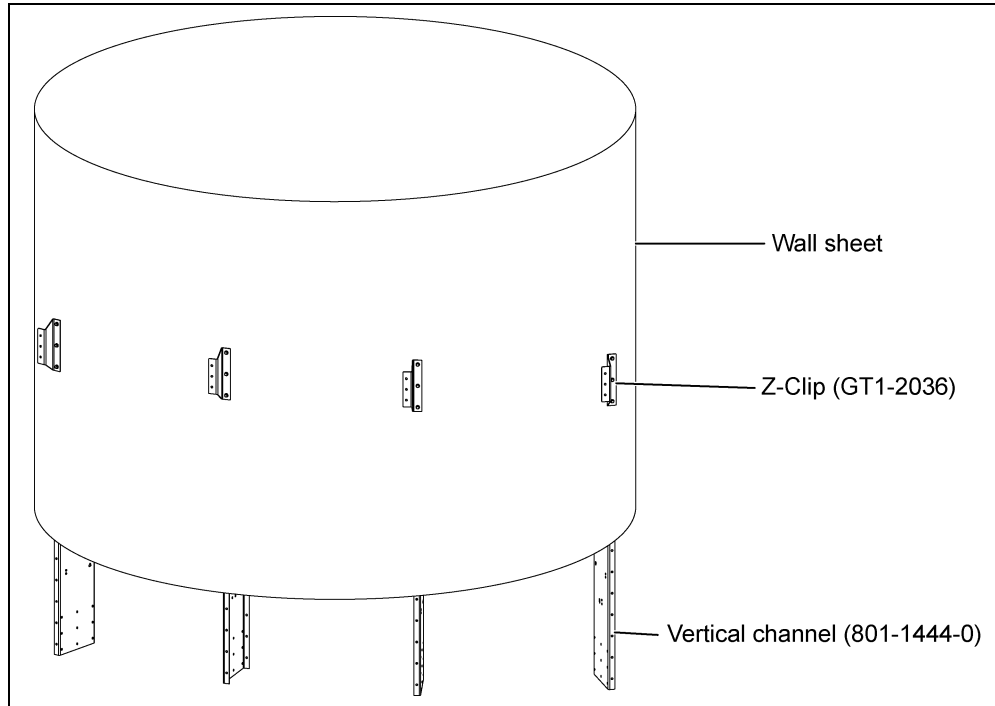


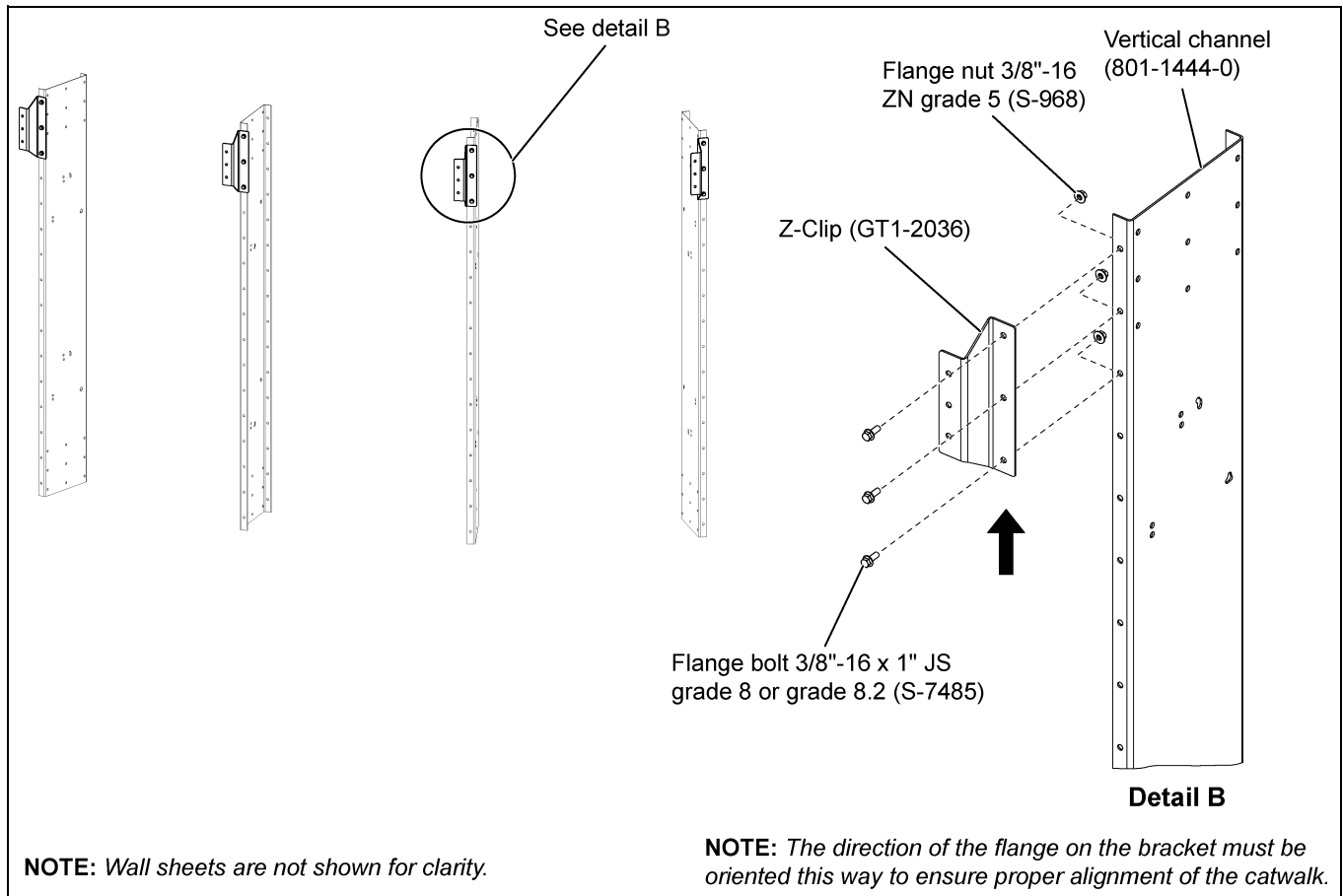
Figure 6B Offset Z-Clip Installation



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



**Figure 6C** Roof Hatch Z-Clip Installation



**NOTE:** Wall sheets are not shown for clarity.

**NOTE:** The direction of the flange on the bracket must be oriented this way to ensure proper alignment of the catwalk.

**Figure 6D** Roof Hatch Z-Clip Installation

## 6. 23'-4" Offset and Roof Hatch Platform Installation Instructions

### Installing the 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" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 grade 5 nuts (S-968). (See Figure 6E and Figure 6F.)

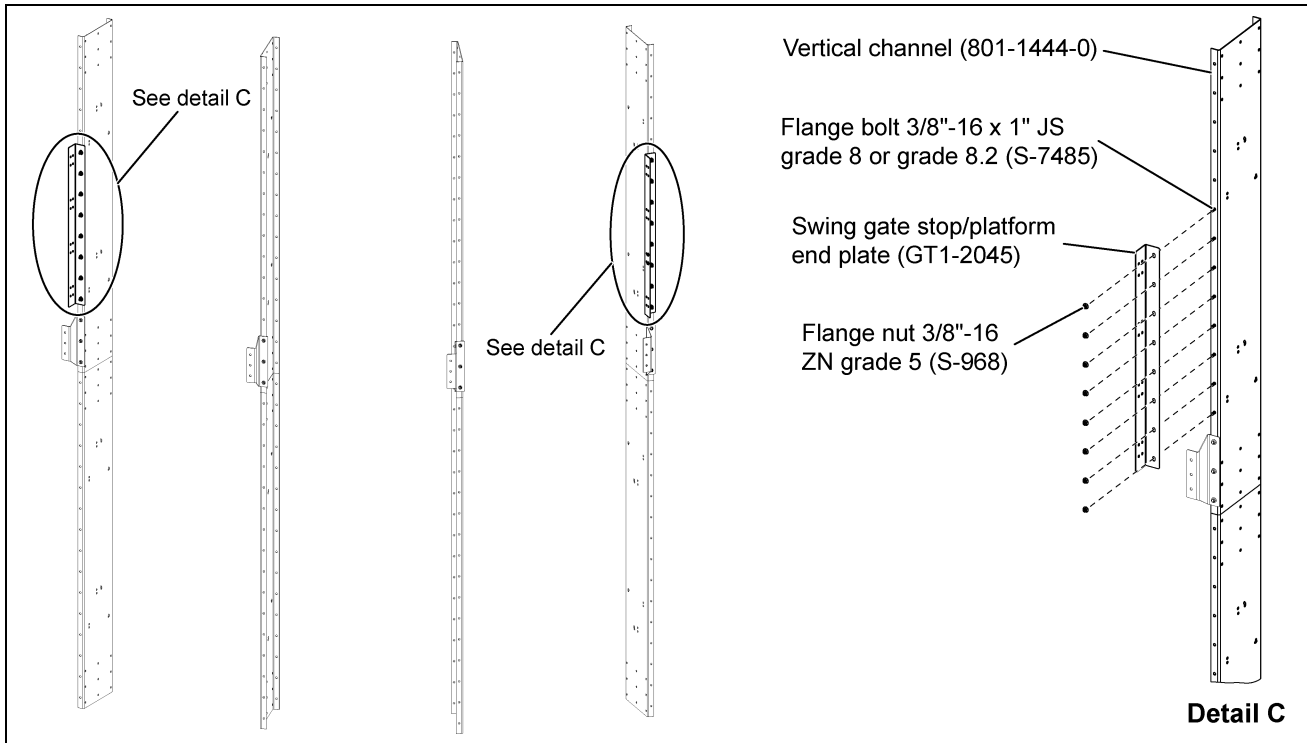


Figure 6E Offset Swing Gate Stop Installation

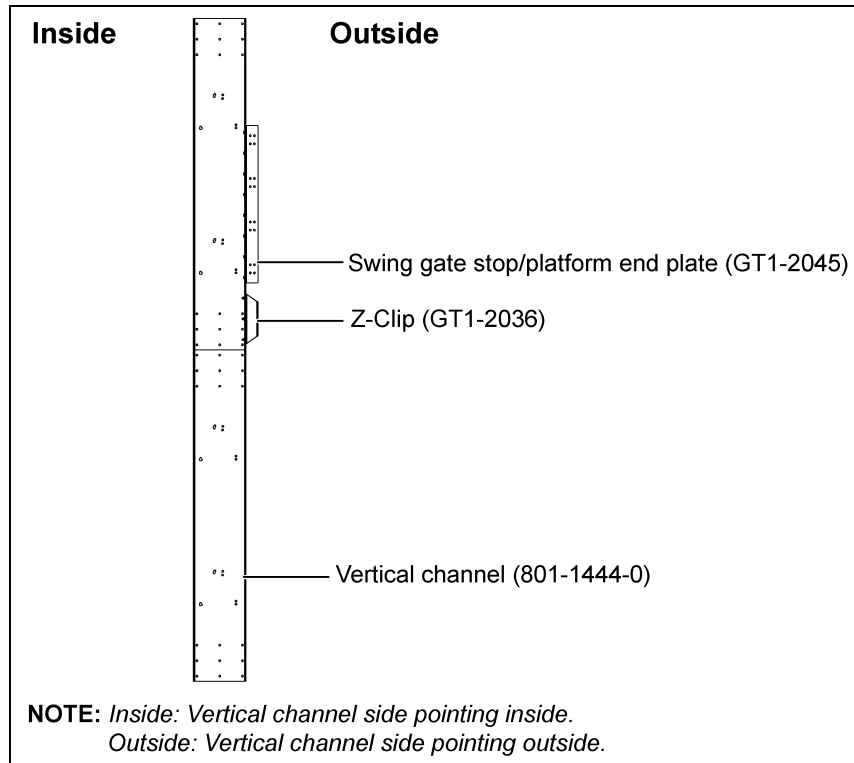
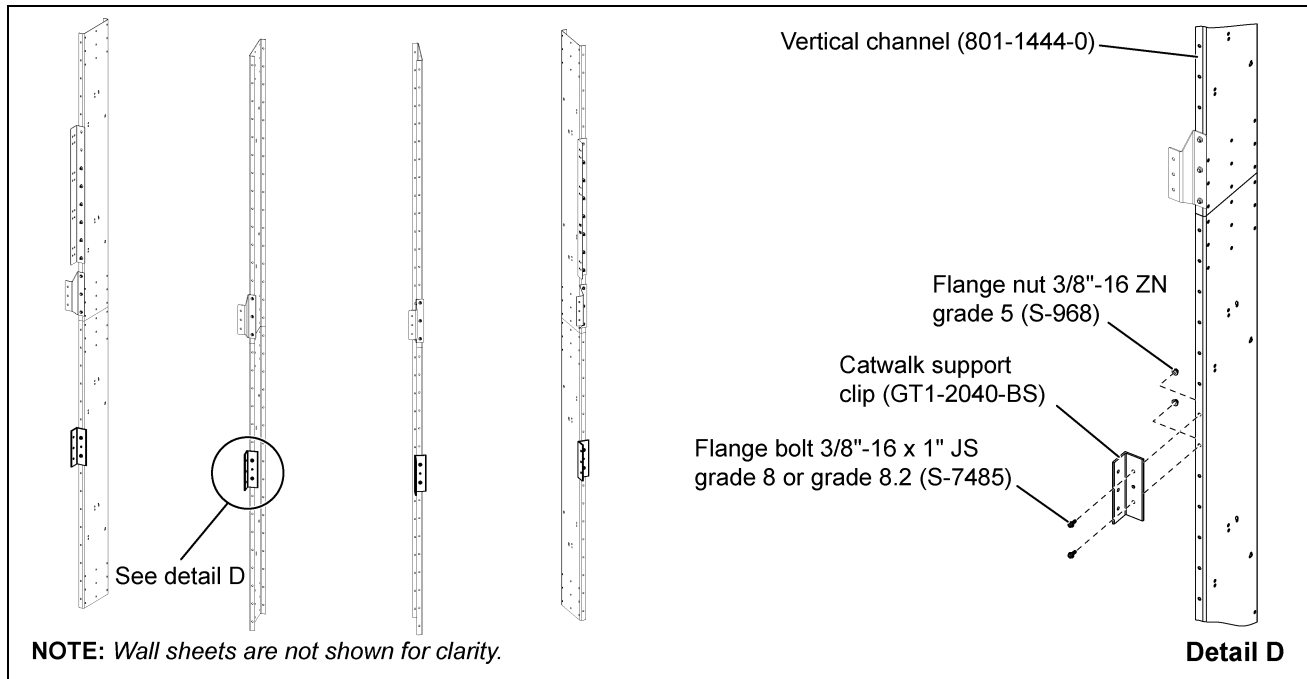


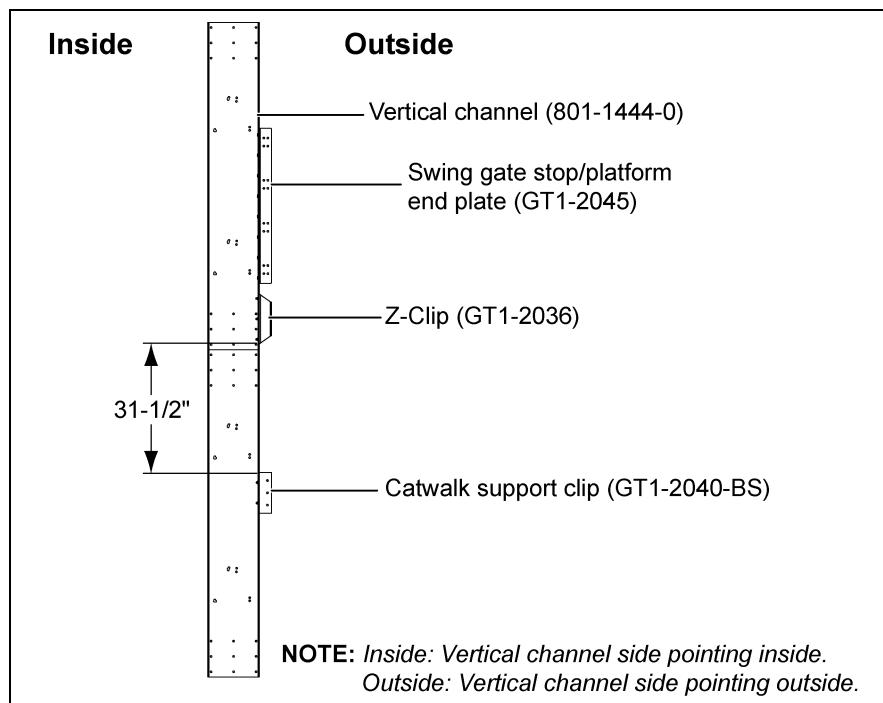
Figure 6F

### Installing the Catwalk Support Clip (GT1-2040-BS)

1. Install catwalk support clips (GT1-2040-BS) to vertical channels (801-1444-0). Support clip can be installed on each vertical channel as the wall sheets are installed using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 6G below and Figure 6I on Page 52.)
2. The distance between the Z-clip and support clip for 23'-4" offset and roof hatch platform is 31-1/2". (See Figure 6H below and Figure 6J on Page 52.)

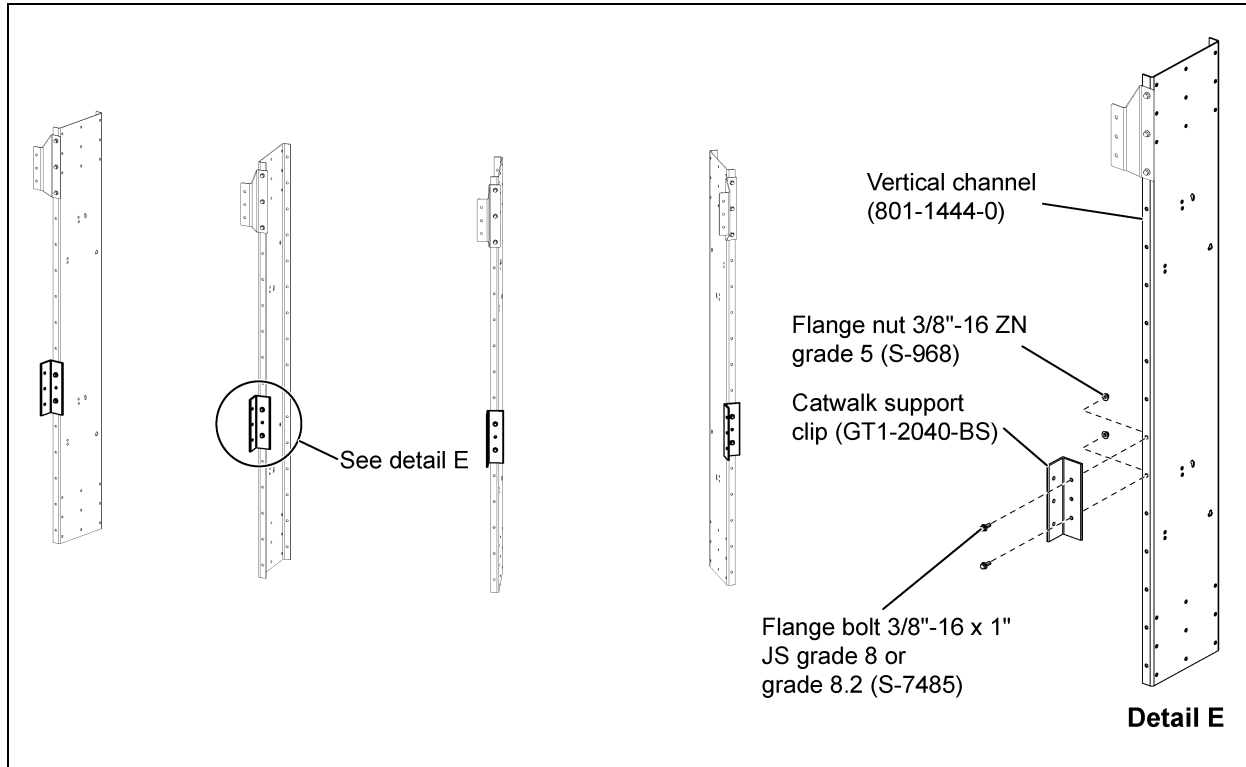


**Figure 6G** Offset Catwalk Support Clip Installation

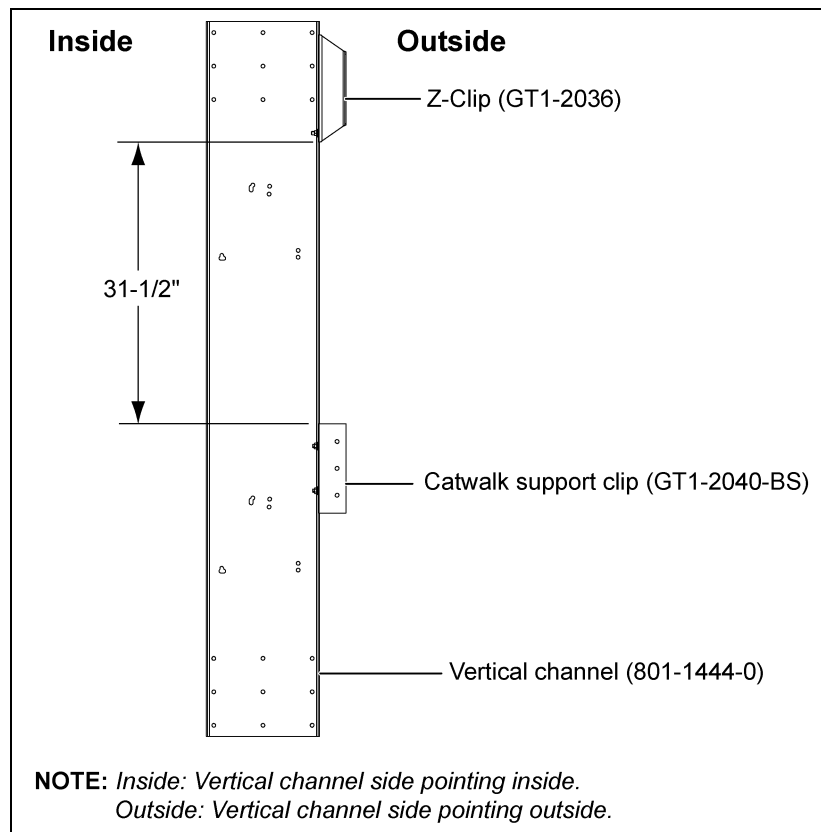


**Figure 6H**

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



**Figure 6I** Roof Hatch Catwalk Support Clip Installation



**Figure 6J**

## Installing the Inner Toe Board (GT1-2657)

1. Install the inner toe board (GT1-2657) 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" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 6K.)

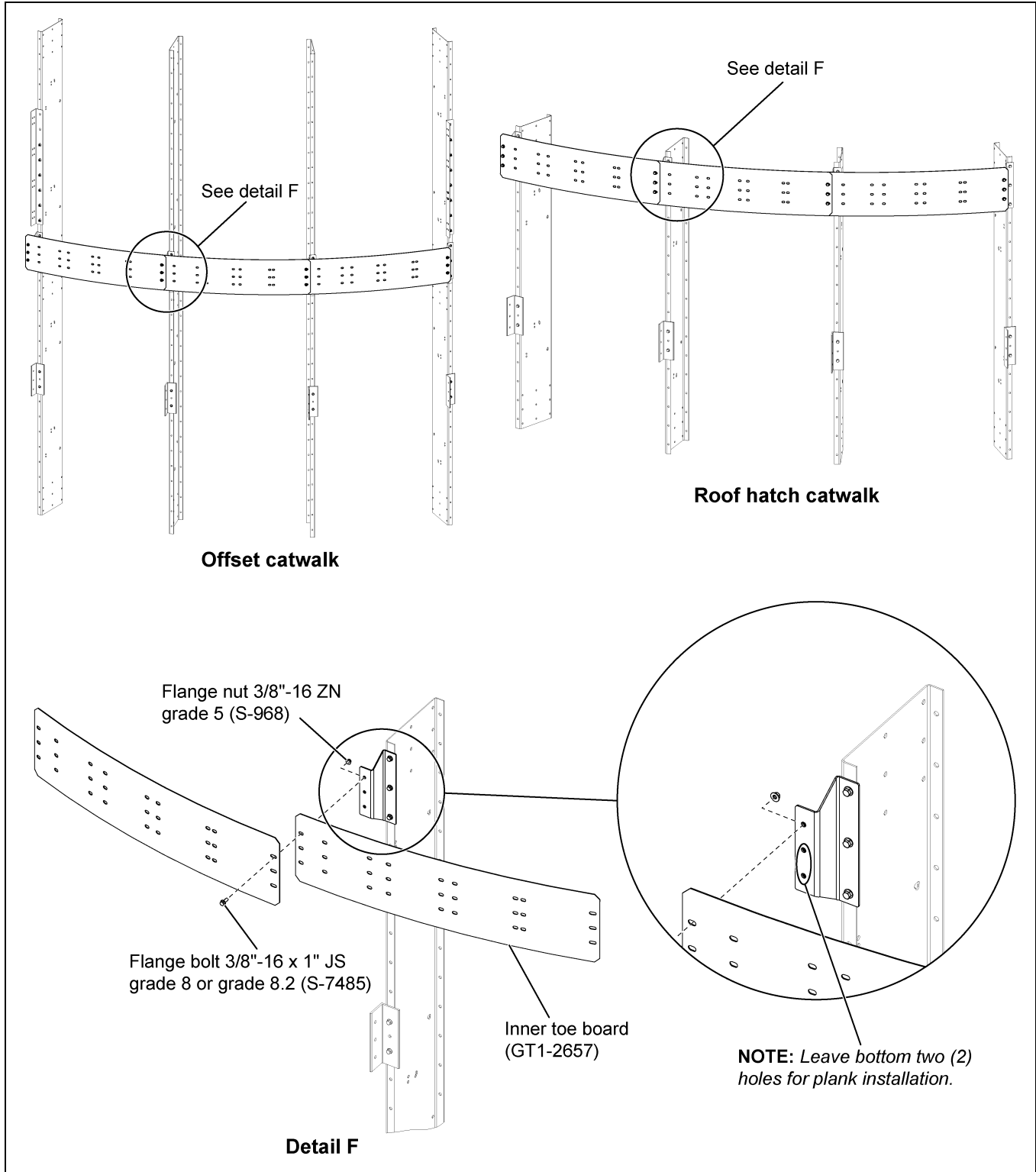
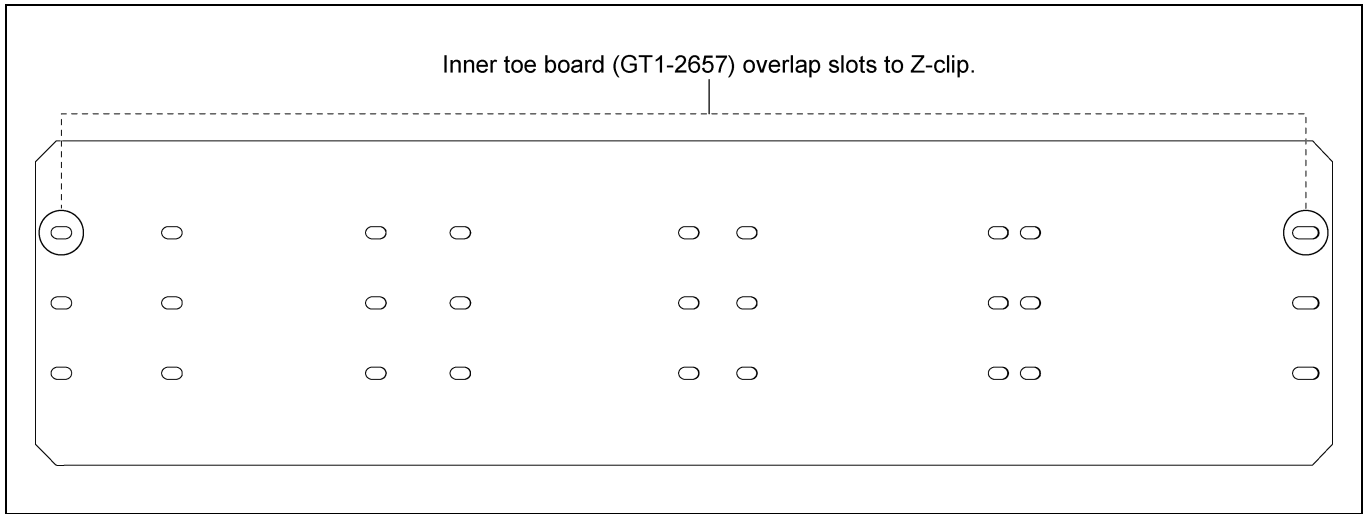


Figure 6K Inner Toe Board Installation for Offset and Roof Hatch Catwalks

## 6. 23'-4" Offset and Roof Hatch Platform Installation Instructions

### Installing the Inner Toe Board (GT1-2657) (Continued)

3. Inner toe board is arranged with overlap slots on each side. Install 23'-4" offset and roof hatch inner toe boards (GT1-2657) to corresponding slots as shown in [Figure 6L](#).



**Figure 6L** 23'-4" Inner Toe Board (GT1-2657)

## Installing the Plank (GT3-1669) to the Inner Toe Board (GT1-2657)

1. Install planks (GT3-1669) to bottom two (2) holes of the inner toe board (GT1-2657) using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 6M.)

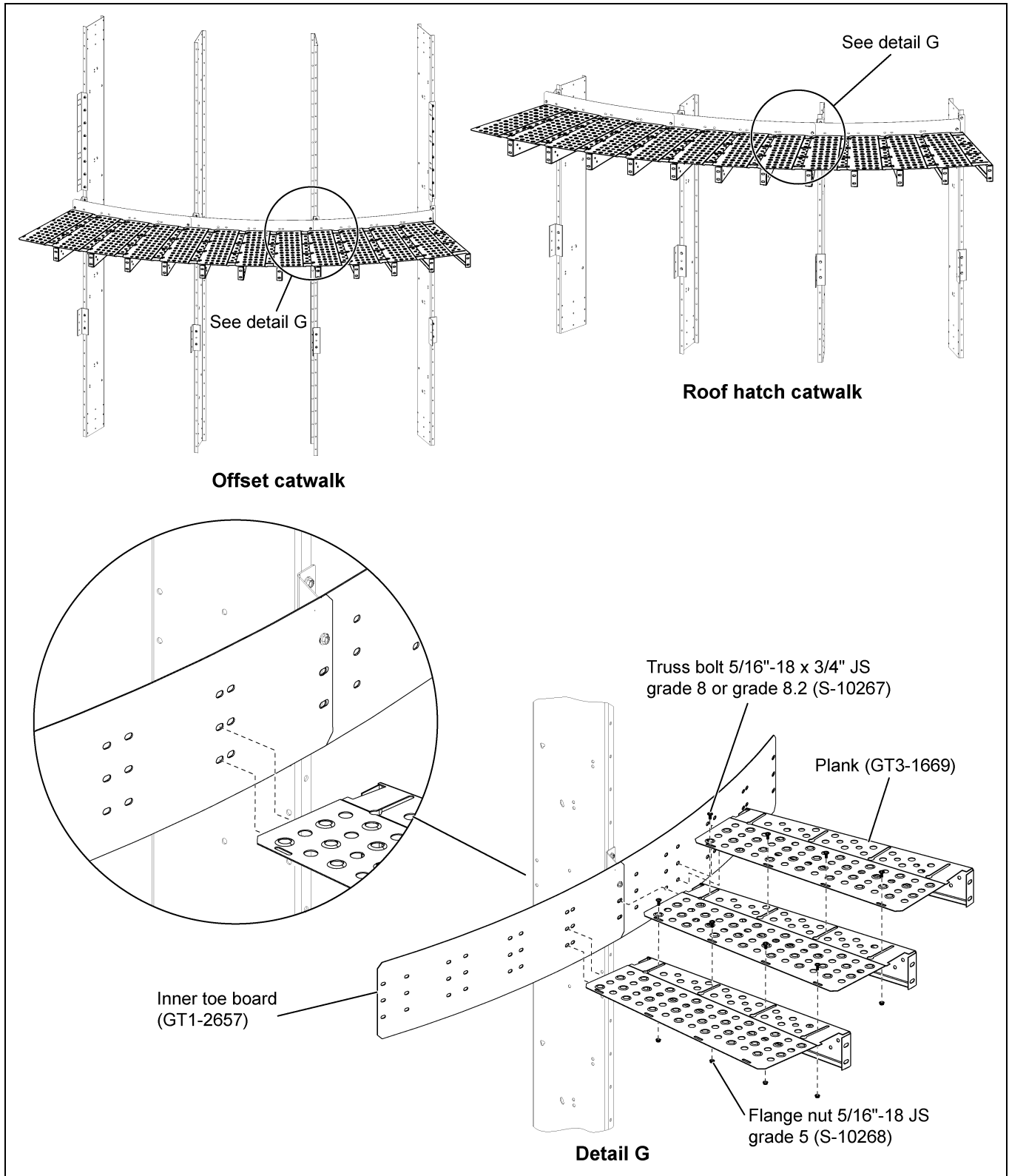
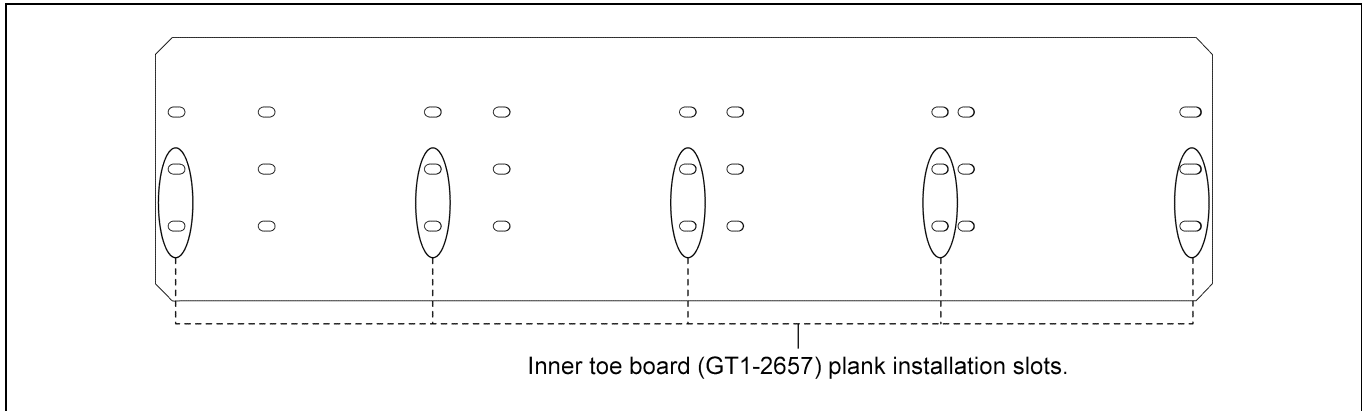


Figure 6M Inner Toe Board (GT1-2657) Plank Installation for Offset and Roof Hatch Catwalks

## 6. 23'-4" Offset and Roof Hatch Platform Installation Instructions

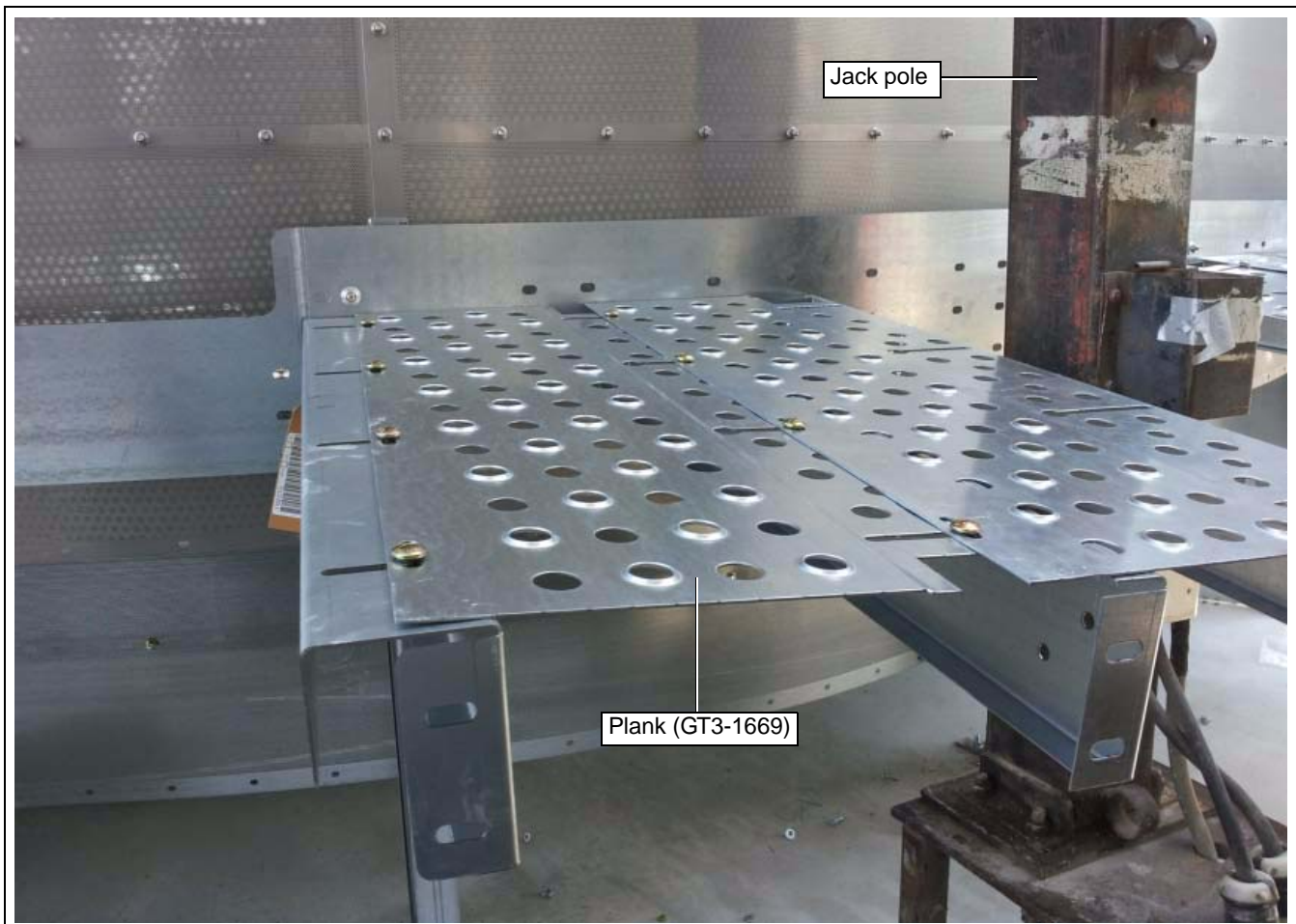
### Installing the Plank (GT3-1669) to the Inner Toe Board (GT1-2657) (Continued)

2. Inner toe board (GT1-2657) is arranged with many slots to install plank. Install offset and roof hatch planks to corresponding slots as shown in [Figure 6N](#).



**Figure 6N** 23'-4" Inner Toe Board (GT1-2657)

3. Install all the planks (GT3-1669) continuously around the dryer except at the jack pole locations. ([See Figure 6O.](#))



**Figure 6O**



## Installing the Plank (GT3-1669) to the Inner Toe Board (GT1-2657) (Continued)

4. Each plank should be overlapped at the edges and bolted with 5/16"-18 x 3/4" JS grade 8 or grade 8.2 bolts (S-10267) and 5/16"-18 x 3/4" JS grade 5 nuts (S-10268). (See Figure 6Q.)

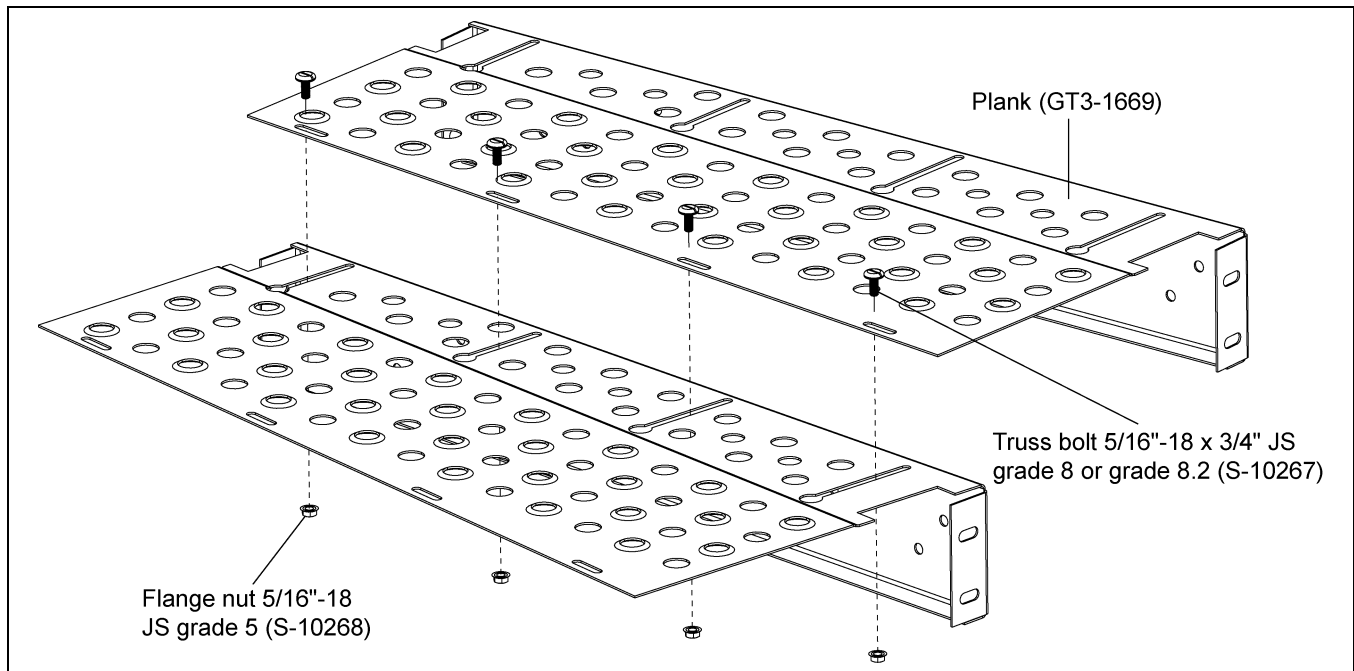


Figure 6P

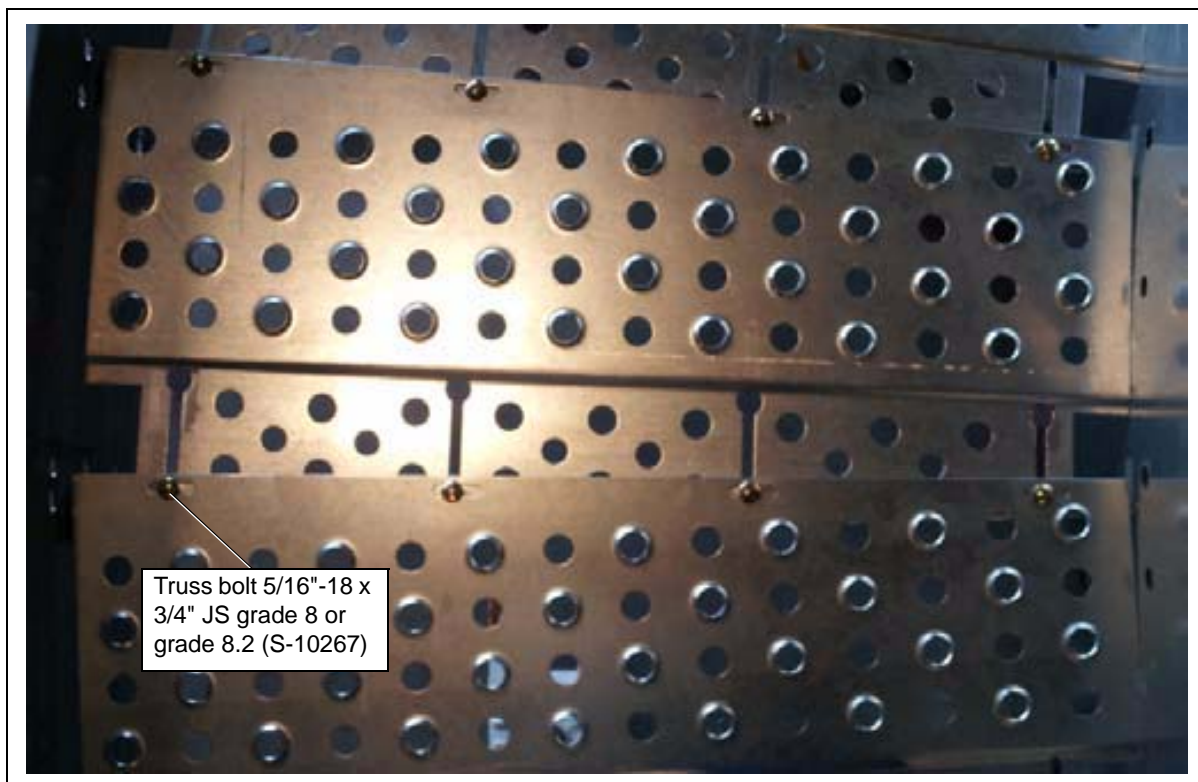


Figure 6Q

## 6. 23'-4" Offset and Roof Hatch Platform Installation Instructions

### Installing the 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" JS grade 8 or grade 8.2 bolts (S-10267) and 5/16"-18 JS grade 5 nuts (S-10268) and to the toe board (GT1-2657) using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 6R.)

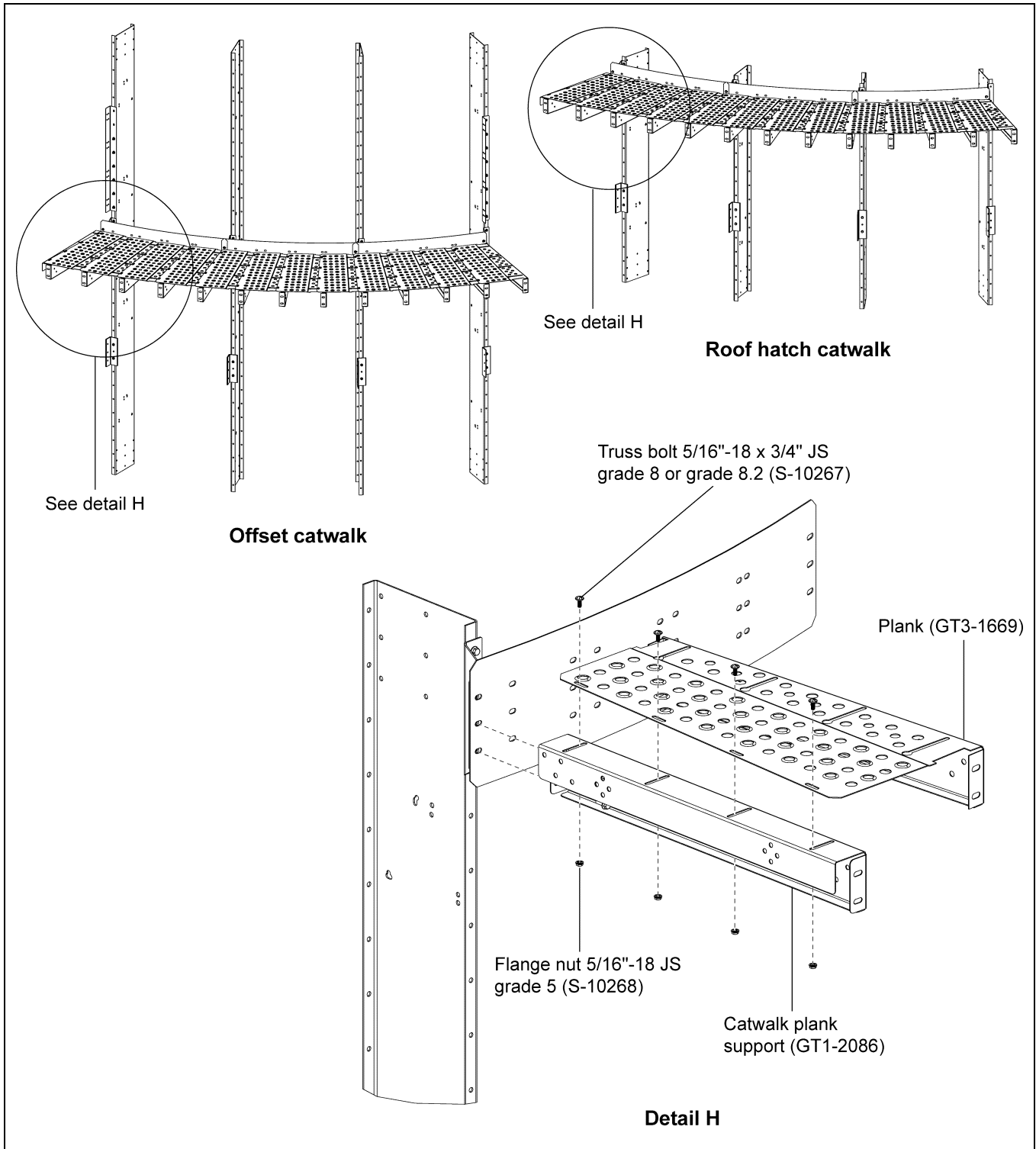


Figure 6R Plank Support (GT1-2086) Installation for Offset and Roof Hatch Catwalks

## Installing the 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 (GT3-1669) using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 6S.)

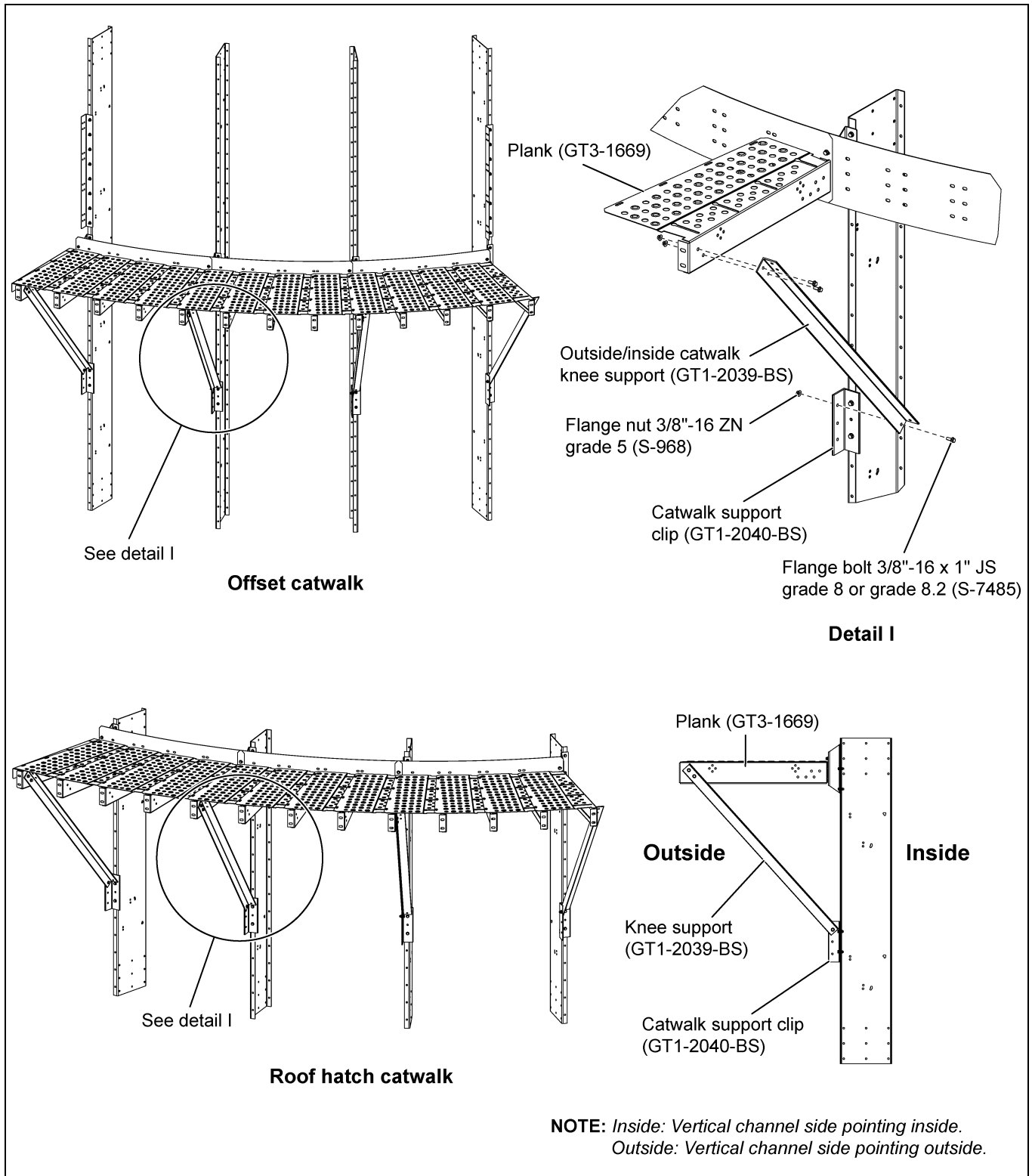
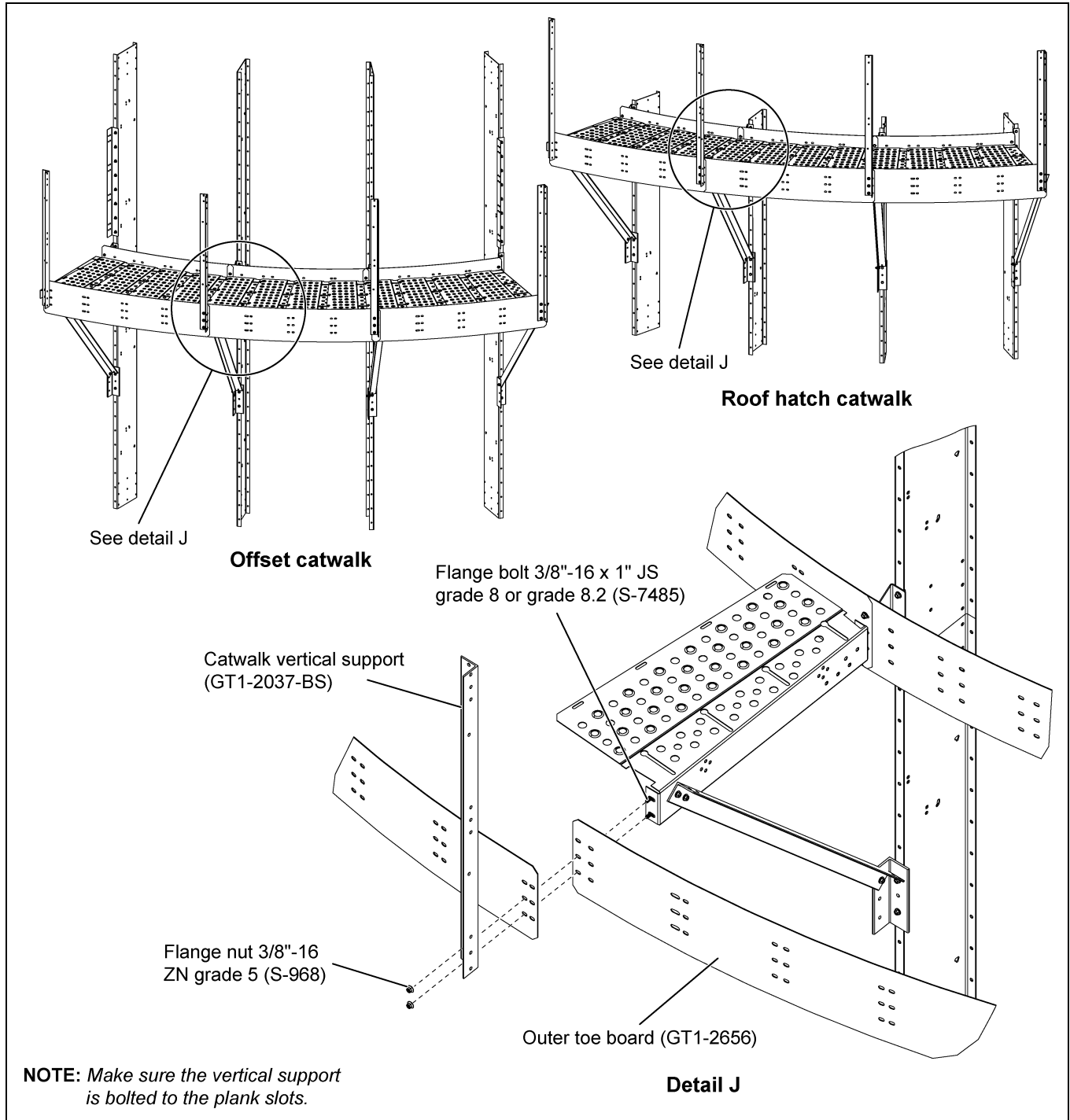


Figure 6S Knee Support (GT1-2039-BS) Installation for Offset and Roof Hatch Catwalks

## 6. 23'-4" Offset and Roof Hatch Platform Installation Instructions

### Installing the Outer Toe Board (GT1-2656) and Catwalk Vertical Support (GT1-2037-BS)

1. Install all the outer toe boards (GT1-2656) to the planks (GT3-1669). (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" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 6T.)



**Figure 6T** Outer Toe Board (GT1-2656) and Vertical Support (GT1-2037-BS)  
Installation for Offset and Roof Hatch Catwalks

## Installing the Long Handrails (GT1-2658-230)

1. Install the long handrail (GT1-2658-230) to the catwalk vertical support (GT1-2037-BS) using 5/16"-18 ZN U-bolts (S-10171) and 5/16"-18 JS grade 5 nuts (S-10268) to tighten the handrail with vertical post. (See Figure 6U.)
2. Use the self-tapping screws SDS #10-16 x 3/4" HWH ZN grade 2 (S-7466) at all handrail pipe joints. (See Figure 6U.)

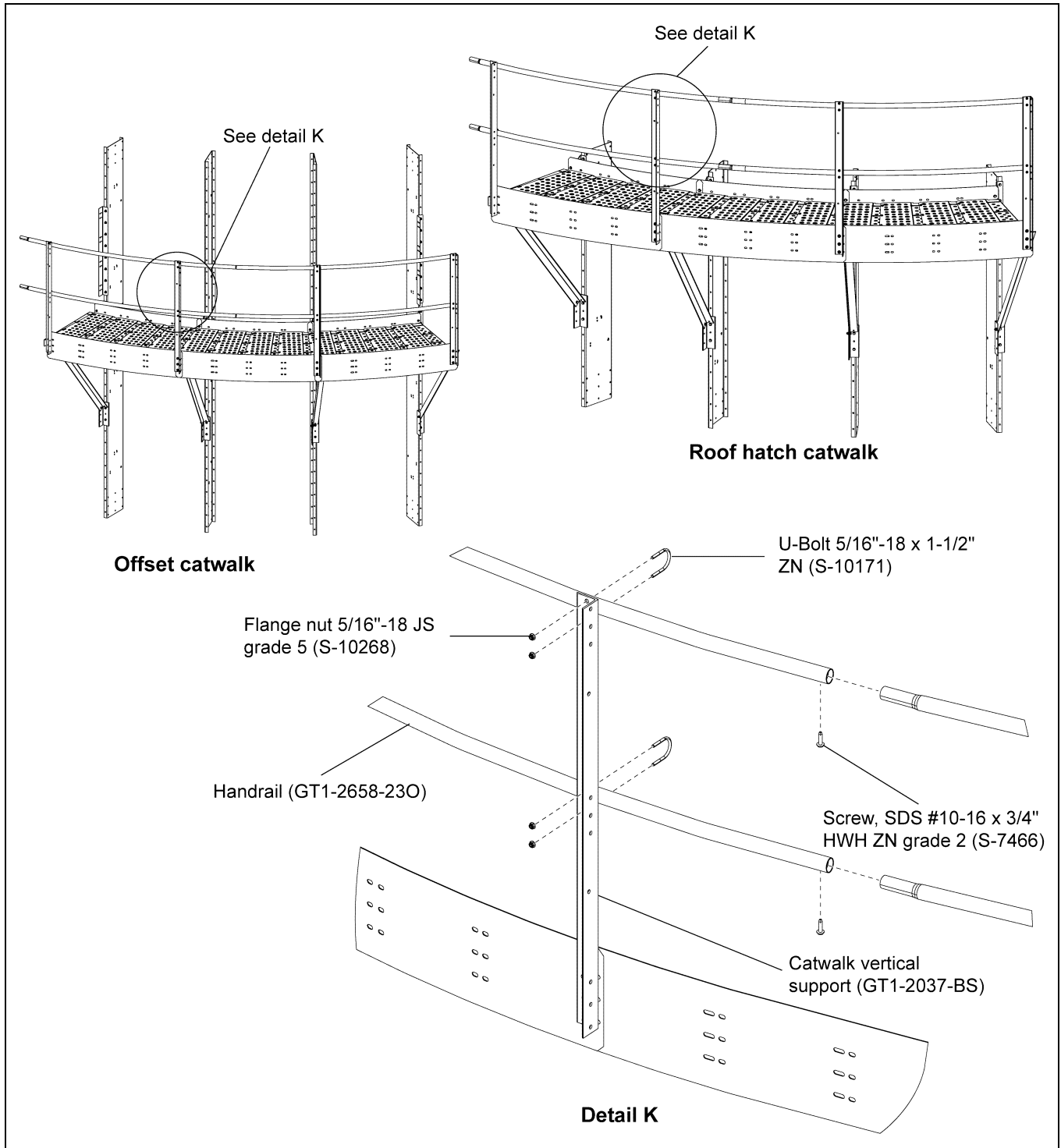


Figure 6U Handrail (GT1-2658-230) Installation for Offset and Roof Hatch Catwalks

## 6. 23'-4" Offset and Roof Hatch Platform Installation Instructions

### Installing the Platform End Handrails (GT1-2044) and Platform End Toe Board (GT1-2095)

1. Install the platform end handrail (GT1-2044) to the catwalk vertical support (GT1-2037-BS) and the platform end plate (GT1-2045) using 5/16"-18 ZN U-bolts (S-10171) and 5/16"-18 JS grade 5 nuts (S-10268). (See Figure 6V.)
2. Install the platform end toe board (GT1-2095) and knee support (GT1-2039-BS) to the catwalk plank support (GT1-2086) using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 6V.)
3. Attach the bottom end of the knee support (GT1-2039-BS) to the catwalk support clip (GT1-2040-BS) using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968).

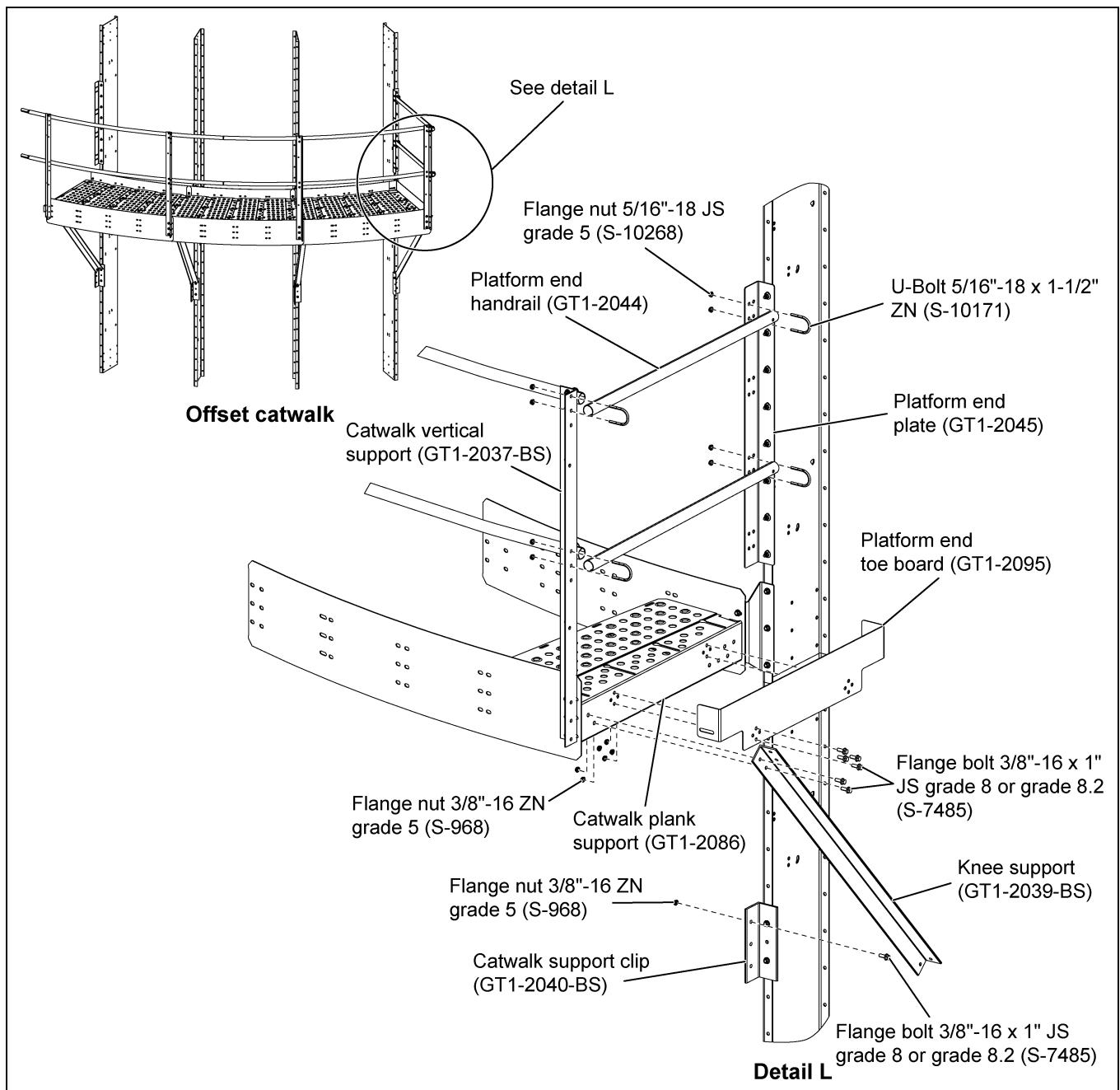


Figure 6V Offset Platform End Handrail (GT1-2044) Installation

## Installing the Platform End Handrails (GT1-2044) and Platform End Toe Board (GT1-2095) (Continued)

4. Install the platform end toe board (GT1-2095) and knee support (GT1-2039-BS) to the catwalk plank support (GT1-2086) using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). (See Figure 6W.)
5. Attach the bottom end of the knee support (GT1-2039-BS) to the catwalk support clip (GT1-2040-BS) using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968).
6. Install the swing gate stop plate (GT1-2091) to the catwalk plank support (GT1-2086) using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968).
7. Install the platform end handrail (GT1-2044) to the catwalk vertical support (GT1-2037-BS) and the swing gate stop plate (GT1-2091) using 5/16"-18 ZN U-bolts (S-10171) and 5/16"-18 JS grade 5 nuts (S-10268). (See Figure 6W.)

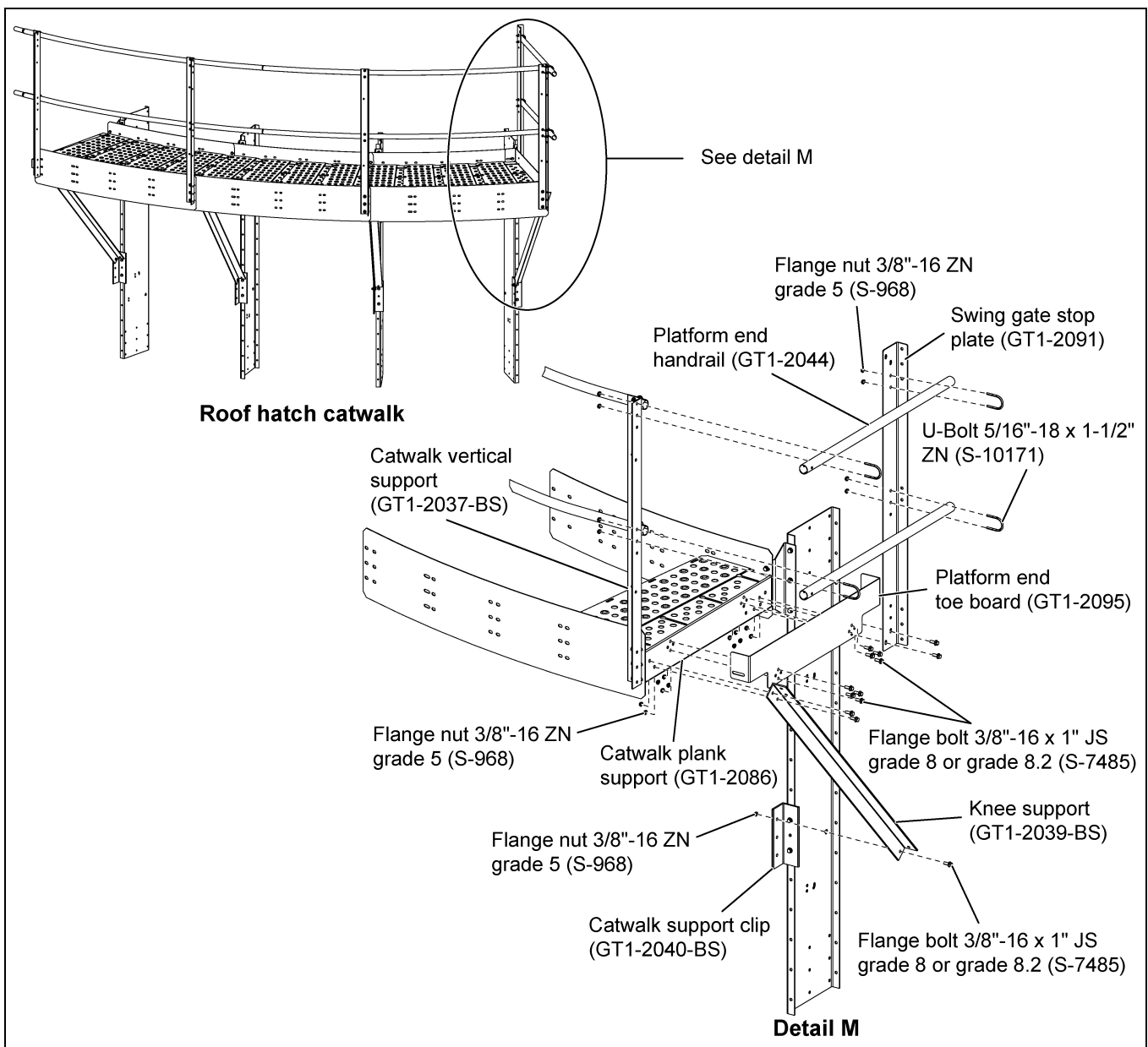


Figure 6W Roof Hatch Platform End Handrail (GT1-2044) Installation

## 6. 23'-4" Offset and Roof Hatch Platform Installation Instructions

### Installing the Swing Gate Support (GT1-2087)

1. Install the swing gate support (GT1-2087) and the gate end toe board (GT1-2665) to 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.)

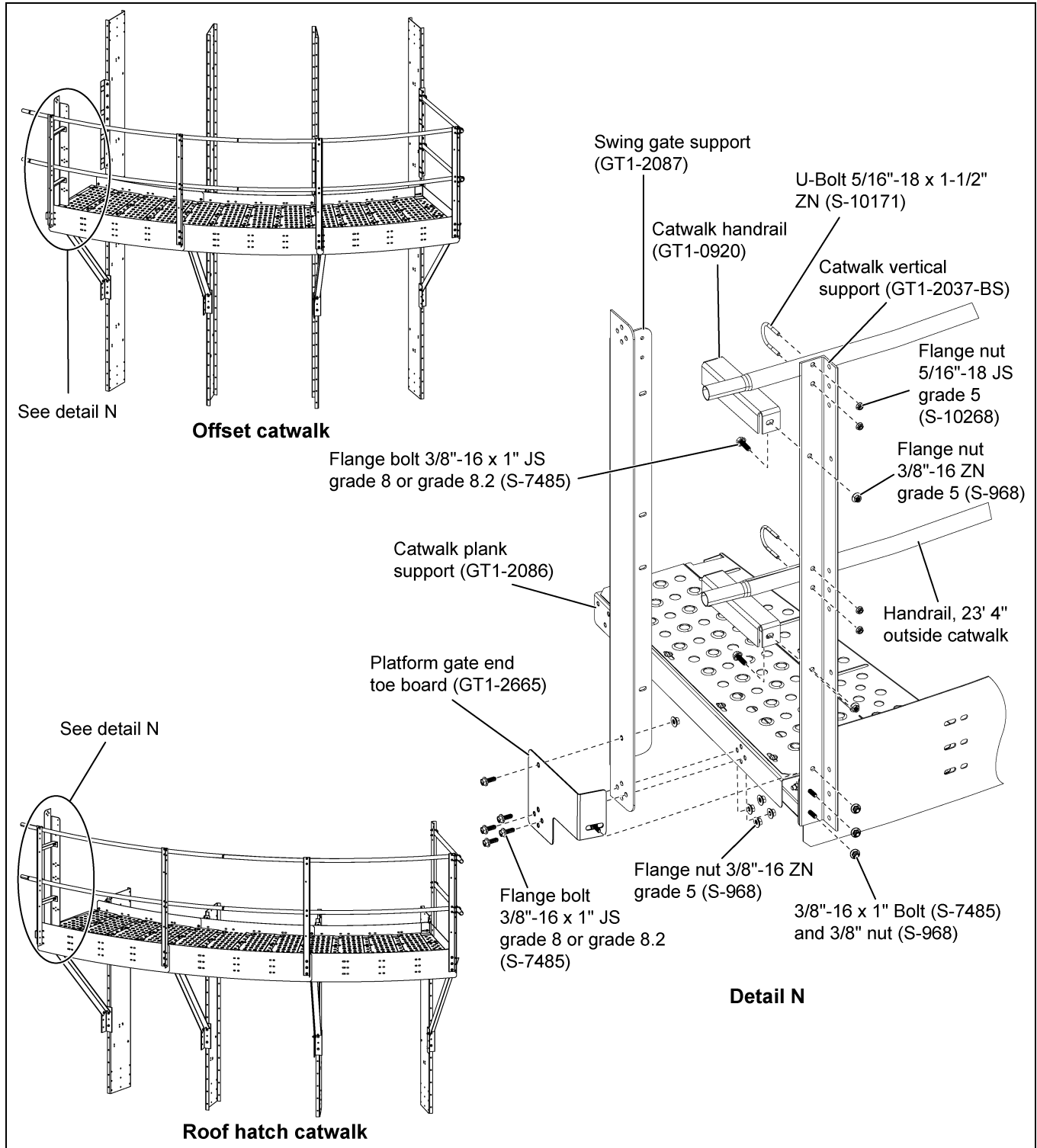
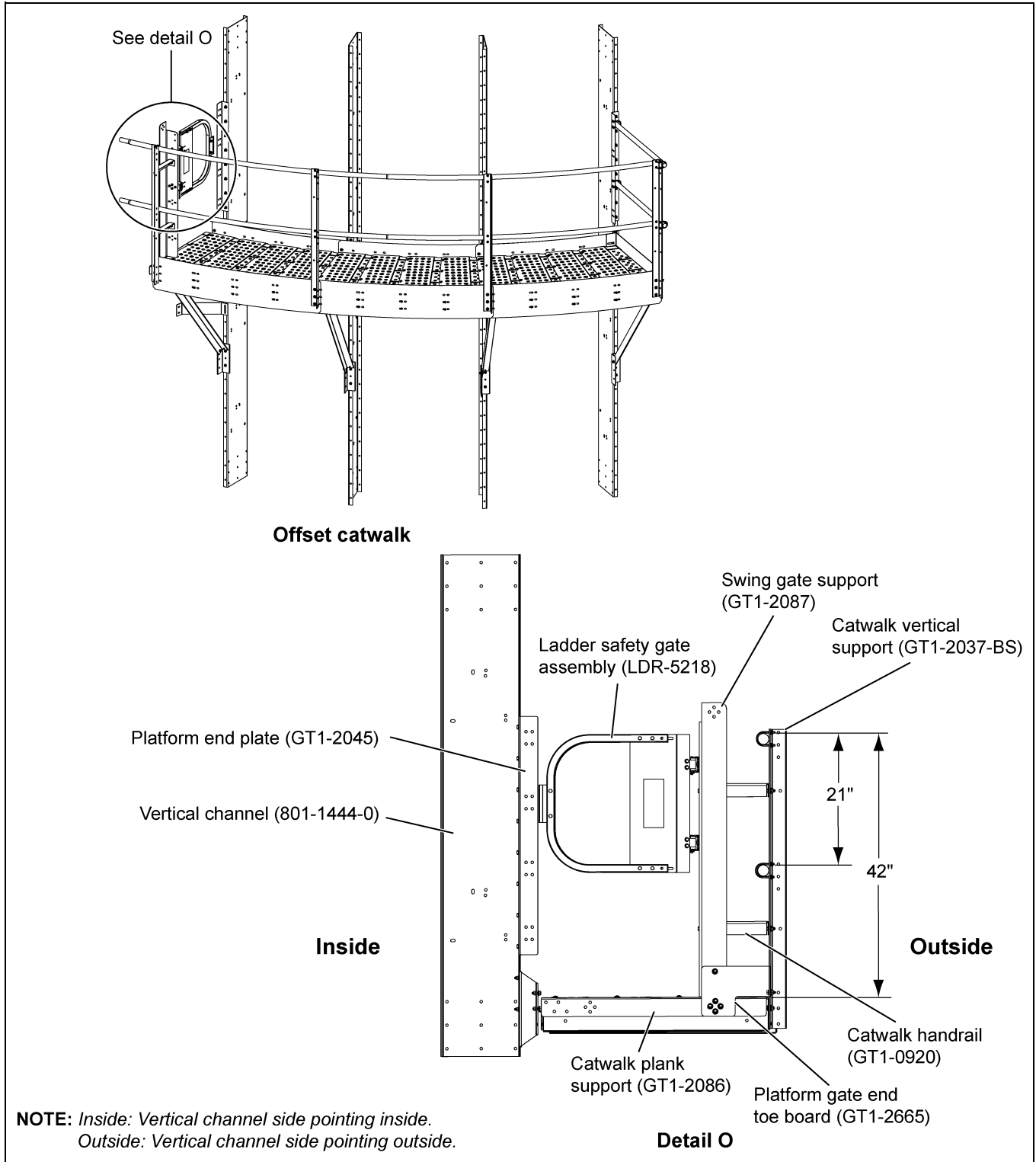


Figure 6X Installing Safety Gate (LDR-5218) to Offset and Roof Hatch Catwalks



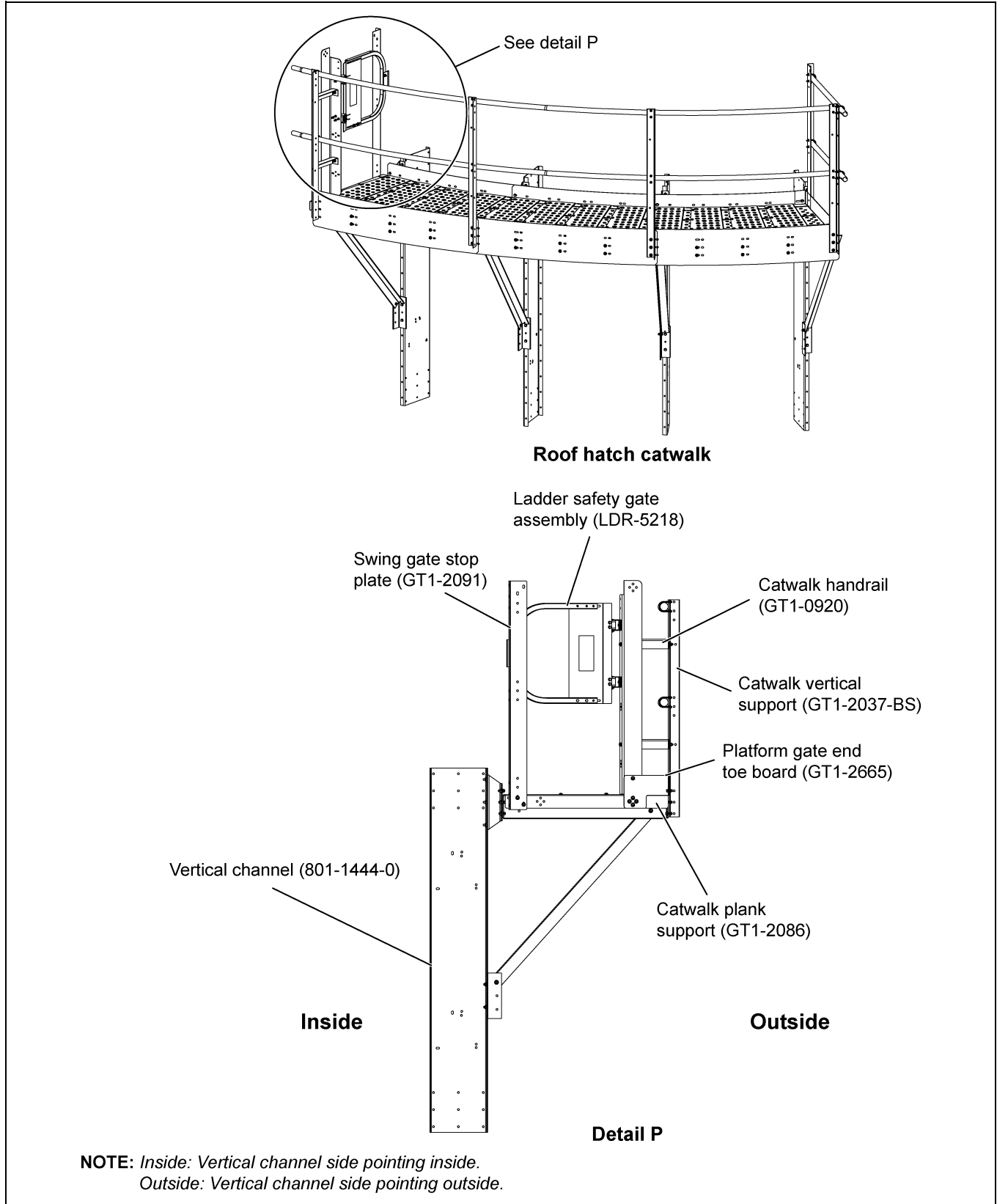
## Installing the Safety Gate Assembly (LDR-5218) with Swing Gate Support (GT1-2087)

1. Install the ladder safety gate assembly (LDR-5218) to the swing gate support (GT1-2087) using 3/8"-16 x 1" JS grade 8 or grade 8.2 bolts (S-7485) and 3/8"-16 ZN grade 5 nuts (S-968). The distance between the plank and handrail is 42". (See Figure 6Y.)



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

## Installing the Safety Gate Assembly (LDR-5218) with Swing Gate Support (GT1-2087) (Continued)



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

## Installing the Braces (Only for Roof Hatch Platform)

The brace is comprised of one large diameter tube (2) and two smaller diameter tubes (1 and 3).

1. Install two sets of long braces: Attach one smaller tube (1) to the top of the swing gate stop plate (6) and attach the other smaller tube (3) to the roof panel (9).

### NOTES:

- a. Make sure to slide and adjust one end of the smaller tube (1) in the stop plate brace, so that the bottom of the flattened end reaches the roof panel (9).
- b. Make sure to field drill four 5/16" holes per brace through both large and small tubes and bolt together using 1/4" x 1-1/2" bolts (4) and nuts (5) to prevent the braces from slipping.
- c. Use 5/16" x 1" flange bolts (10) and 5/16" flange nuts (11) to install the smaller tubes (3) to the roof panel (9).
- d. Use 3/8" x 1" flange bolts (7) and 3/8" flange nuts (8) to install the smaller tubes (1) to the swing gate stop plate (6).

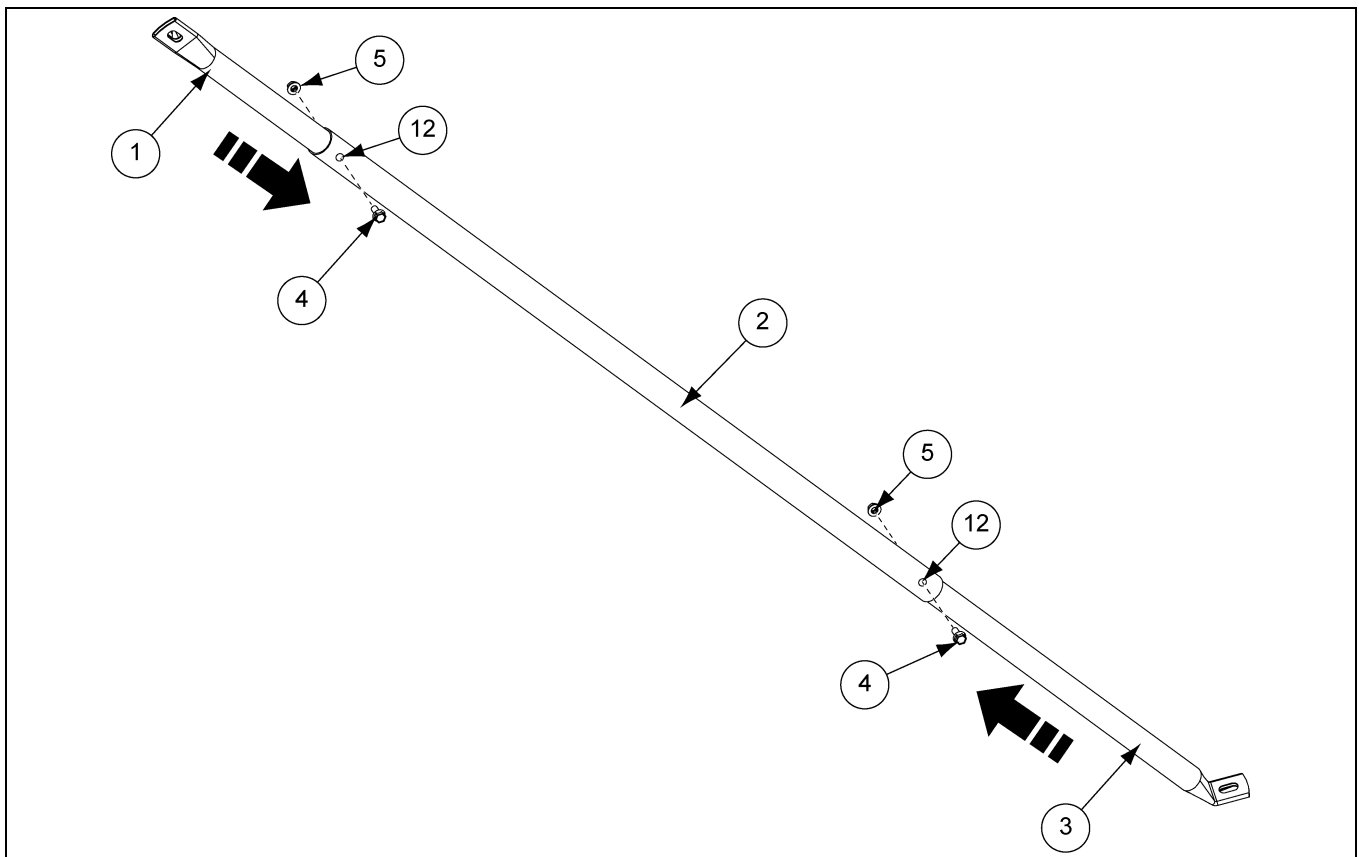


Figure 6AA Brace Assembly

Ref #	Part #	Description	Ref #	Description
1	LS-7031	End Safety Cage Brace Section	4	1/4" x 1-1/2" Bolt
2	LS-6615	Center Safety Cage Brace Section	5	1/4" Nut
3	LS-6616	End Safety Cage Brace Section	12	5/16" Field Drilled Hole

Installing the Braces (Only for Roof Hatch Platform) (Continued)

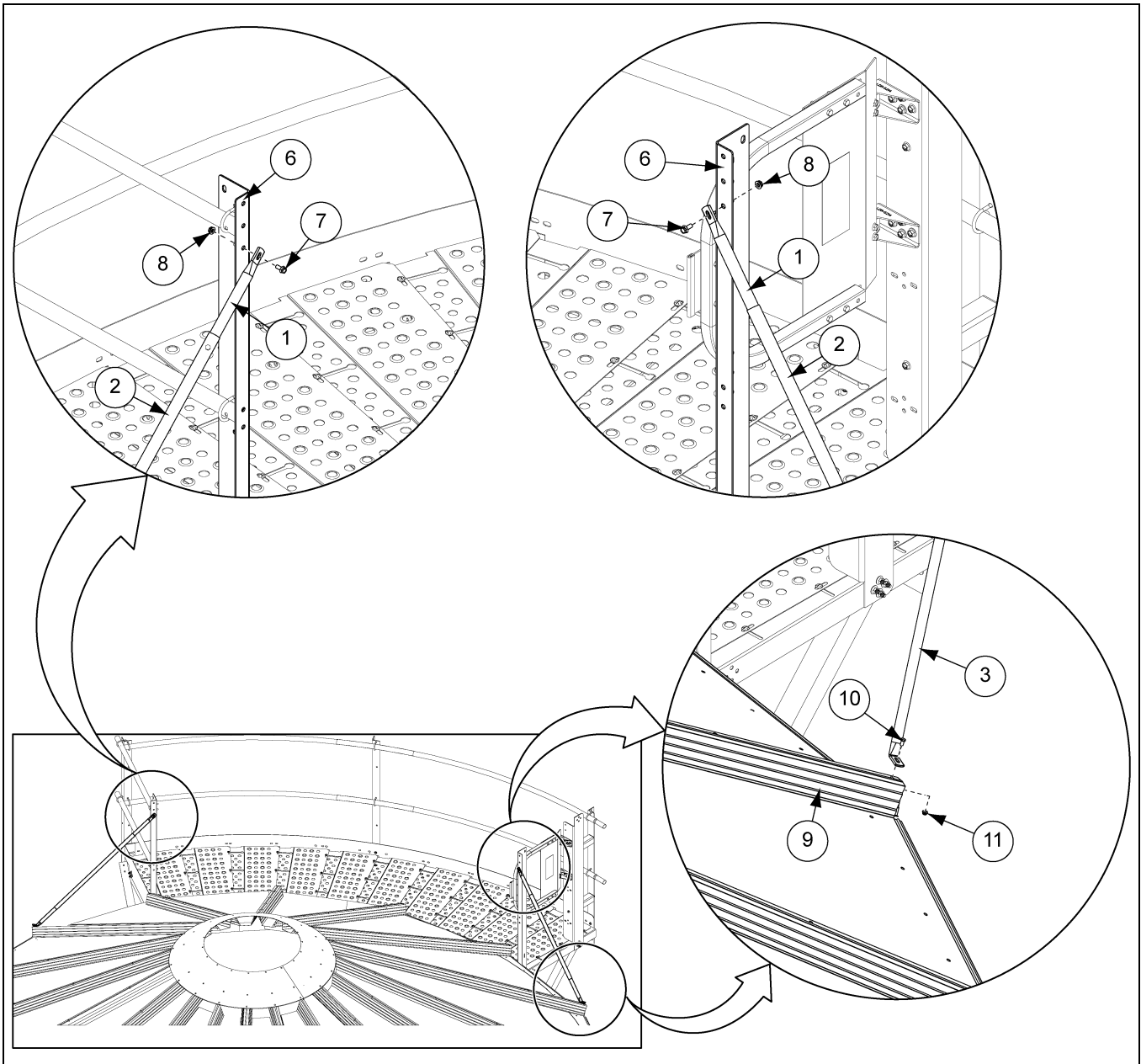


Figure 6AB Installing the Braces

Ref #	Part #	Description	Ref #	Part #	Description
1	LS-7031	End Safety Cage Brace Section	8	S-968	3/8" Flange Nut
2	LS-6615	Center Safety Cage Brace Section	9	CTR-0382	Roof Panel
3	LS-6616	End Safety Cage Brace Section	10	S-10260	5/16" x 1" Flange Bolt
6	GT1-2091	Swing Gate Stop Plate	11	S-10268	5/16" Flange Nut
7	S-7485	3/8" x 1" Flange Bolt			



# Ladder Assembly with Fall Protection System

## 7. Ladder Assembly

### Ladder Part Numbers

Ref #	Part #	Description
1	S-7485	3/8" x 1" Flange Bolt
2	S-7470	5/16" x 1" Flange Bolt
3	S-3550	5/16" x 1" Carriage Bolt
4	S-10260	5/16" x 1" Flange Bolt with Sealing Washer
5		1/4" x 1-1/2" Bolt
6		5/16" x 1-1/4" Bolt
7	S-968	3/8" Flange Nut
8	S-10268	5/16" Flange Nut
9		1/4" Nut
10		5/16" Nut
11	CHT-1233	Ladder Bracket
12	GT1-2657-23	Roof Band
13	LDR-4346	Left Ladder Starting Bracket
14	LDR-4347	Right Ladder Starting Bracket
15	GT1-2662-23	Left Ladder Brace Bracket
16	GT1-2663-23	Right Ladder Brace Bracket
17	LS-6615	Center Brace
18	LS-6616	Angle End Brace

Ref #	Part #	Description
19	LS-7031	Straight End Brace
20	GT1-2620	Center Brace
21	GT1-2621	Angle End Brace
22	GT1-2622	Straight End Brace
23	LDR-5011	End Cap
24	LDR-4314	Ladder Stand-Off Bracket
25	LDR-4198	Ladder Stand-Off Wedge
26	LDR-4317	Ladder Splice
27	GT1-2447-L	Ladder to Toe Board Bracket L.H.
28	GT1-2447-R	Ladder to Toe Board Bracket R.H.
29	GT1-2659	Ladder Opening Inner Toe Board
30	CHT-1594	Support Channel
31		Ladder Section
32		Solid Rod Inserts
33		Cotter Pin
34		Extended Bracket Package
35		Support Column
36		Roof Panel

### Installing the Ladder Assembly at Eave

1. Install the ladder starting brackets (13 and 14) to the roof band (12) using 3/8" x 1" flange bolts (1) and 3/8" flange nuts (7). (See Figure 7A.)

**NOTE:** Make sure to assemble the right ladder starting bracket (14) to the first set of holes on the left where two roof bands (12) overlap.

**NOTE:** Make sure to assemble the left ladder starting bracket (13) to the set of holes which are about 17" left of the first set of holes.

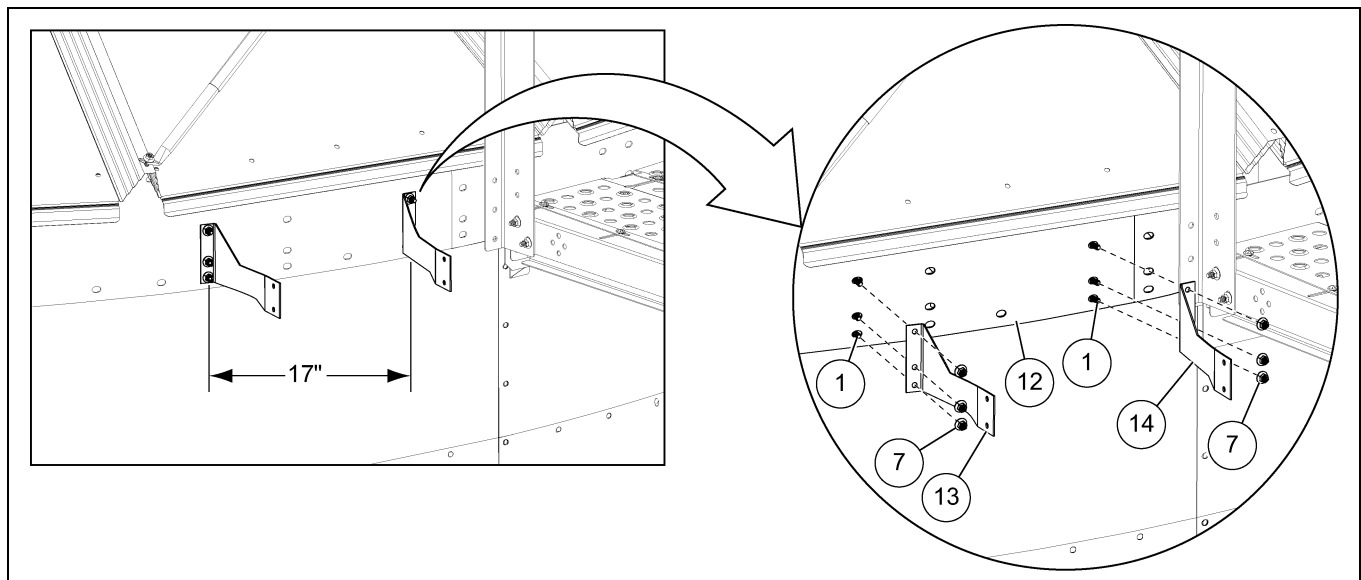
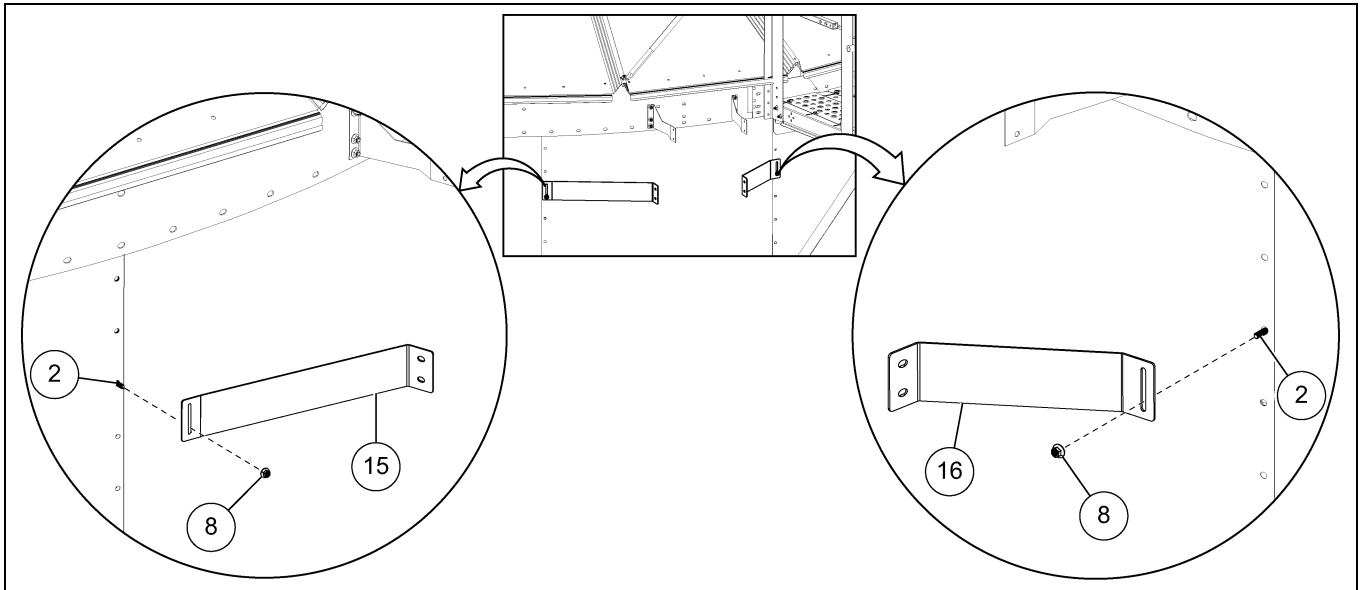


Figure 7A Installing the Ladder Starting Brackets

## Installing the Ladder Assembly at Eave (Continued)

2. Install the slotted end of the left ladder brace bracket (15) and right ladder brace bracket (16) to the vertical channels using 5/16" x 1" flange bolts (2) and 5/16" flange nuts (8). (See Figure 7B.)

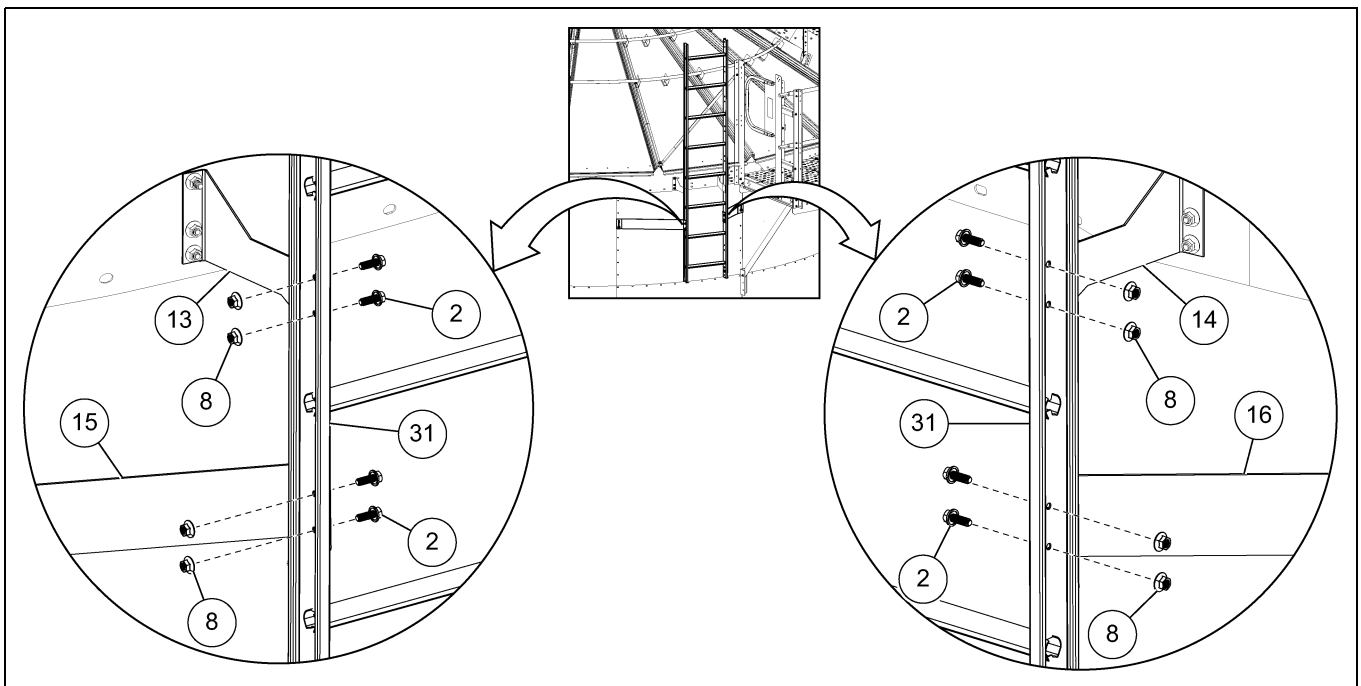


**Figure 7B** *Installing the Ladder Brace Brackets*

3. Install the ladder section (31) to the ladder starting brackets (13 and 14) and ladder brace brackets (15 and 16) using 5/16" x 1" flange bolts (2) and 5/16" flange nuts (8). (See Figure 7C.)

**NOTE:** Make sure the ladder (31) will extend up approximately 4' from roof hatch platform floor.

**NOTE:** Make sure the ladder rung is aligned with the roof hatch platform floor.



**Figure 7C** *Installing the Ladder Section*

4. For the fall protection system, you need to install the fall protection bracket to the three rungs below the eave in the ladder assembly.

## 7. Ladder Assembly

### Installing the Ladder Braces

#### What You Should Know

The long ladder brace is comprised of one large diameter tube (17) and two smaller diameter tubes (18 and 19). The short ladder brace is comprised of one large diameter tube (20) and two smaller diameter tubes (21 and 22).

1. Install two sets of long ladder braces: Attach one smaller tube (19) to the top of the ladder rail (31) and attach the other smaller tube (18) to the roof panel (36). (See Figure 7D.)
2. Install two sets of short ladder braces: Attach one smaller tube (22) to the ladder rail (31) and attach the other smaller tube (21) to the roof panel (36). (See Figure 7D.)

#### NOTE:

- a. Make sure to slide and adjust the smaller tubes (19 and 22) in both the ladder brace so that the bottom flattened end of the smaller tubes (18 and 21) reaches the roof panel (36).
- b. Use 5/16" x 1" flange bolts (4) and 5/16" flange nuts (8) to install the smaller tubes (18 and 21) to the roof panel (36).
- c. Use 5/16" x 1" flange bolts (4) and 5/16" flange nuts (8) to install the smaller tubes (19 and 22) to the ladder extension rail (31).
- d. Make sure to field drill four 5/16" holes per brace through both large and smaller tubes and bolt together using 1/4" x 1-1/2" bolts (5) and 1/4" nuts (9) to prevent the braces from slipping. (See Figure 7E on Page 73.)

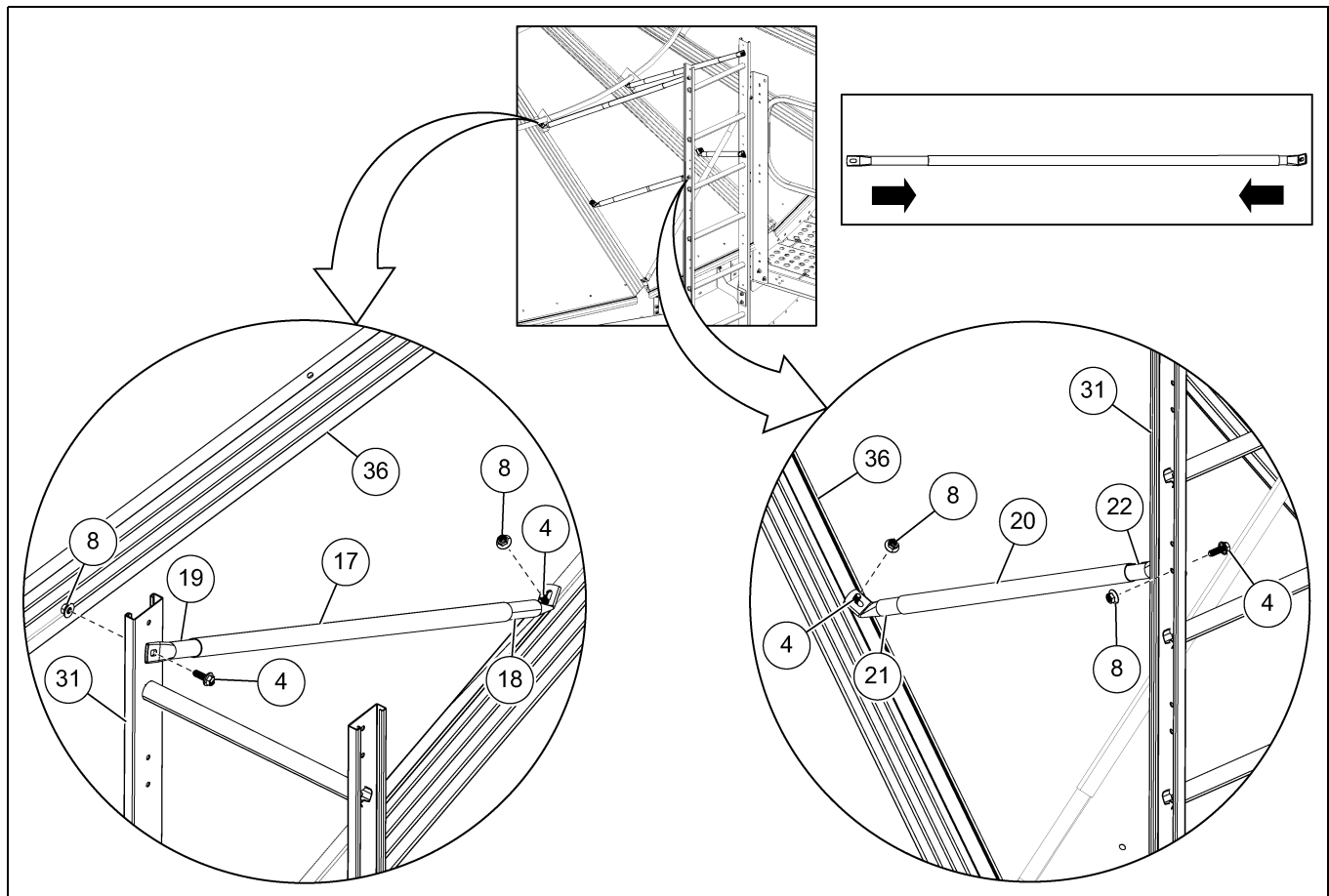


Figure 7D Installing the Ladder Braces



## Installing the Ladder Braces (Continued)

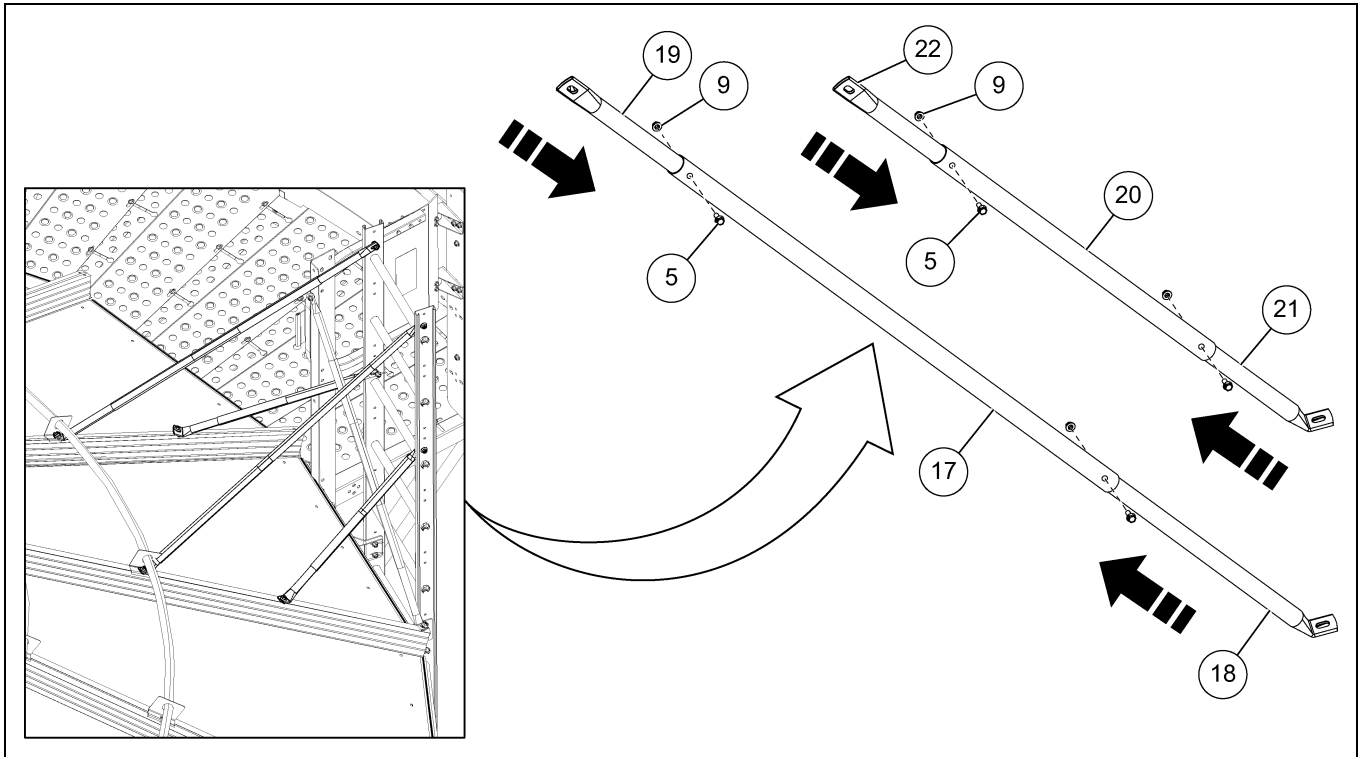


Figure 7E Securing the Ladder Braces

## Installing the End Cap to the Ladder

The end cap (23) helps to protect your hands from the sharp edges on the ends of the ladder (31).

1. Install the end caps (23) to both the left and right side of the ladder (31) by snapping the end caps (23) onto the top of the ladder (31). (See Figure 7F.)
2. Secure the end caps (23) in place using 5/16" x 1" flange bolt (2) and 5/16" flange nut (8).

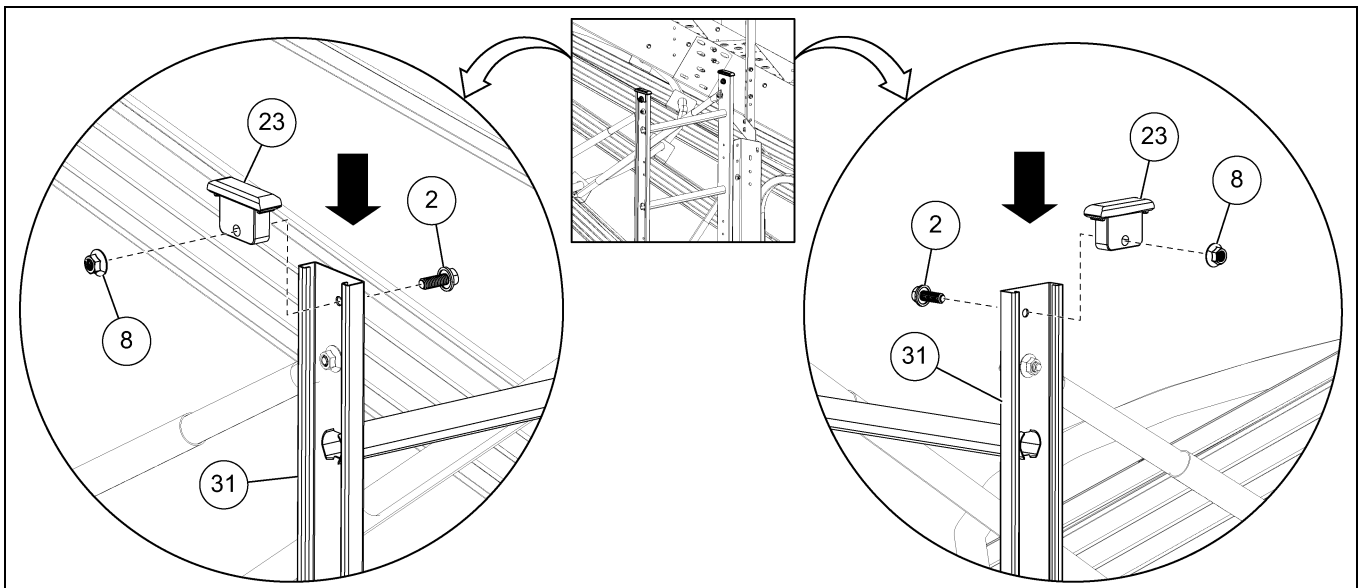


Figure 7F Installing the End Caps

## 7. Ladder Assembly

### Installing the Ladder Assembly to the Dryer

1. Install one set of ladder stand-off brackets (24) where perforated sheets overlap using existing vertical seam bolt (2) and 5/16" flange nut (8).

**NOTE:** As a rule of thumb, make sure to use one set of ladder stand-off brackets (24) on every overlap, unless otherwise shown.

2. Install the ladder brace brackets (15 and 16) to the vertical channels using existing vertical seam bolt (2) and 5/16" flange nut (8).

**NOTE:** Use one set of ladder brace brackets (15 and 16) per 4' ladder section and two sets per 8' ladder section.

3. Install the ladder section (31) to the ladder brace brackets (15 and 16) using 5/16" x 1" flange bolts (2) and 5/16" flange nuts (8).

4. Slide the ladder wedge (25) along the ladder rail (31) and install it to the ladder stand-off bracket (24) using 5/16" x 1" carriage bolts (3) and 5/16" flange nuts (8).

5. At required places, connect the ladder sections (31) with two splices (26) using 5/16" x 1" flange bolt (4) and 5/16" flange nut (8). **NOTE:** Install bolts (4) with bolt head on the inside of the ladder (31).

6. At catwalks, install the left and right ladder toe board brackets (27 and 28) to the inner toe board (29) using 3/8" x 1" flange bolts (1) and 3/8" flange nuts (7). (See Figure 7G.)

**NOTE:** Use the left set of holes below the notch on the inner toe board (29) to install the ladder toe board brackets (27 and 28).

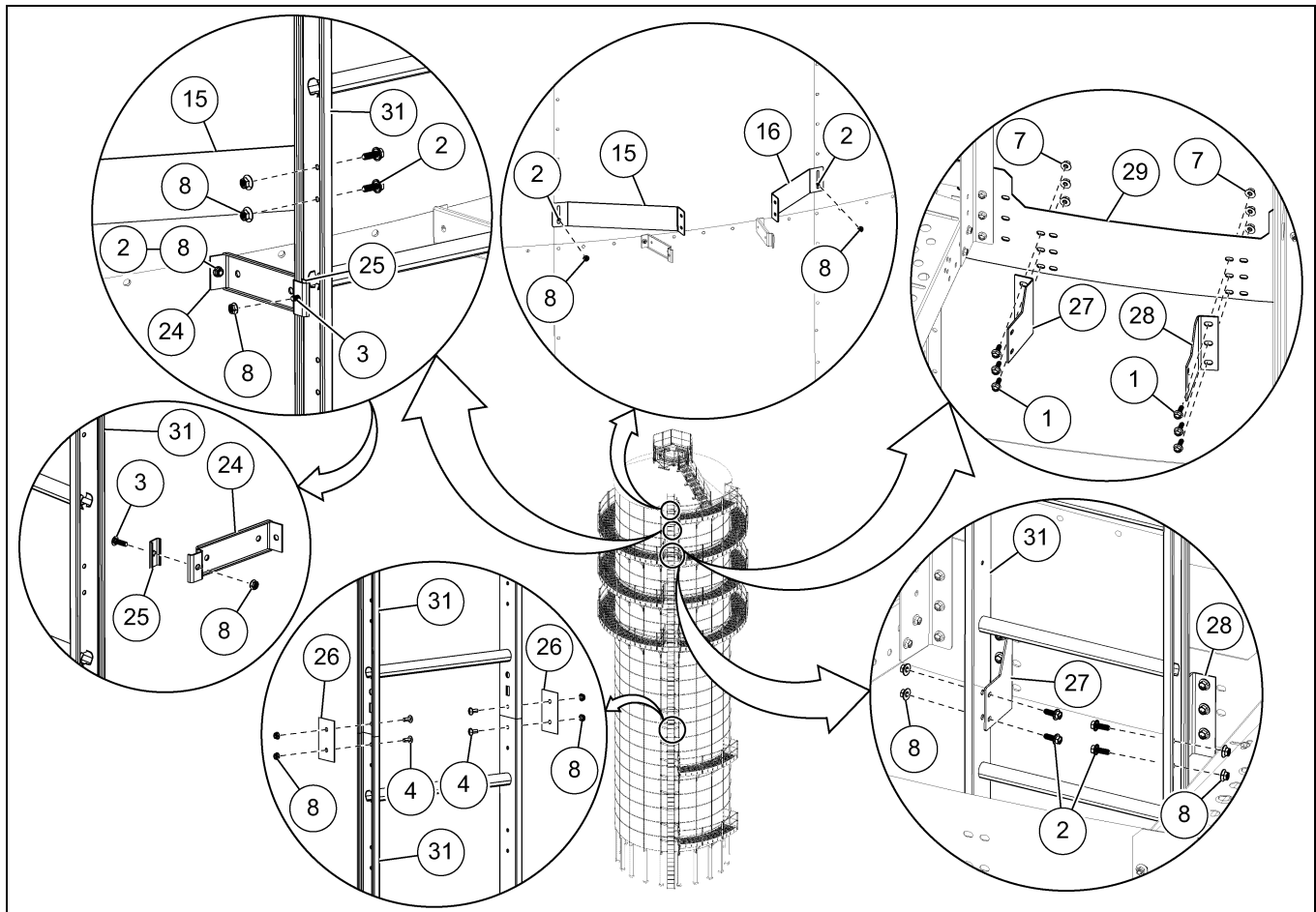


Figure 7G Installing the Ladder to the Dryer

## Installing the Ladder Assembly at the Base

1. Measure 32" from the last stand-off bracket at the base sheet and install the first support channel (30) to the support column (35).

**NOTE:** Weld the support channel (30) to the support column (35) or field drill a 3/8" hole in the support column (35) and install the support channel (30) using 5/16" x 1-1/4" bolts (6) and 5/16" nuts (10).

2. Similarly install the remaining support channels (30). Check for the ladder position and install two ladder brackets (11) to each of the support channel (30) using 5/16" x 1" flange bolts (2) and 5/16" nuts (10).
3. Install the ladder stand-off brackets (24) to each of the ladder brackets (11) using 5/16" x 1" flange bolts (2) and 5/16" flange nuts (8).
4. Slide the ladder wedge (25) along the ladder rail (31) and install it to the stand-off bracket (24) using 5/16" x 1" carriage bolts (3) and 5/16" flange nuts (8). (See Figure 7H.)

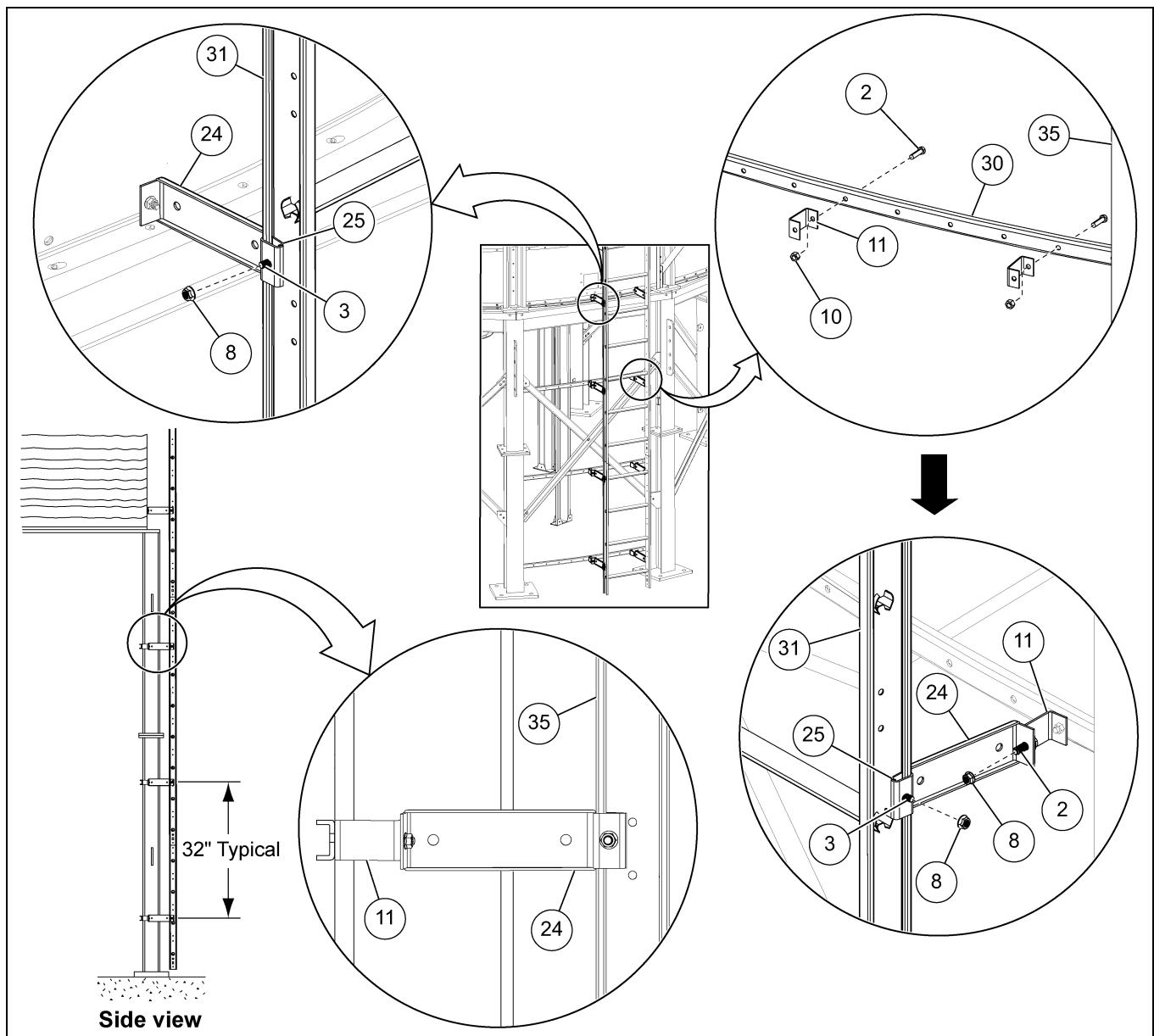


Figure 7H Installing the Ladder at the Base

## 7. Ladder Assembly

### Installing the Fall Protection System

1. Slide the solid rod inserts (32) into the hollow rungs of the ladder (31) where the extended bracket package (34) will be installed.

**IMPORTANT:** *The solid rods inserts (32) will be installed to the first three rungs counted from eave.*

2. Secure the solid rod inserts (32) from slipping out by installing cotter pins (33) on both the sides.
3. Use the extended bracket package (34) and install the fall protection system to the right side of the ladder (31). (*See Figure 71.*)

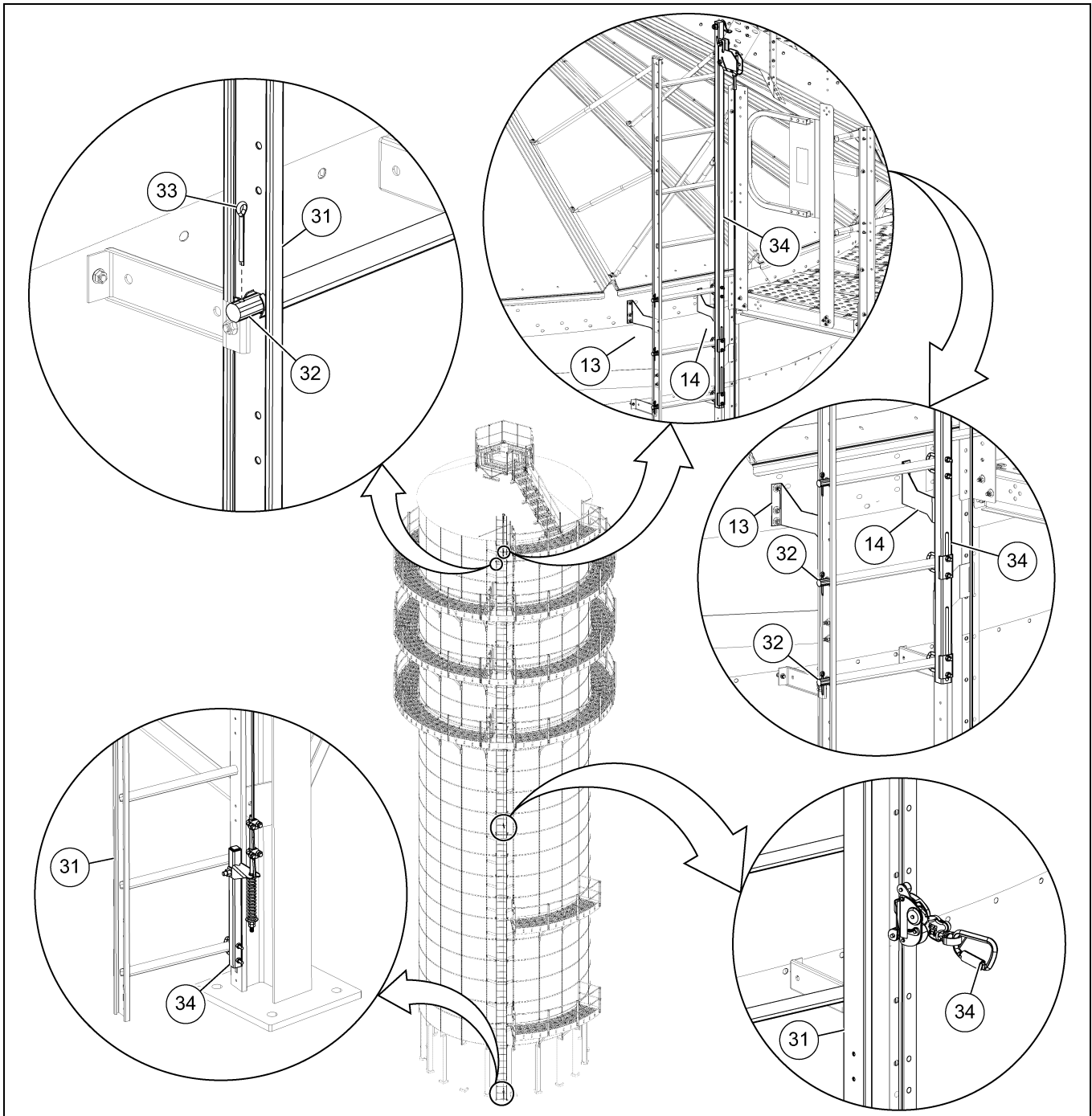
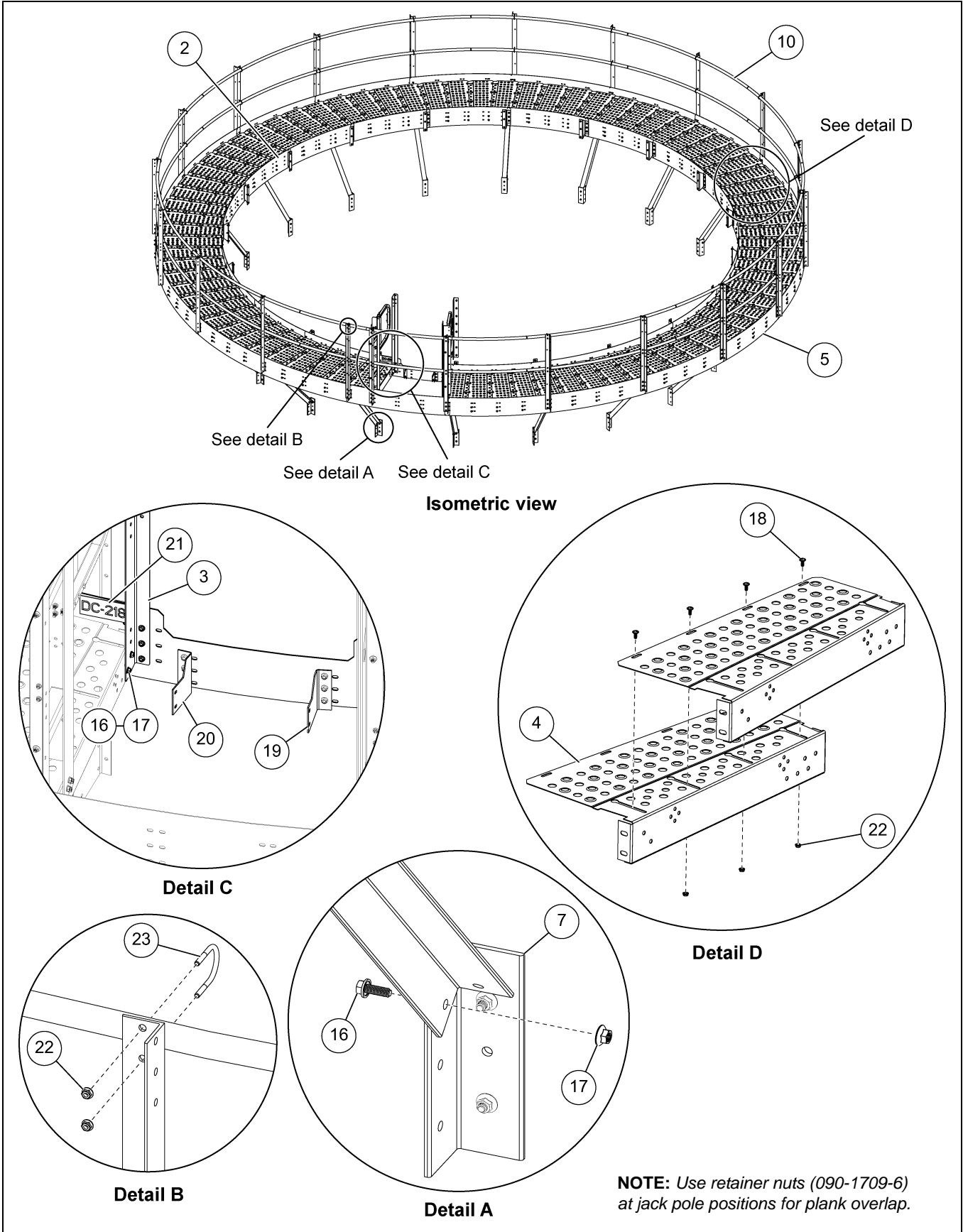


Figure 71 Installing the Fall Protection System

1. 23'-4" Outside Fan Style Catwalk (GT4-1648-23F) - [\(See Pages 78-81.\)](#)
2. 23'-4" Inside Fan Style Catwalk (GT4-1650-23F) - [\(See Pages 82-85.\)](#)
3. 23'-4" Offset Fan Style Platform (GT4-1649-23F) - [\(See Pages 86-89.\)](#)
4. 23'-4" Roof Hatch Fan Style Platform (GT4-1651-23F) - [\(See Pages 90-93.\)](#)

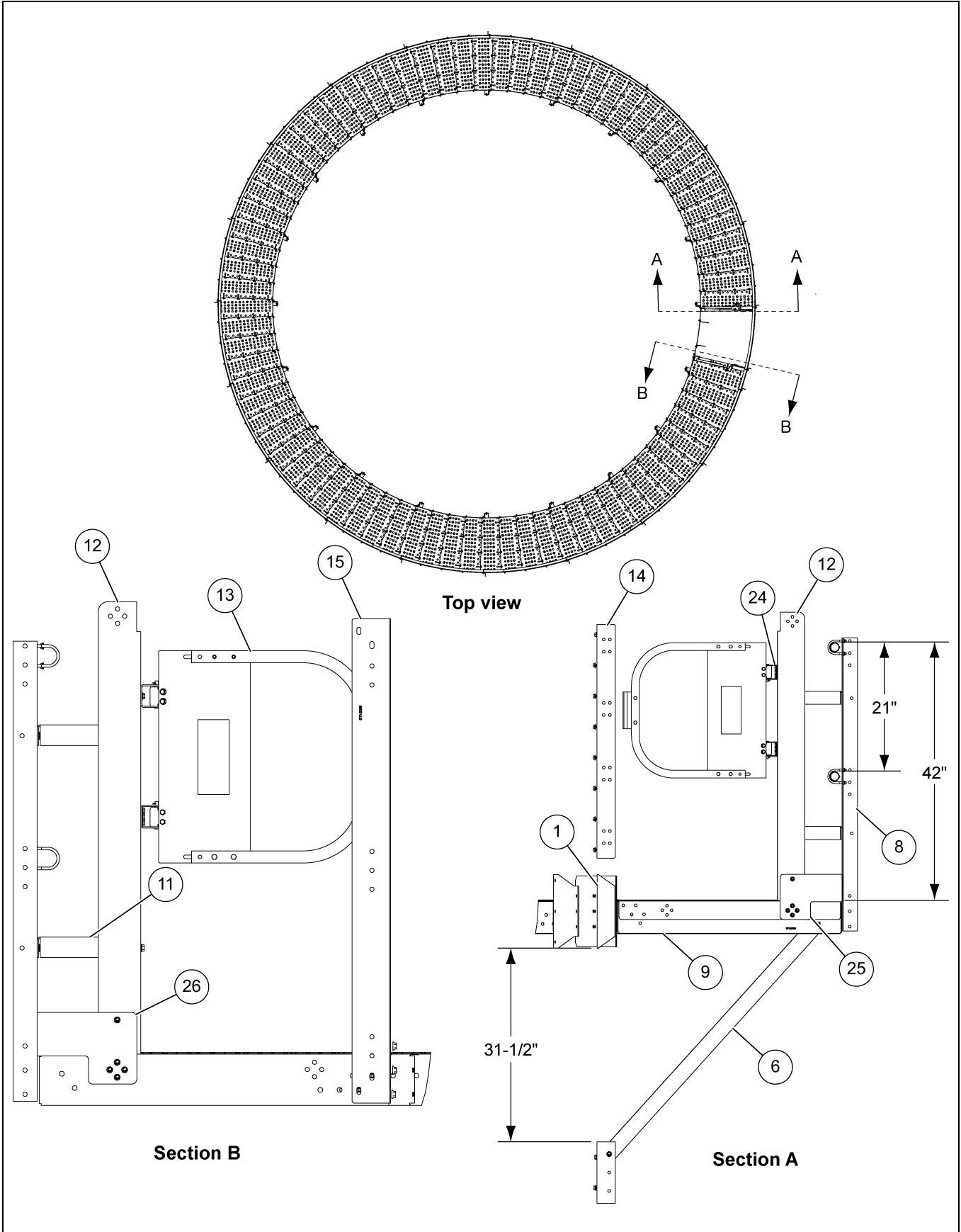
# 23'-4" Outside Fan Style Catwalk (GT4-1648-23F)



## 23'-4" Outside Fan Style Catwalk (GT4-1648-23F) Parts List

Ref #	Part #	Description	Qty
1	GT1-2036	Catwalk/Platform to Dryer Wall Bracket	20
2	GT1-2657	23'-4" Outside Catwalk/Platform Inner Toe Board	19
3	GT1-2659	23'-4" Ladder Opening Inner Toe Board	1
4	GT3-1669	Plank	77
5	GT1-2656	23'-4" Outer Toe Board	20
6	GT1-2039-BS	Outside/Inside Catwalk Diagonal Support - Bin Silver	20
7	GT1-2040-BS	Catwalk Support Clip - Bin Silver	20
8	GT1-2037-BS	Catwalk Vertical Support - Bin Silver	21
9	GT1-2086	Catwalk Plank Support	1
10	GT1-2658-230	23'-4" Outside Catwalk/Platform Handrail	26
11	GT1-0920	Catwalk End Handrail	4
12	GT1-2087	Swing Gate Support	2
13	LDR-5218	Ladder Safety Gate	2
14	GT1-2045	Platform End Plate	1
15	GT1-2091	Swing Gate Stop Plate	1
16	S-7485	Flange Bolt 3/8"-16 x 1" JS500 Grade 8 or Grade 8.2	600
17	S-968	Flange Nut 3/8"-16 ZN Grade 5 Wide Flange	600
18	S-10267	Truss Bolt 5/16"-18 x 3/4" JS500 Grade 8 or Grade 8.2 with Sealing Washer	350
19	GT1-2447-L	Ladder to Toe Board Bracket - L.H.	1
20	GT1-2447-R	Ladder to Toe Board Bracket - R.H.	1
21	DC-2188	Decal, Notice Load Limit	2
22	S-10268	Flange Nut 5/16"-18 JS500 Grade 5	420
23	S-10171	Bolt, U-Bolt 5/16"-18 for 1-1/4" Pipe ZN	50
24	S-10260	Flange Bolt 5/16"-18 x 1" JS500 Grade 8 or Grade 8.2 with Sealing Washer	20
25	GT1-2665	Toe Board, Platform Gate End - R.H.	1
26	GT1-2671	Toe Board, Platform Gate End - L.H.	1
N/S	090-1709-6	Retainer Nut 5/16"-18 x 0.120" ZN	132
N/S	GT1-2144	Holding Plate, Inner Toe Board to Plank	26
N/S	S-10175	Extruded Nut 3/8"-16, Tapped Hole, 050-0.200 Panel Range, Black	130
N/S	WB-964530	Wood Box, 96" x 45" x 30" PINE/OSB HT/KD	1

# 23'-4" Outside Fan Style Catwalk (GT4-1648-23F) (Continued)

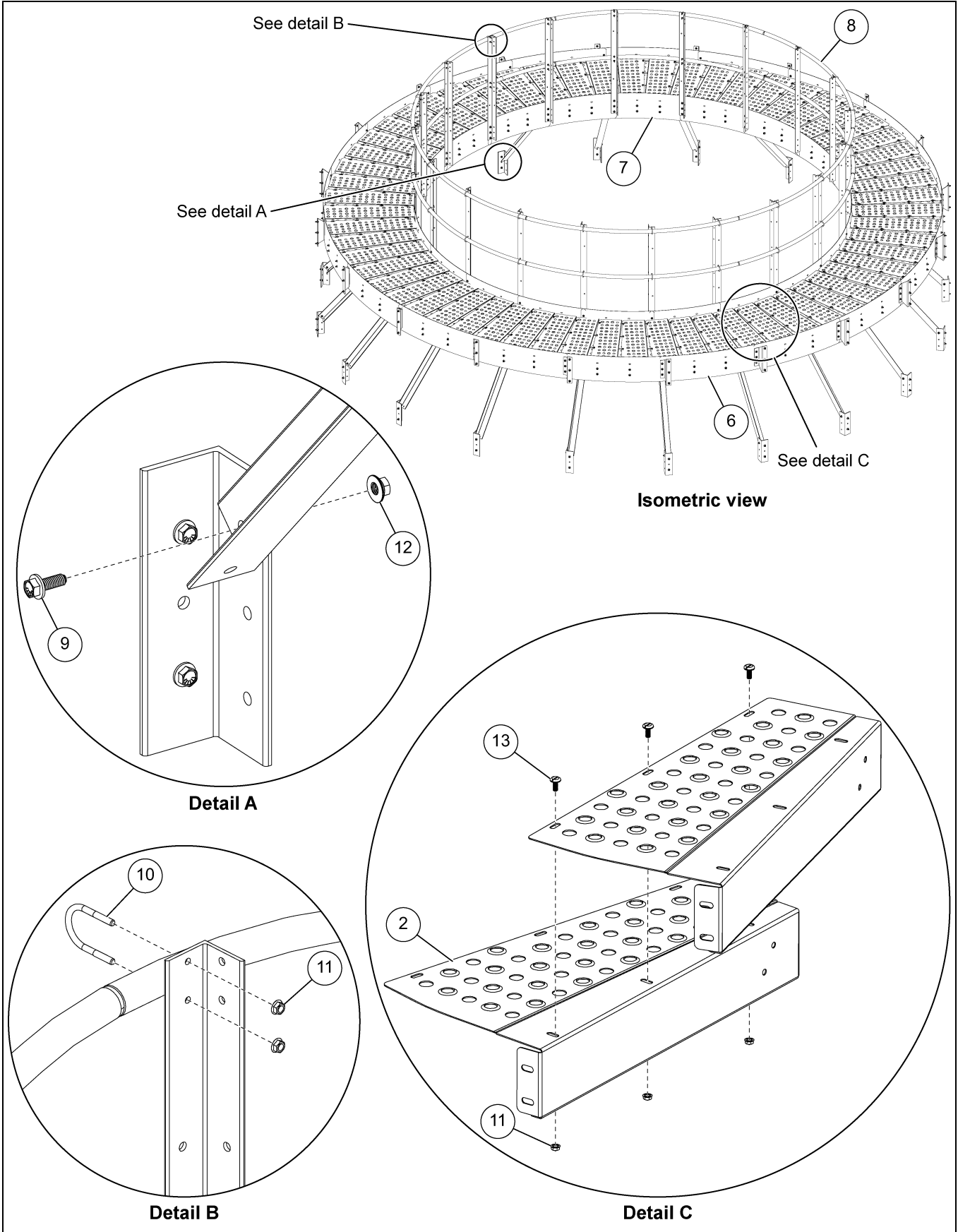




## 23'-4" Outside Fan Style Catwalk (GT4-1648-23F) Parts List

Ref #	Part #	Description	Qty
1	GT1-2036	Catwalk/Platform to Dryer Wall Bracket	20
2	GT1-2657	23'-4" Outside Catwalk/Platform Inner Toe Board	19
3	GT1-2659	23'-4" Ladder Opening Inner Toe Board	1
4	GT3-1669	Plank	77
5	GT1-2656	23'-4" Outer Toe Board	20
6	GT1-2039-BS	Outside/Inside Catwalk Diagonal Support - Bin Silver	20
7	GT1-2040-BS	Catwalk Support Clip - Bin Silver	20
8	GT1-2037-BS	Catwalk Vertical Support - Bin Silver	21
9	GT1-2086	Catwalk Plank Support	1
10	GT1-2658-230	23'-4" Outside Catwalk/Platform Handrail	26
11	GT1-0920	Catwalk End Handrail	4
12	GT1-2087	Swing Gate Support	2
13	LDR-5218	Ladder Safety Gate	2
14	GT1-2045	Platform End Plate	1
15	GT1-2091	Swing Gate Stop Plate	1
16	S-7485	Flange Bolt 3/8"-16 x 1" JS500 Grade 8 or Grade 8.2	600
17	S-968	Flange Nut 3/8"-16 ZN Grade 5 Wide Flange	600
18	S-10267	Truss Bolt 5/16"-18 x 3/4" JS500 Grade 8 or Grade 8.2 with Sealing Washer	350
19	GT1-2447-L	Ladder to Toe Board Bracket - L.H.	1
20	GT1-2447-R	Ladder to Toe Board Bracket - R.H.	1
21	DC-2188	Decal, Notice Load Limit	2
22	S-10268	Flange Nut 5/16"-18 JS500 Grade 5	420
23	S-10171	Bolt, U-Bolt 5/16"-18 for 1-1/4" Pipe ZN	50
24	S-10260	Flange Bolt 5/16"-18 x 1" JS500 Grade 8 or Grade 8.2 with Sealing Washer	20
25	GT1-2665	Toe Board, Platform Gate End - R.H.	1
26	GT1-2671	Toe Board, Platform Gate End - L.H.	1
N/S	090-1709-6	Retainer Nut 5/16"-18 x 0.120" ZN	132
N/S	GT1-2144	Holding Plate, Inner Toe Board to Plank	26
N/S	S-10175	Extruded Nut 3/8"-16, Tapped Hole, 050-0.200 Panel Range, Black	130
N/S	WB-964530	Wood Box, 96" x 45" x 30" PINE/OSB HT/KD	1

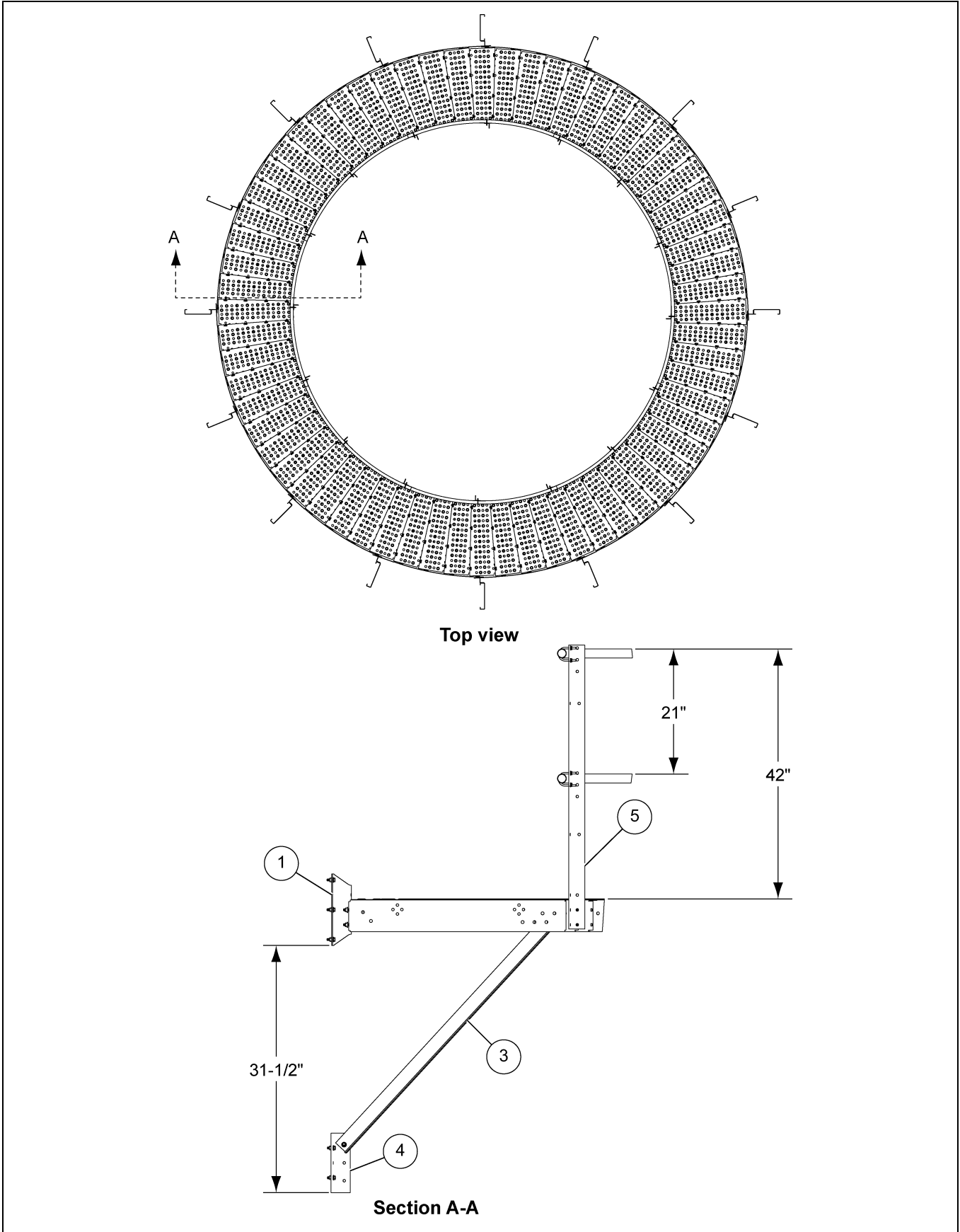
# 23'-4" Inside Fan Style Catwalk (GT4-1650-23F)



## 23'-4" Inside Fan Style Catwalk (GT4-1650-23F) Parts List

Ref #	Part #	Description	Qty
1	GT1-2036	Catwalk/Platform to Dryer Wall Bracket	20
2	GT3-1669	Plank	64
3	GT1-2039-BS	Outside/Inside Catwalk Diagonal Support - Bin Silver	20
4	GT1-2040-BS	Catwalk Support Clip - Bin Silver	20
5	GT1-2037-BS	Vertical Support Handrail - Bin Silver	20
6	GT1-2660	23'-4" Outer Toe Board	20
7	GT1-2661	23'-4" Inner Toe Board	20
8	GT1-2658-23I	23'-4" Inside Catwalk Handrail	14
9	S-7485	Flange Bolt 3/8"-16 x 1" JS500 Grade 8 or Grade 8.2	500
10	S-10171	Bolt, U-Bolt 5/16"-18 for 1-1/4" Pipe ZN	44
11	S-10268	Flange Nut 5/16"-18 JS500 Grade 5	400
12	S-968	Flange Nut 3/8"-16 ZN Grade 5 Wide Flange	500
13	S-10267	Truss Bolt 5/16"-18 x 3/4" JS500 Grade 8 or Grade 8.2 with Sealing Washer	300
N/S	WB-964530	Wood Box, 96" x 45" x 30" PINE/OSB HT/KD	1

### 23'-4" Inside Fan Style Catwalk (GT4-1650-23F) (Continued)

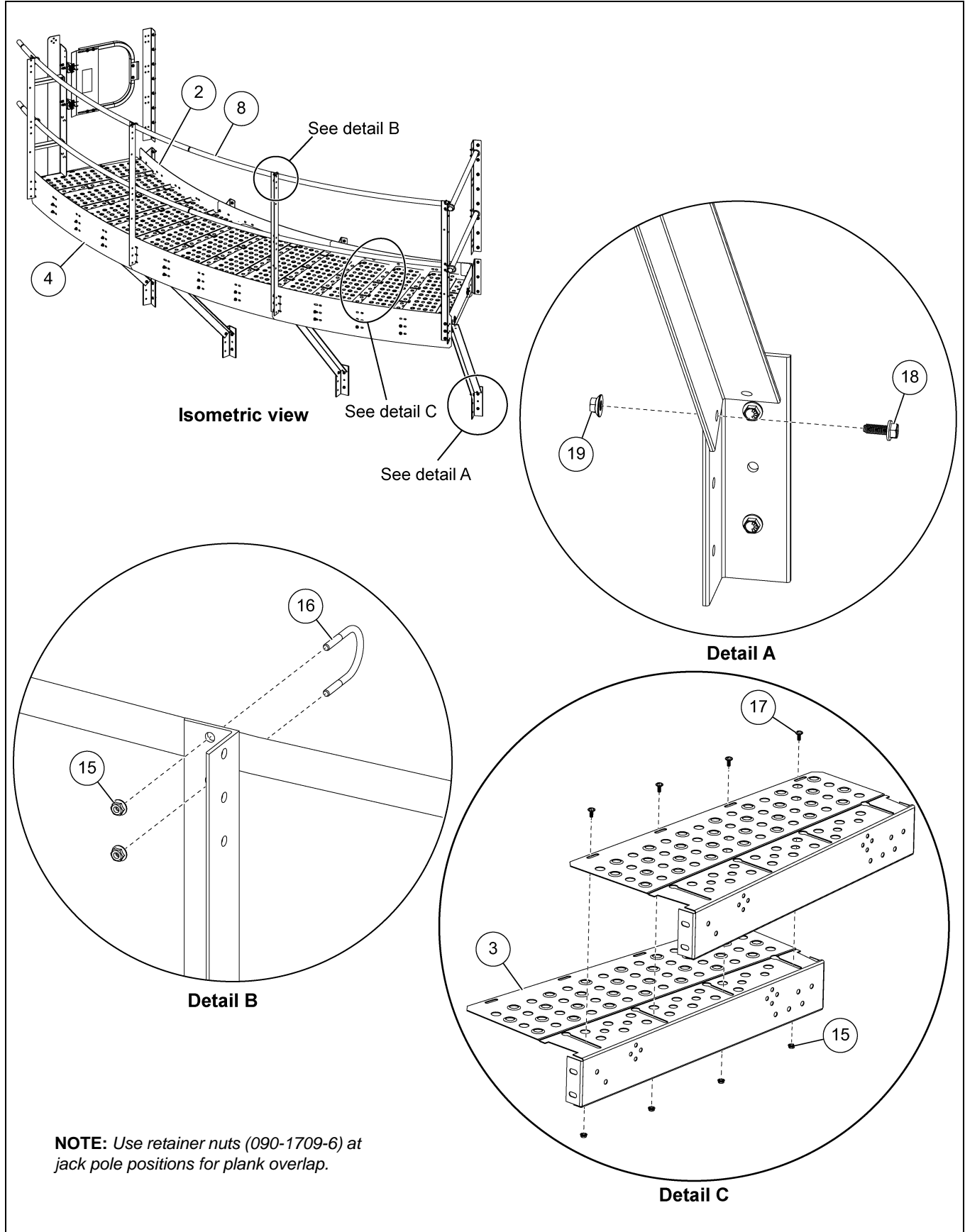


## 23'-4" Inside Fan Style Catwalk (GT4-1650-23F) Parts List

Ref #	Part #	Description	Qty
1	GT1-2036	Catwalk/Platform to Dryer Wall Bracket	20
2	GT3-1669	Plank	64
3	GT1-2039-BS	Outside/Inside Catwalk Diagonal Support - Bin Silver	20
4	GT1-2040-BS	Catwalk Support Clip - Bin Silver	20
5	GT1-2037-BS	Vertical Support Handrail - Bin Silver	20
6	GT1-2660	23'-4" Outer Toe Board	20
7	GT1-2661	23'-4" Inner Toe Board	20
8	GT1-2658-23I	23'-4" Inside Catwalk Handrail	14
9	S-7485	Flange Bolt 3/8"-16 x 1" JS500 Grade 8 or Grade 8.2	500
10	S-10171	Bolt, U-Bolt 5/16"-18 for 1-1/4" Pipe ZN	44
11	S-10268	Flange Nut 5/16"-18 JS500 Grade 5	400
12	S-968	Flange Nut 3/8"-16 ZN Grade 5 Wide Flange	500
13	S-10267	Truss Bolt 5/16"-18 x 3/4" JS500 Grade 8 or Grade 8.2 with Sealing Washer	300
N/S	WB-964530	Wood Box, 96" x 45" x 30" PINE/OSB HT/KD	1

## 8. Parts List

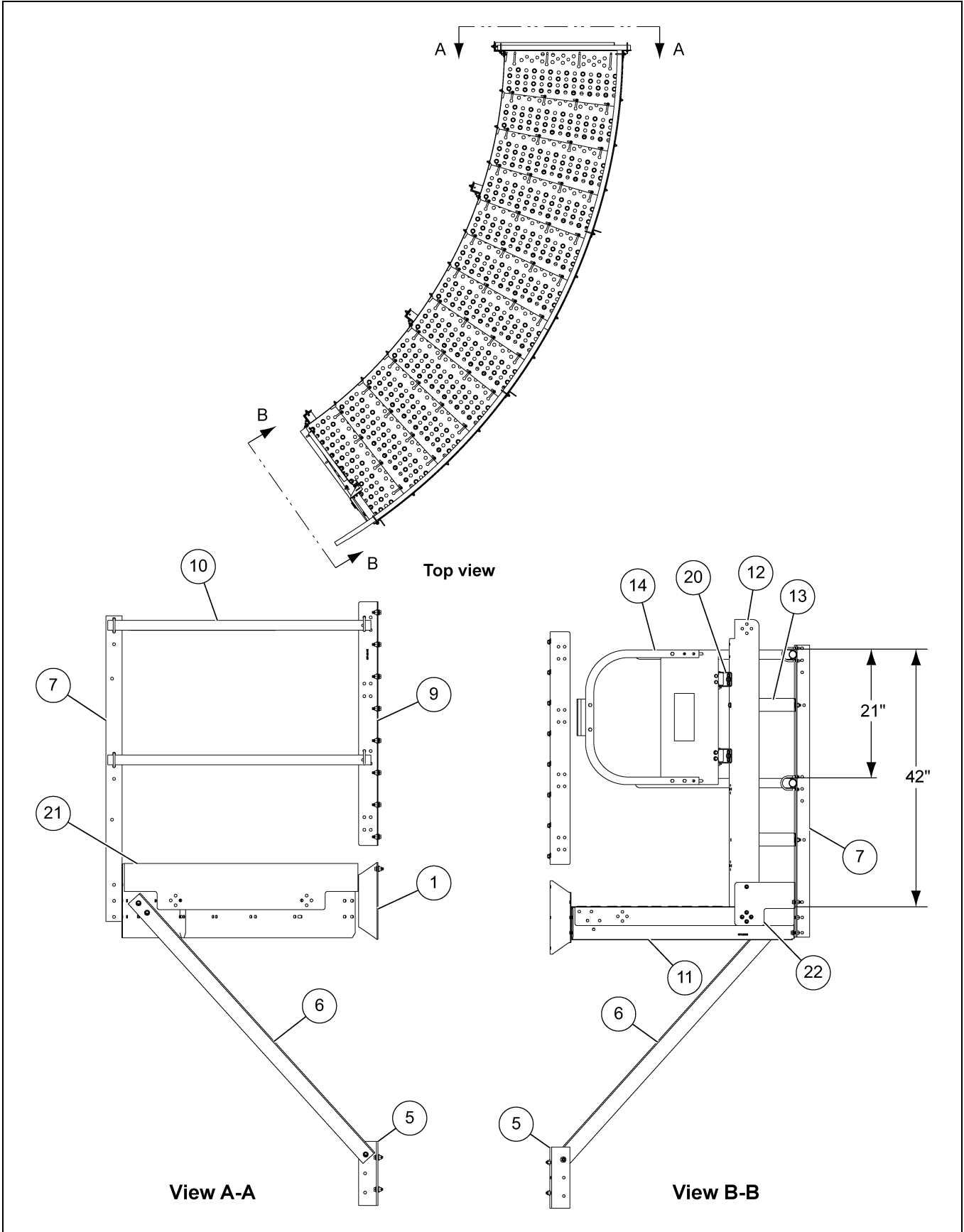
### 23'-4" Offset Fan Style Platform (GT4-1649-23F)



## 23'-4" Offset Fan Style Platform (GT4-1649-23F) Parts List

Ref #	Part #	Description	Qty
1	GT1-2036	Catwalk/Platform to Dryer Wall Bracket	4
2	GT1-2657	23'-4" Inner Toe Board	3
3	GT3-1669	Plank	12
4	GT1-2656	23'-4" Outer Toe Board	3
5	GT1-2040-BS	Catwalk Support Clip - Bin Silver	4
6	GT1-2039-BS	Outside/Inside Catwalk Diagonal Support - Bin Silver	4
7	GT1-2037-BS	Vertical Support Handrail - Bin Silver	4
8	GT1-2658-23O	23'-4" Outside Catwalk/Platform Handrail	4
9	GT1-2045	Platform End Plate	2
10	GT1-2044	Platform End Handrail	2
11	GT1-2086	Catwalk Plank Support	1
12	GT1-2087	Swing Gate Support	1
13	GT1-0920	Catwalk End Handrail	2
14	LDR-5218	Ladder Safety Gate	1
15	S-10268	Flange Nut 5/16"-18 JS500 Grade 5	120
16	S-10171	Bolt, U-Bolt 5/16"-18 for 1-1/4" Pipe ZN	16
17	S-10267	Truss Bolt 5/16"-18 x 3/4" JS500 Grade 8 or Grade 8.2 with Sealing Washer	60
18	S-7485	Flange Bolt 3/8"-16 x 1" JS500 Grade 8 or Grade 8.2	170
19	S-968	Flange Nut 3/8"-16 ZN Grade 5 Wide Flange	170
20	S-10260	Flange Bolt 5/16"-18 x 1" JS500 Grade 8 or Grade 8.2 with Sealing Washer	12
21	GT1-2095	Platform End Toe Board	1
22	GT1-2665	Toe Board, Platform Gate End - R.H.	1
N/S	090-1709-6	Retainer Nut 5/16"-18 x 0.120" ZN	18
N/S	GT1-2144	Holding Plate, Inner Toe Board to Plank	8
N/S	S-10175	Extruded Nut 3/8"-16, Tapped Hole, 050-0.200 Panel Range, Black	16
N/S	WB-964522	Wood Box, 96" x 45" x 22" PINE/OSB HT/KD	1

23'-4" Offset Fan Style Platform (GT4-1649-23F) (Continued)

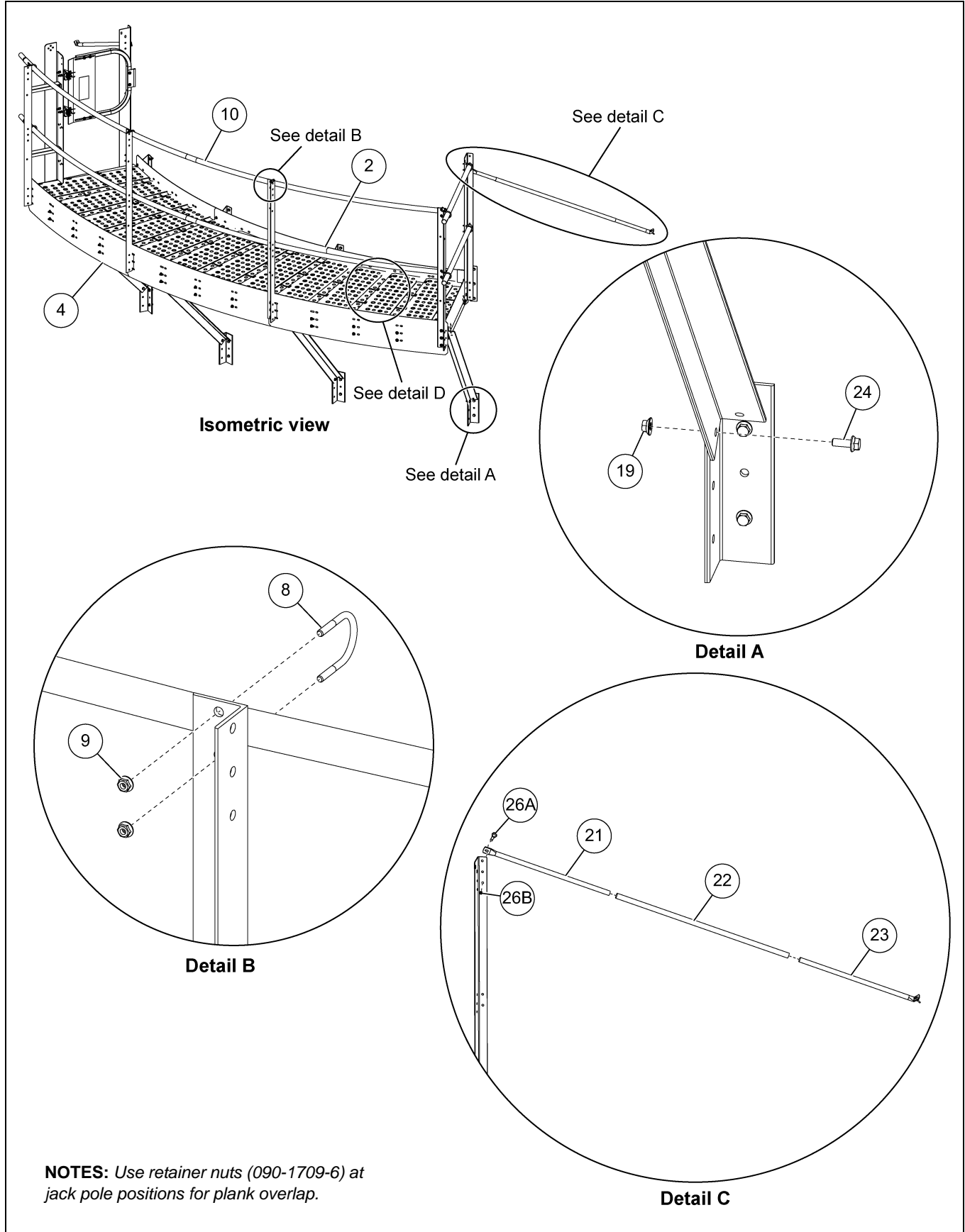




## 23'-4" Offset Fan Style Platform (GT4-1649-23F) Parts List

Ref #	Part #	Description	Qty
1	GT1-2036	Catwalk/Platform to Dryer Wall Bracket	4
2	GT1-2657	23'-4" Inner Toe Board	3
3	GT3-1669	Plank	12
4	GT1-2656	23'-4" Outer Toe Board	3
5	GT1-2040-BS	Catwalk Support Clip - Bin Silver	4
6	GT1-2039-BS	Outside/Inside Catwalk Diagonal Support - Bin Silver	4
7	GT1-2037-BS	Vertical Support Handrail - Bin Silver	4
8	GT1-2658-23O	23'-4" Outside Catwalk/Platform Handrail	4
9	GT1-2045	Platform End Plate	2
10	GT1-2044	Platform End Handrail	2
11	GT1-2086	Catwalk Plank Support	1
12	GT1-2087	Swing Gate Support	1
13	GT1-0920	Catwalk End Handrail	2
14	LDR-5218	Ladder Safety Gate	1
15	S-10268	Flange Nut 5/16"-18 JS500 Grade 5	120
16	S-10171	Bolt, U-Bolt 5/16"-18 for 1-1/4" Pipe ZN	16
17	S-10267	Truss Bolt 5/16"-18 x 3/4" JS500 Grade 8 or Grade 8.2 with Sealing Washer	60
18	S-7485	Flange Bolt 3/8"-16 x 1" JS500 Grade 8 or Grade 8.2	170
19	S-968	Flange Nut 3/8"-16 ZN Grade 5 Wide Flange	170
20	S-10260	Flange Bolt 5/16"-18 x 1" JS500 Grade 8 or Grade 8.2 with Sealing Washer	12
21	GT1-2095	Platform End Toe Board	1
22	GT1-2665	Toe Board, Platform Gate End - R.H.	1
N/S	090-1709-6	Retainer Nut 5/16"-18 x 0.120" ZN	18
N/S	GT1-2144	Holding Plate, Inner Toe Board to Plank	8
N/S	S-10175	Extruded Nut 3/8"-16, Tapped Hole, 050-0.200 Panel Range, Black	16
N/S	WB-964522	Wood Box, 96" x 45" x 22" PINE/OSB HT/KD	1

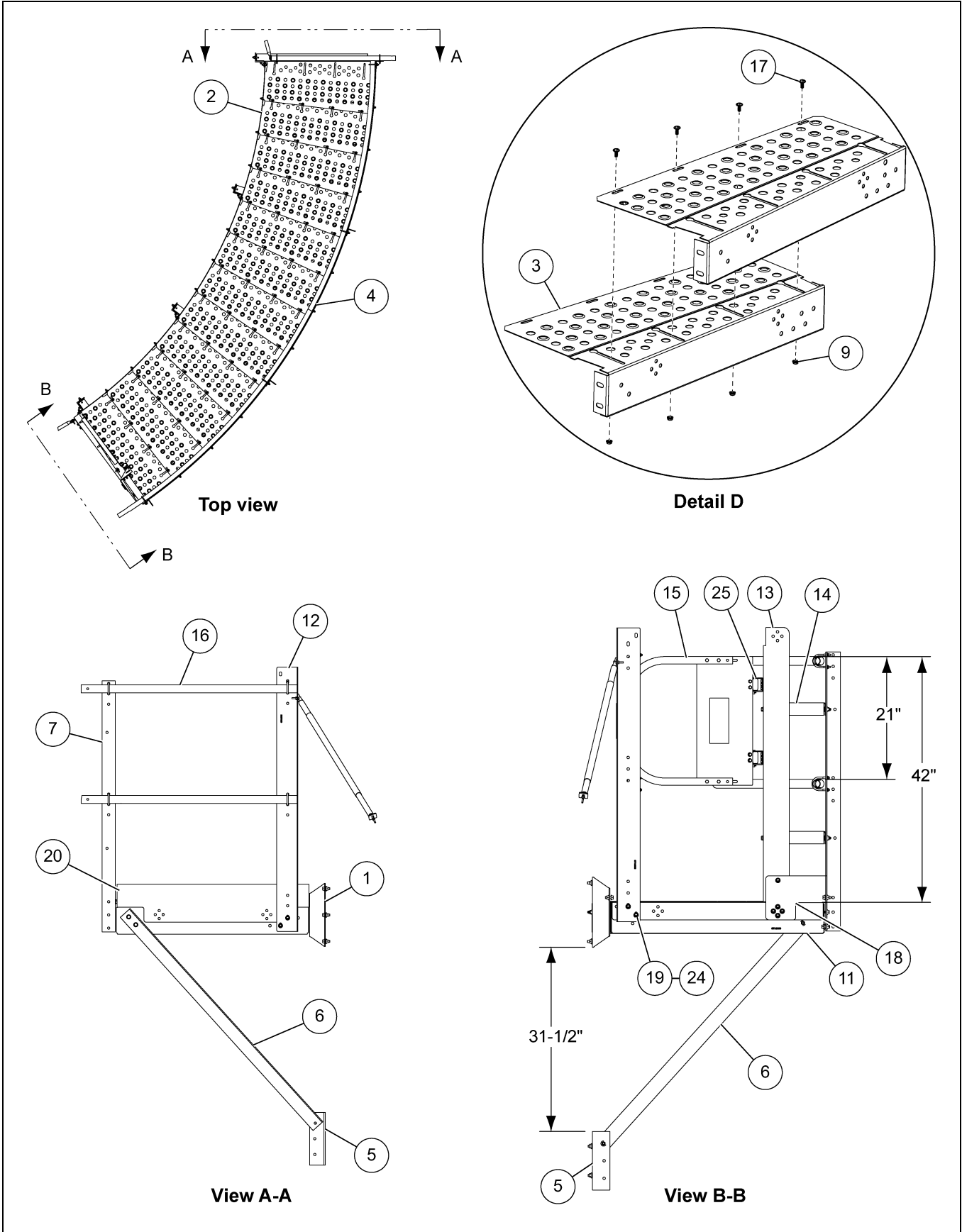
23'-4" Roof Hatch Fan Style Platform (GT4-1651-23F)



## 23'-4" Roof Hatch Fan Style Platform (GT4-1651-23F) Parts List

Ref #	Part #	Description	Qty
1	GT1-2036	Catwalk/Platform to Dryer Wall Bracket	4
2	GT1-2657	23'-4" Inner Toe Board	3
3	GT3-1669	Plank	12
4	GT1-2656	23'-4" Outer Toe Board	3
5	GT1-2040-BS	Catwalk Support Clip - Bin Silver	4
6	GT1-2039-BS	Outside/Inside Catwalk Diagonal Support - Bin Silver	4
7	GT1-2037-BS	Vertical Support Handrail - Bin Silver	4
8	S-10171	Bolt, U-Bolt 5/16"-18 for 1-1/4" Pipe ZN	16
9	S-10268	Flange Nut 5/16"-18 JS500 Grade 5	120
10	GT1-2658-23O	23'-4" Outside Catwalk/Platform Handrail	4
11	GT1-2086	Catwalk Plank Support	1
12	GT1-2091	Swing Gate Stop Plate	2
13	GT1-2087	Swing Gate Support	1
14	GT1-0920	Catwalk End Handrail	2
15	LDR-5218	Ladder Safety Gate	1
16	GT1-2044	Platform End Handrail	2
17	S-10267	Truss Bolt 5/16"-18 x 3/4" JS500 Grade 8 or Grade 8.2 with Sealing Washer	60
18	GT1-2665	Toe Board, Platform Gate End - R.H.	1
19	S-968	Flange Nut 3/8"-16 ZN Grade 5 Wide Flange	170
20	GT1-2095	Platform End Toe Board	1
21	LS-7031	End Safety Cage Brace Section	2
22	LS-6615	Center Safety Cage Brace Section	2
23	LS-6616	End Safety Cage Brace Section	2
24	S-7485	Flange Bolt 3/8"-16 x 1" JS500 Grade 8 or Grade 8.2	170
25	S-10260	Flange Bolt 5/16"-18 x 1" JS500 Grade 8 or Grade 8.2 with Sealing Washer	12
	PL-8287	Package of Bolts 8 - Pkg. of (8 EA.) S-853 and (8 EA.) S-1102	1
26A	S-853	HHCS Bolt 1/4"-20 x 1-1/2" ZN Grade 2	8
26B	S-1102	Hex Nut 1/4"-20 ZN Grade 2	8
N/S	090-1709-6	Retainer Nut 5/16"-18 x 0.120" ZN	18
N/S	GT1-2144	Holding Plate, Inner Toe Board to Plank	8
N/S	S-10175	Extruded Nut 3/8"-16, Tapped Hole, 050-0.200 Panel Range, Black	16
N/S	WB-964522	Wood Box, 96" x 45" x 22" PINE/OSB HT/KD	1

23'-4" Roof Hatch Fan Style Platform (GT4-1651-23F) (Continued)



## 23'-4" Roof Hatch Fan Style Platform (GT4-1651-23F) Parts List

Ref #	Part #	Description	Qty
1	GT1-2036	Catwalk/Platform to Dryer Wall Bracket	4
2	GT1-2657	23'-4" Inner Toe Board	3
3	GT3-1669	Plank	12
4	GT1-2656	23'-4" Outer Toe Board	3
5	GT1-2040-BS	Catwalk Support Clip - Bin Silver	4
6	GT1-2039-BS	Outside/Inside Catwalk Diagonal Support - Bin Silver	4
7	GT1-2037-BS	Vertical Support Handrail - Bin Silver	4
8	S-10171	Bolt, U-Bolt 5/16"-18 for 1-1/4" Pipe ZN	16
9	S-10268	Flange Nut 5/16"-18 JS500 Grade 5	120
10	GT1-2658-23O	23'-4" Outside Catwalk/Platform Handrail	4
11	GT1-2086	Catwalk Plank Support	1
12	GT1-2091	Swing Gate Stop Plate	2
13	GT1-2087	Swing Gate Support	1
14	GT1-0920	Catwalk End Handrail	2
15	LDR-5218	Ladder Safety Gate	1
16	GT1-2044	Platform End Handrail	2
17	S-10267	Truss Bolt 5/16"-18 x 3/4" JS500 Grade 8 or Grade 8.2 with Sealing Washer	60
18	GT1-2665	Toe Board, Platform Gate End - R.H.	1
19	S-968	Flange Nut 3/8"-16 ZN Grade 5 Wide Flange	170
20	GT1-2095	Platform End Toe Board	1
21	LS-7031	End Safety Cage Brace Section	2
22	LS-6615	Center Safety Cage Brace Section	2
23	LS-6616	End Safety Cage Brace Section	2
24	S-7485	Flange Bolt 3/8"-16 x 1" JS500 Grade 8 or Grade 8.2	170
25	S-10260	Flange Bolt 5/16"-18 x 1" JS500 Grade 8 or Grade 8.2 with Sealing Washer	12
	PL-8287	Package of Bolts 8 - Pkg. of (8 EA.) S-853 and (8 EA.) S-1102	1
26A	S-853	HHCS Bolt 1/4"-20 x 1-1/2" ZN Grade 2	8
26B	S-1102	Hex Nut 1/4"-20 ZN Grade 2	8
N/S	090-1709-6	Retainer Nut 5/16"-18 x 0.120" ZN	18
N/S	GT1-2144	Holding Plate, Inner Toe Board to Plank	8
N/S	S-10175	Extruded Nut 3/8"-16, Tapped Hole, 050-0.200 Panel Range, Black	16
N/S	WB-964522	Wood Box, 96" x 45" x 22" PINE/OSB HT/KD	1

---

# 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
<b>Storage</b>	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
<b>Conditioning</b>	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
<b>Material Handling</b>	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.



1004 E. Illinois St.  
Assumption, IL 62510-0020  
Phone: 1-217-226-4421  
Fax: 1-217-226-4420  
[www.gsiag.com](http://www.gsiag.com)

