

Catwalk Assembly Manual

Owner's Manual
PNEG-834
Version 1
March 1999



a division of

THE GSI GROUP



Table of Contents

General Safety

Safety Decals

Dryer Orientation

Catwalk End Stiffener Assembly

Stiffener Angle Location

Stiffener Hole Location

Mounting Bracket Assembly

Platform Assembly

Handrail Assembly

Safety First

General Safety Statements

The GSI Group Inc's Principal concern is your safety and the safety of others associated with grain handling equipment. We want to keep you as a customer. This manual is to help you understand safe operating procedures and some problems which may be encountered by the operator and other personnel.

As owner and/or operator, it is your responsibility to know what requirements, hazards and precautions exist and inform all personnel associated with, or in the area of the Fill/Feed System. Safety precautions may be required from the personnel. Avoid any alteration to the equipment. Such alterations may produce a very dangerous situation, where serious injury or death may occur.



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

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



WARNING

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

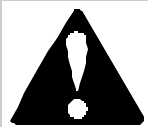


CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

CAUTION

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.



BE ALERT! Danger!

Personnel operating or working around electrical equipment should 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.

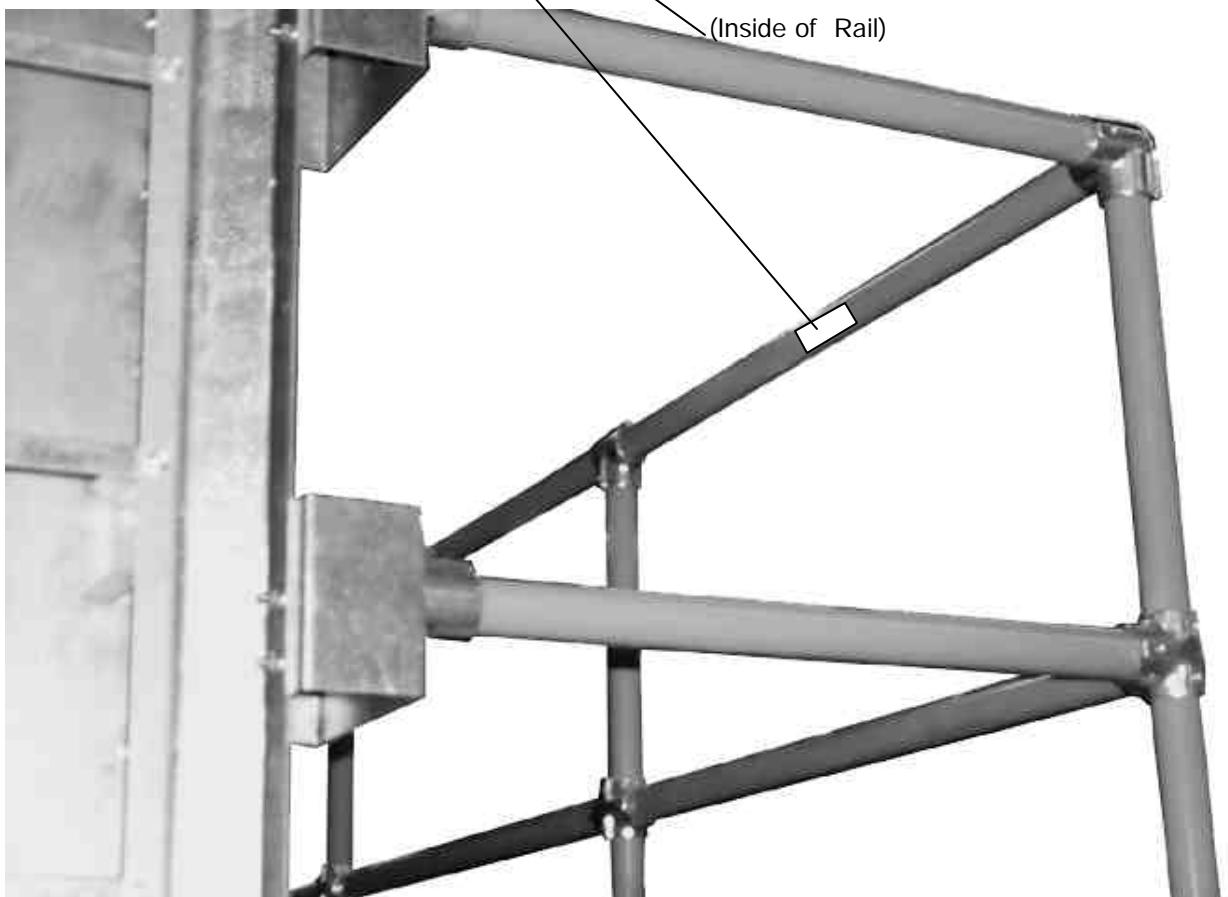
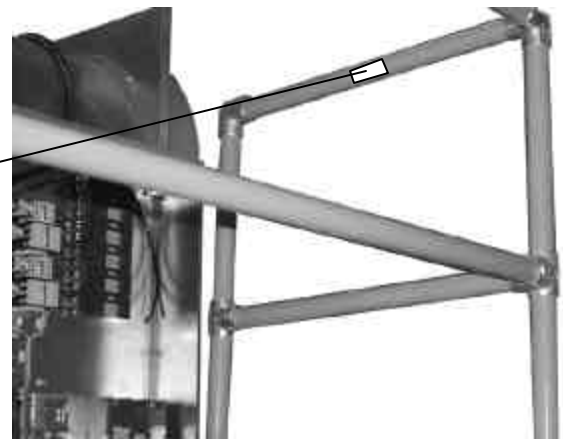
This product may have sharp edges. These sharp edges may cause serious injury. To avoid injury handle sharp edges with caution and use proper protective clothing and equipment at all times.

The safety pages that follow are to show you where you can find the safety decals. The photographs show exactly where the decals should be. If a decal has been damaged or is missing contact The GSI Group, Inc. for a free replacement.

The GSI Group, Inc.
1004 E. Illinois St.
P.O. Box 20
Assumption, IL 62510-0020
Phone: 217.226.4421
Fax: 217.226.4420

Safety Decals

This decal is placed on the end rails, and then every other rail on the inside of the top bar.



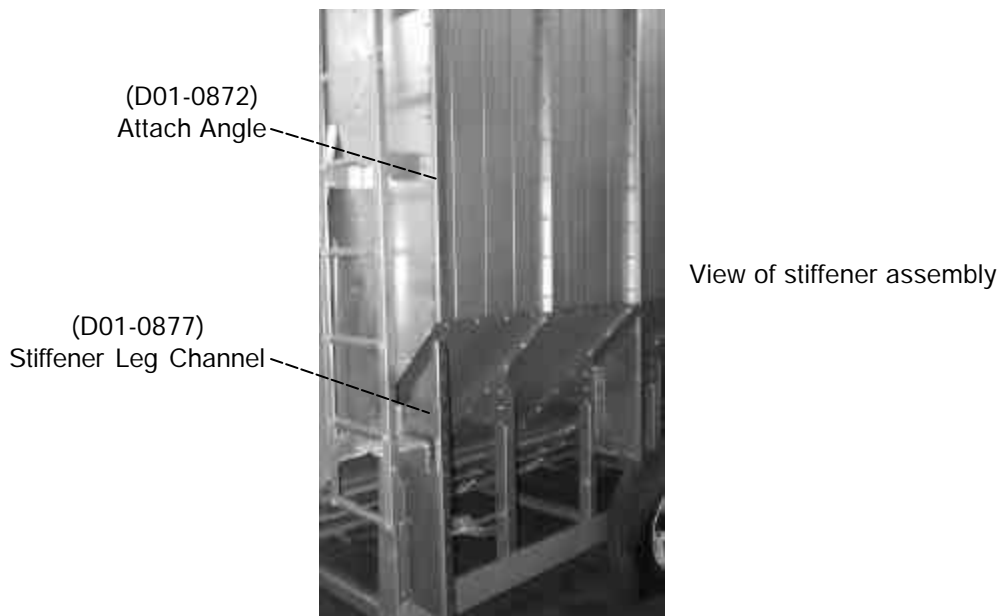
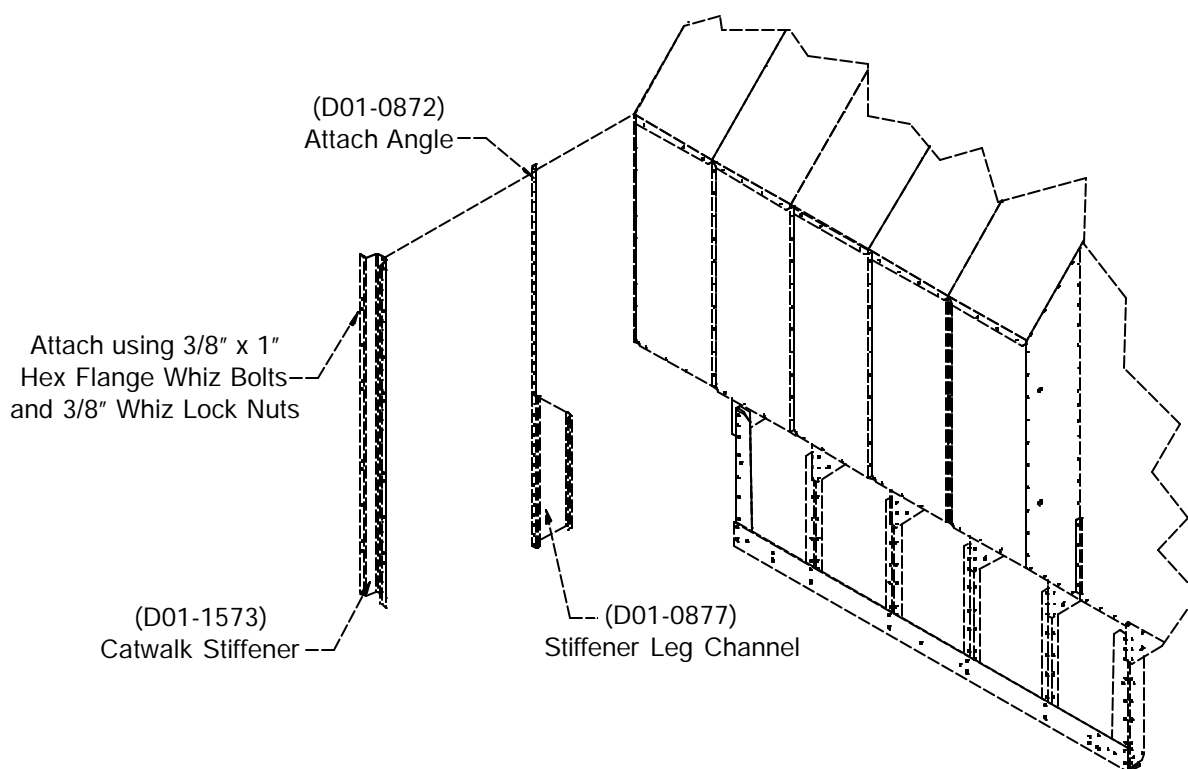
Dryer Orientation



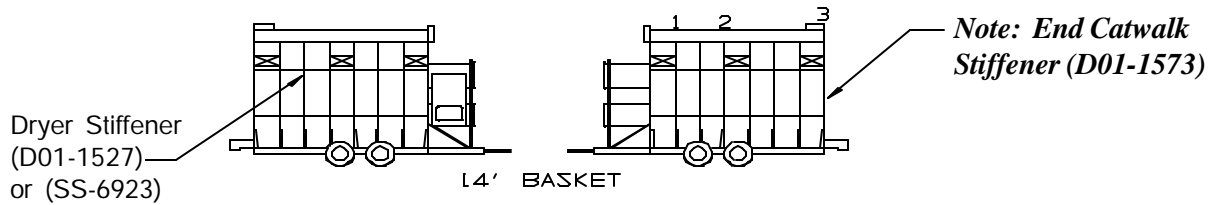
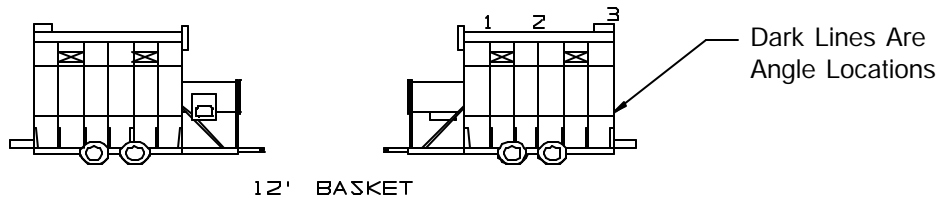
NOTE: The right and left side of the dryer can be determined by standing at the front, (or fan end of the dryer), and facing out. The right side will coincide with the right arm and the left will coincide with the left arm.

Catwalk End Stiffener Assembly

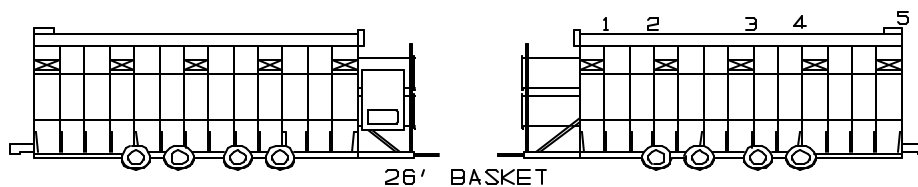
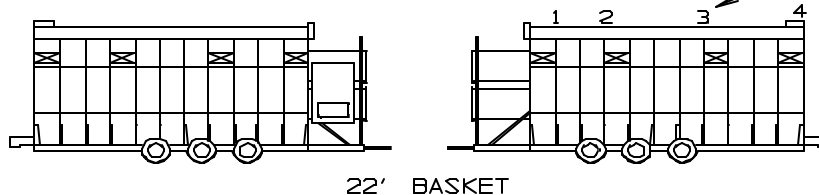
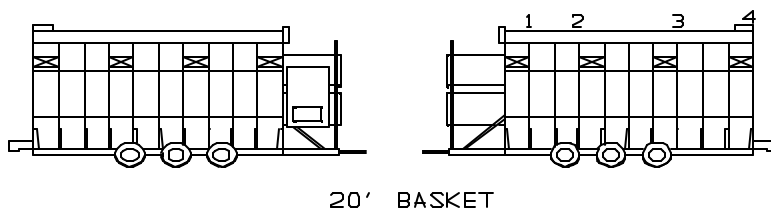
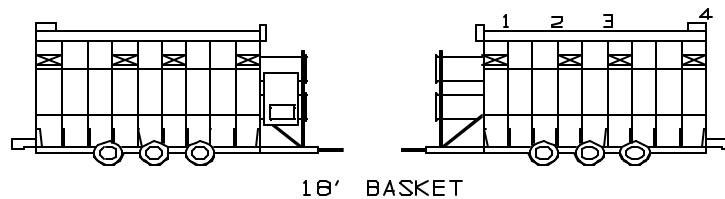
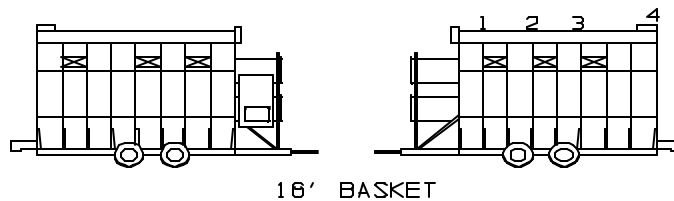
Before beginning construction on the catwalk, assemble the stiffener package for stacking the dryer completely. **NOTE: All the parts for this set of stiffeners are packaged separately from the catwalk parts. There is an additional set of stiffeners (D0-1573), included in the catwalk package that are for the catwalk only.** Each of the catwalk stiffeners are installed differently than the stiffeners used to stack the dryer. They are bolted to the stiffener channel (D01-0877), the attach angle D01-0872), and on the last leg of the dryer. **NOTE: The end stiffener is only used when a catwalk is to be installed.**



Stiffener Angle Location On Basket



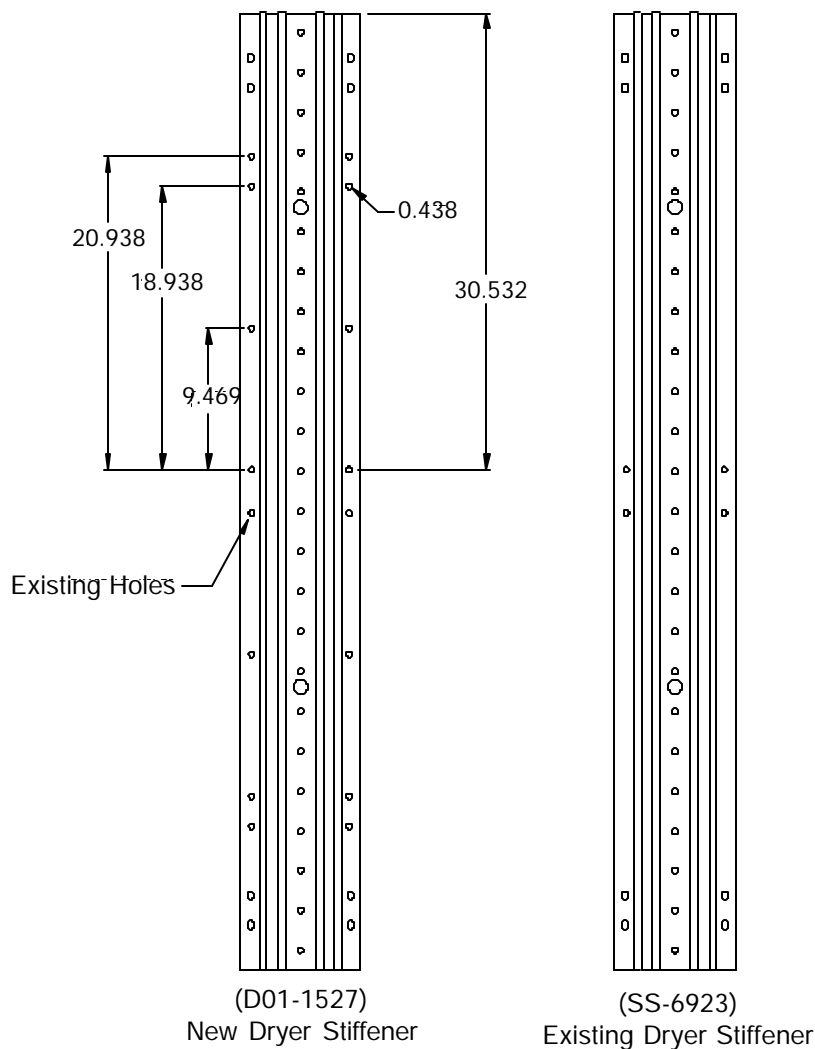
NOTE: If you have (SS-6923) stiffener: See Stiffener Hole Location on next page.



Stiffener Hole Location

If the catwalk is being added to an existing dryer some modifications will have to be made. Drill holes (see diagram below), for the mounting brackets in each of the existing stiffeners. If a new dryer is being installed, check to see if the stiffeners have the holes. If they do not, then the holes must be drilled in the stiffeners.

The dimensions are the same from the top hole to the top of the stiffener, and the bottom hole to the bottom of the stiffener. **NOTE: Only the top set of holes may need to be drilled. If this is the case, then make sure that the drilled holes are at the top when attached to the dryer.**

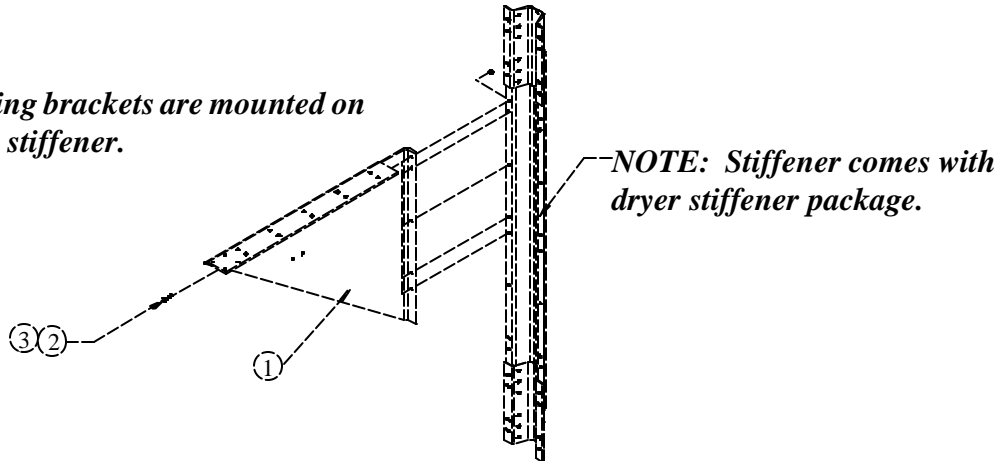


Mounting Bracket Assembly (Right Hand D04-0245)

After the stiffeners are attached to the dryer, attach mounting brackets for each side with five (5) 3/8" x 1" hex head flange bolts and five (5) 3/8" wide flange whiz lock nuts. (See illustration below).

NOTE: See page 6 to determine the left and right sides of the dryer.

NOTE: Be sure mounting brackets are mounted on the left hand side of the stiffener.



NOTE: See stiffener angle location sheet (page 8) for mounting bracket locations.

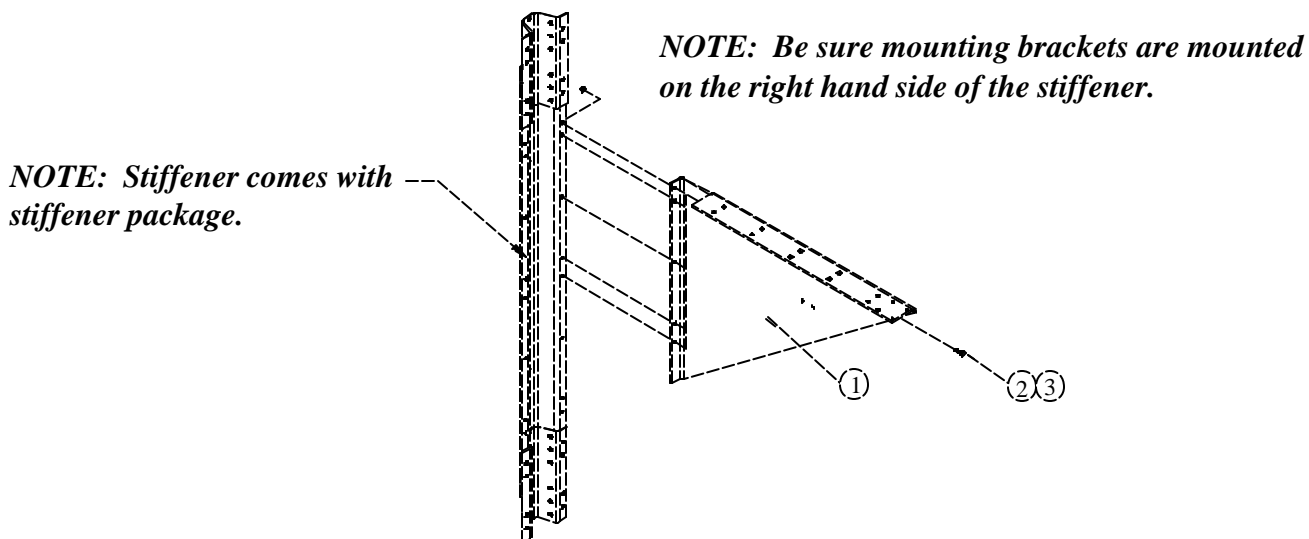
D04-0245 Right Hand Mounting Bracket Assembly			
Item #	Part #	Description	Qty.
1	D01-1530	RH Mounting Plate	1
2	S-7927	3/8" x 1" Hex Flange Head Bolt	5
3	S-968	3/8" -16 Wide Flange Whiz Lock Nut	5



Mounting Bracket Assembly (Right Hand Side)

Quantity of Mounting Bracket Assemblies		
Part #	Dryer Size	D04-0245
D04-0248	12' - 14'	3
D04-0249	16' - 18'	4
D04-0250	20' - 22'	4
D04-0251	26'	5

Mounting Bracket Assembly (Left Hand D04-0246)



NOTE: See stiffener angle location sheet (page 8) for mounting bracket locations.

D04-0246 Left Hand Mounting Bracket Assembly			
Item #	Part #	Description	Qty.
1	D01-1547	LH Mounting Plate	1
2	S-7927	3/8" x 1" Hex Flange Head Bolt	5
3	S-968	3/8" Wide Flange Whiz Lock Nut	5

Quantity of Mounting Bracket Assemblies		
Part #	Dryer Size	D04-0246
D04-0252	12' - 14'	3
D04-0253	16' - 18'	4
D04-0254	20' - 22'	4
D04-0255	26'	5

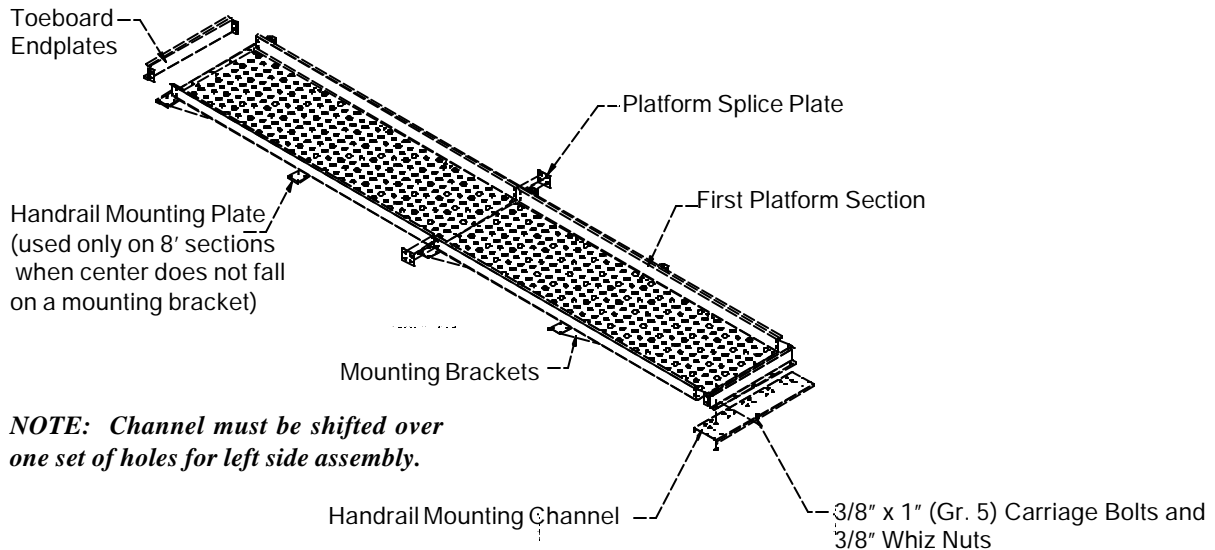
NOTE: See page 6 to determine the left and right sides of the dryer.

Platform Assembly

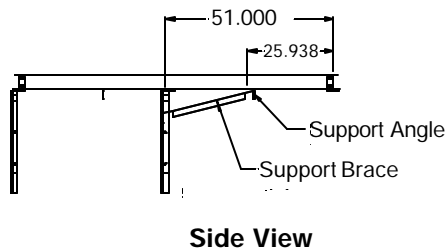
Once the mounting brackets have been attached to the stiffeners, the platform sections can be assembled next.

NOTE: Refer to the chart below to see the proper layout of the platform sections and for the quantity of each piece.

The platform is bolted to the mounting brackets using 3/8" x 1" carriage bolts and 3/8" wide flange whiz lock nuts. After the platform sections are **loosely** bolted down attach the toeboard endplates (D01-1531), the platform splice plates (D01-1535), the handrail mounting channel (D01-1577), support angle (D01-1532), support brace (D01-1533), and the handrail mounting plate (D01-1536), (if required). The support angles are bolted at the set or sets of holes between the mounting brackets. After parts are assembled tighten all nuts and bolts.



14' Dryer right hand side assembly shown, left hand is similar.



Support Brace Assembly

NOTE: Use 3/8" x 1" Whiz bolts and 3/8" Whiz nuts to bolt brace to mounting bracket and support angles.

Catwalk Assembly Instructions

		Platform Sect. 1	Platform Sect. 2	Platform Sect. 3	Platform Sect. 4	Toeboard Endplate	Splice Plate	Handrail Channel	Support Angle	Support Brace	Handrail Plate	Carriage Bolt	3/8" Whiz Nut	3/8" Whiz Bolt
Part#	Dryer Size					D01-1531	D01-1535	D01-1577	D01-1532	D01-1533	D01-1536	S-8231	S-968	S-7927
D04-0256	12'	D01-1528	D01-1574	x	x	2	2	1	4	1	x	76	80	4
D04-0324	14'	D01-1528	D01-1528	x	x	2	2	1	4	1	1	82	86	4
D04-0257	16'	D01-1528	D01-1529	D01-1574	x	2	4	1	5	1	x	100	104	4
D04-0325	18'	D01-1528	D01-1529	D01-1528	x	2	4	1	5	1	1	106	110	4
D04-0258	20'	D01-1528	D01-1528	D01-1574	x	2	4	1	6	1	1	112	116	4
D04-0326	22'	D01-1528	D01-1528	D01-1528	x	2	4	1	6	1	2	118	122	4
D04-0259	26'	D01-1528	D01-1528	D01-1529	D01-1528	2	6	1	7	1	2	142	146	4

Platform section layout and part listing chart

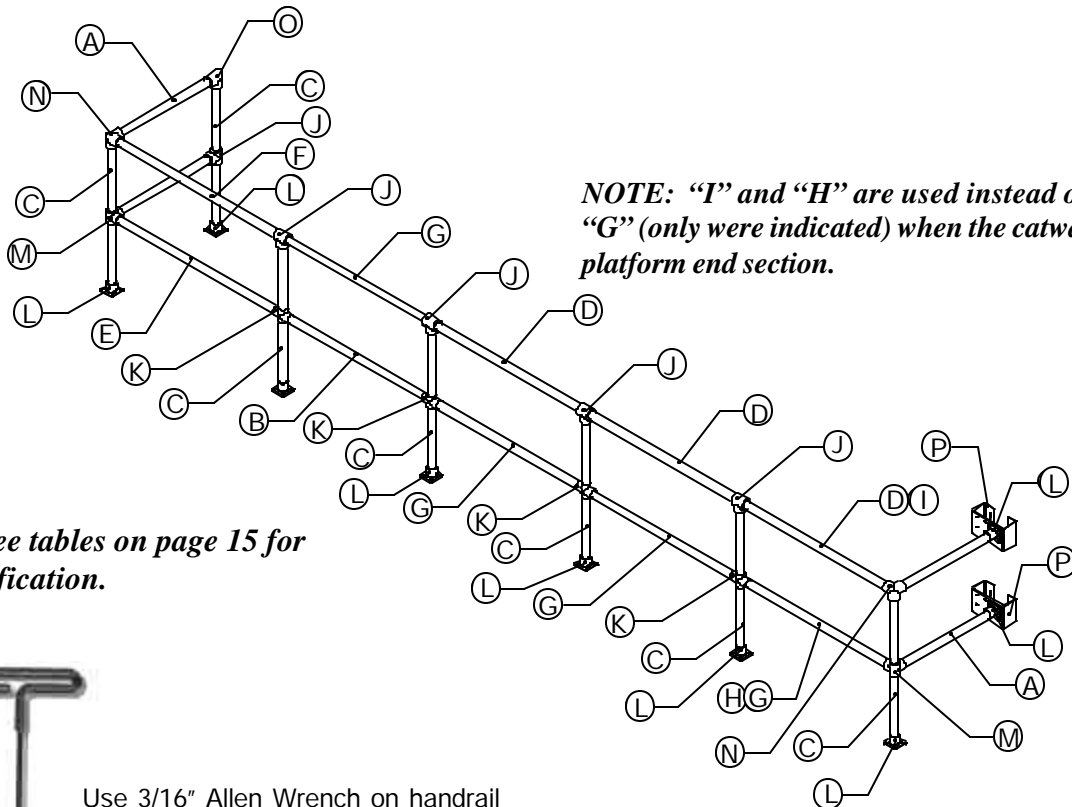
Catwalk Handrail Assembly

Begin the assembly of the handrail by attaching the handrail mounting plates (D01-1539) to the end stiffener. Once the mounting plates are attached, attach the base flanges (D03-0504) to the mounting plates. Slip a 40" rail (D01-1559) into the base flange that is attached to the mounting bracket. Leaving the rail loose in the base flange, slip one side outlet elbow (D03-0505) on the rail. Then slip one side outlet tee (D03-0506) on the top of the rail. While both connectors are on the rail, find two of the 30" rails (D01-1557), and insert the rails into the base flanges on the mounting plates and the side outlet tee and elbow. **NOTE: To make sure that the 40" vertical rail butts up with the top rail, it should measure 42" from the top of the platform to the top of the top rail.**

Use a level to check that each of the rails are level. Once the posts have been leveled, tighten the set screws with a 3/16" allen wrench. (The set screws are supplied with the connectors).

CAUTION: Do not tighten each section all at once, because they will need to be adjusted to fit the other sections together.

Using this section as a reference, assemble each piece of railing as shown below. After the complete handrail is assembled check all set screws to be sure they are tight. **NOTE: The handrail assembly part numbers are the same for both the left and right side.**



NOTE: "I" and "H" are used instead of "D" and "G" (only were indicated) when the catwalk has a 6' platform end section.

NOTE: See tables on page 15 for part identification.



Use 3/16" Allen Wrench on handrail connector set screws

NOTE: Use 3/8" x 1" whiz bolts ("Q") and whiz lock nuts ("R") to bolt mounting plates to stiffener and handrail baseflange to mounting plates.

Catwalk Handrail Assembly Tables

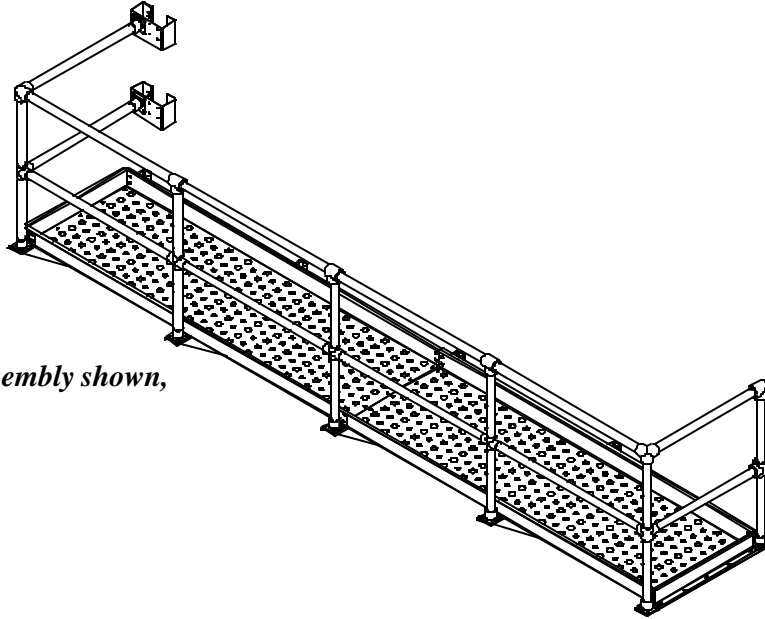
		1 1/2" SCH. 40 Black Pipe (1.90" D.D.)								
		"A"	"B"	"C"	"D"	"I"	"E"	"F"	"G"	"H"
		30.000"	43.750"	40.000"	47.500"	71.500"	50.500"	52.750"	45.500"	69.500"
		Length	Length	Length	Length	Length	Length	Length	Length	Length
Part #	Dryer Size	D01-1557	D01-1558	D01-1559	D01-1560	D01-1581	D01-1561	D01-1562	D01-1582	D01-1580
D04-0282	12'	4	1	5	0	1	1	1	1	1
D04-0327	14'	4	1	6	2	0	1	1	3	0
D04-0283	16'	4	1	6	1	1	1	1	2	1
D04-0328	18'	4	1	7	3	0	1	1	4	0
D04-0284	20'	4	1	7	2	1	1	1	3	1
D04-0329	22'	4	1	8	4	0	1	1	5	0
D04-0285	26'	4	1	9	5	0	1	1	6	0

Catwalk parts and quantities

		"J"	"K"	"L"	"M"	"N"	"O"	"P"	"Q"	"R"
		1 1/2"	1 1/2" Cross	1 1/2" Base	1/2" Side	1 1/2" Side	1 1/2" 90°	Mounting	3/8" Whiz	3/8" Whiz
		Tee	Tee	Flange	Outlet Ell	Outlet Tee	Elbow	Plate	Bolt	Lock Nut
Part #	Dryer Size	D03-0502	D03-0503	D03-0504	D03-0505	D03-0506	D03-0507	D01-1539	S-7927	S968
D04-0282	12'	3	2	7	2	2	1	2	16	16
D04-0327	14'	4	3	8	2	2	1	2	16	16
D04-0283	16'	4	3	8	2	2	1	2	16	16
D04-0328	18'	5	4	9	2	2	1	2	16	16
D04-0284	20'	5	4	9	2	2	1	2	16	16
D04-0329	22'	6	5	10	2	2	1	2	16	16
D04-0285	26'	7	6	11	2	2	1	2	16	16

Catwalk parts and quantities

Complete Catwalk Assembly (Right Hand Assembly)



NOTE: Right hand assembly shown,
left hand is similar.

		Handrail	Platform	Mounting Brkt.	3/8" Whiz	3/8" Whiz
Left Side Catwalk Assembly		Assembly	Assembly	Assembly	Bolt	Lock Nut
Assembly Part	Dryer Size				S-7927	S-968
D04-0287	12'	D04-0282	D04-0256	D04-0252	28	28
D04-0334	14'	D04-0327	D04-0324	D04-0252	32	32
D04-0289	16'	D04-0283	D04-0257	D04-0253	32	32
D04-0330	18'	D04-0328	D04-0325	D04-0253	36	36
D04-0291	20'	D04-0284	D04-0258	D04-0254	36	36
D04-0332	22'	D04-0329	D04-0326	D04-0254	40	40
D04-0293	26'	D04-0259	D04-0259	D04-0255	44	44

Left Side Catwalk Assembly

		Handrail	Platform	Mounting Brkt.	3/8" Whiz	3/8" Whiz
Right Side Catwalk Assembly		Assembly	Assembly	Assembly	Bolt	Lock Nut
Assembly Part	Dryer Size				S-7927	S-968
D04-0288	12'	D04-0282	D04-0256	D04-0248	28	28
D04-0317	14'	D04-0327	D04-0324	D04-0248	32	32
D04-0290	16'	D04-0283	D04-0257	D04-0249	32	32
D04-0331	18'	D04-0328	D04-0325	D04-0249	36	36
D04-0292	20'	D04-0284	D04-0258	D04-0250	36	36
D04-0333	22'	D04-0329	D04-0326	D04-0250	40	40
D04-0294	26'	D04-0259	D04-0259	D04-0251	44	44

Right Side Catwalk Assembly

Warranty

THE GSI GROUP, INC. ("GSI") WARRANTS ALL PRODUCTS MANUFACTURED BY GSI TO BE FREE OF DEFECTS IN MATERIAL AND WORKMANSHIP UNDER NORMAL USAGE AND CONDITIONS FOR A PERIOD OF 12 MONTHS AFTER RETAIL SALE TO THE ORIGINAL END USER OF SUCH PRODUCTS. GSI'S ONLY OBLIGATION IS, AND PURCHASER'S SOLE REMEDY SHALL BE FOR GSI, TO REPAIR OR REPLACE, AT GSI'S OPTION AND EXPENSE, PRODUCTS THAT, IN GSI'S SOLE JUDGMENT, CONTAIN A MATERIAL DEFECT DUE TO MATERIALS OR WORKMANSHIP. ALL DELIVERY AND SHIPMENT CHARGES TO AND FROM GSI'S FACTORY WILL BE PURCHASER'S RESPONSIBILITY. EXPENSES INCURRED BY OR ON BEHALF OF THE PURCHASER WITHOUT PRIOR WRITTEN AUTHORIZATION FROM AN AUTHORIZED EMPLOYEE OF GSI SHALL BE THE SOLE RESPONSIBILITY OF THE PURCHASER.

EXCEPT FOR THE ABOVE STATED EXPRESS LIMITED WARRANTIES, GSI MAKES NO WARRANTY OF ANY KIND, EXPRESSED 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 PRODUCT OR PRODUCTS.

IN NO EVENT SHALL GSI BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOSS OF ANTICIPATED PROFITS OR BENEFITS. PURCHASER'S SOLE AND EXCLUSIVE REMEDY SHALL BE LIMITED TO THAT STATED ABOVE, WHICH SHALL NOT EXCEED THE AMOUNT PAID FOR THE PRODUCT PURCHASED. THIS WARRANTY IS NOT TRANSFERABLE AND APPLIES ONLY TO THE ORIGINAL PURCHASER. GSI SHALL HAVE NO OBLIGATION OR RESPONSIBILITY FOR ANY REPRESENTATIVE OR WARRANTIES MADE BY OR ON BEHALF OF ANY DEALER, AGENT OR DISTRIBUTOR OF GSI.

GSI ASSUMES NO RESPONSIBILITY FOR FIELD MODIFICATIONS OR ERECTION DEFECTS WHICH CREATE STRUCTURAL OR STORAGE QUALITY PROBLEMS. MODIFICATIONS TO THE PRODUCT NOT SPECIFICALLY COVERED BY THE CONTENTS OF THIS MANUAL WILL NULLIFY ANY PRODUCT WARRANTY THAT MIGHT HAVE BEEN OTHERWISE AVAILABLE.

THE FOREGOING WARRANTY SHALL NOT COVER PRODUCTS OR PARTS WHICH HAVE BEEN DAMAGED BY NEGLIGENT USE, MISUSE, ALTERATION OR ACCIDENT. THIS WARRANTY COVERS ONLY PRODUCTS MANUFACTURED BY GSI. THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED. GSI RESERVES THE RIGHT TO MAKE DESIGN OR SPECIFICATION CHANGES AT ANY TIME.

PRIOR TO INSTALLATION, PURCHASER HAS THE RESPONSIBILITY TO RESEARCH AND COMPLY WITH ALL FEDERAL, STATE AND LOCAL CODES WHICH MAY APPLY TO THE LOCATION AND INSTALLATION.



a division of

THE GSI GROUP

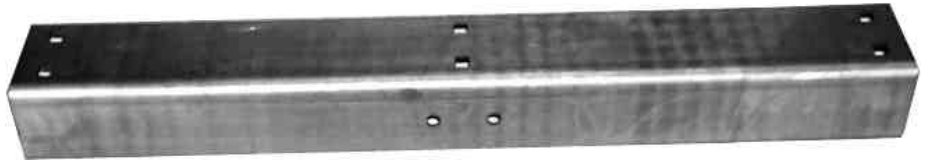


G. S. I. of
The GSI Group, Inc.
1004 E. Illinois St.
P.O. Box 20
Assumption, Il. 62510-0020

Phone: 217.226.4421
Fax: 217.226.4420
e-mail: gsi@grainsystems.com
internet: <http://www.grainsystems.com>



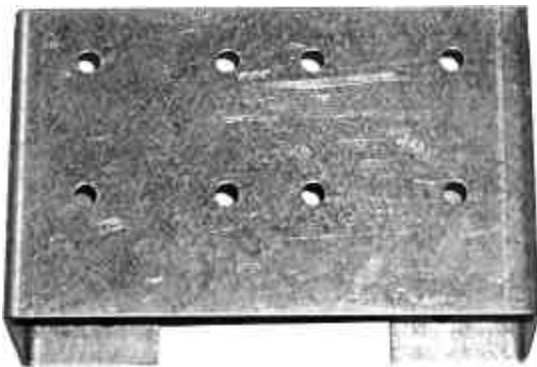
**D01-1577
Handrail
Channel**



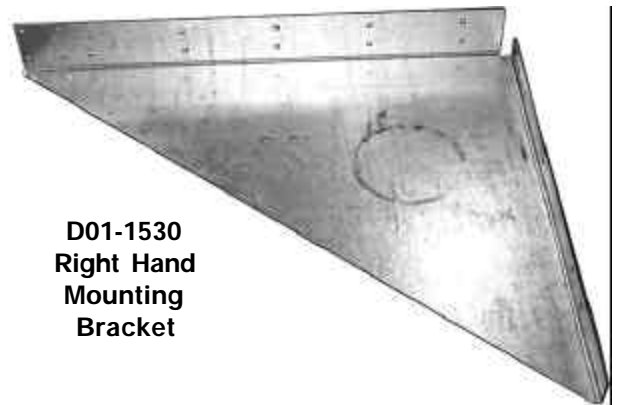
**D01-1532
Support
Angle**



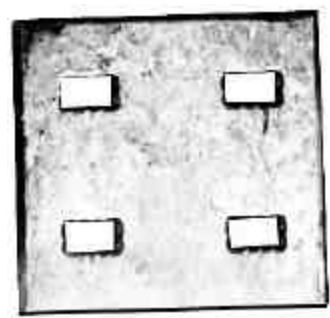
**D01-1531
Toeboard
Endplate**



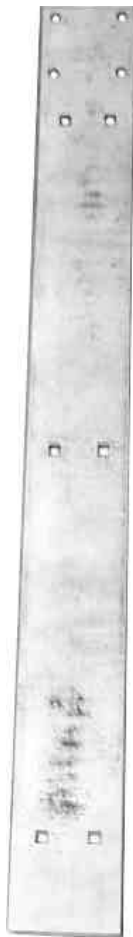
**D01-1539
Handrail
Mounting
Plates**



**D01-1530
Right Hand
Mounting
Bracket**



**D01-1535
Splice
Plate**



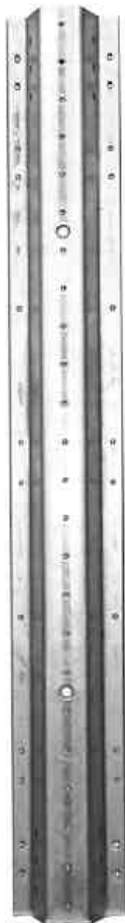
D01-1536
Handrail
Plate



D01-1528
Platform
Section 1



D01-1573



D01-1527
Dryer
Stiffener



**D01-1533
Support
Brace**



**D03-0502
1 1/2" Tee**



**D03-0507
1 1/2" 90°
Elbow**



**D03-0505
1/2" Side
Outlet Ell**



**D03-0504
1 1/2"
Base
Flange**



**D03-0506
1 1/2" Side
Outlet Tee**



**D03-0503
1 1/2"
Cross Tee**



1 1/2" SCH. 40 Black Pipe



**D01-0872
Attach Angle**