



16"-36" Platforms

Installation Manual

PNEG-1295B

Date: 01-13-09



Use of the equipment information page will help you identify the equipment in the case that you need to call your dealer or installer. This information should be filled out and kept on record.

Equipment Information

Model #:_____

Serial #:_____

Date Purchased:_____

Dealer/Distributor Name and Phone #:_____

Material Handling

1004 E. Illinois St. Assumption, IL 62510-0020 Phone: 1-217-226-4421 Fax: 1-217-226-4420 www.gsiag.com

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1. Introduction

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

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

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

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

Safety Guidelines

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



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



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



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



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



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



NOTE indicates information about the equipment that you should pay special attention.

Safety Instructions

Our foremost concern is your safety and the safety of others associated with this 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 to inform all personnel associated with the equipment or in the area. Safety precautions may be required from the personnel. Avoid any alterations to the equipment. Such alterations may produce a very dangerous situation where SERIOUS INJURY or DEATH may occur.

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.

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.

Keep your machinery in proper working condition. Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.

If you do not understand any part of this manual or need assistance, contact your dealer.

Practice Safe Maintenance

Understand service procedures before doing work. Keep area clean and dry.

Never lubricate, service, or adjust machine while it is in operation. Keep hands, feet and clothing away from rotating parts.

Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Remove any built up grease oil and debris.



and Work Area



Read and Understand Manual

Prepare for Emergencies

Be prepared if fire starts.

Keep a first aid kit and fire extinguisher handy.

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



Keep Emergency Equipment Quickly Accessible

Wear Protective Clothing		
Wear close fitting clothing and safety equipment appropriate to the job.	Eye Protection	
Remove all jewelry.		m
Long hair should be tied up and back.	Gloves	
Safety glasses should be worn at all times to protect eyes from debris.		
Wear gloves to protect your hands from sharp edges on plastic or steel parts.	Steel Toe Boots	69
Wear steel toe boots to help protect your feet from falling debris. Tuck in any loose or dangling shoe strings.	Respirator	
A respirator may be needed to prevent breathing potentially toxic fumes and dust.		$\overline{\mathbf{A}}$
Wear hard hat to help protect your head.	Hard Hat	
Wear appropriate fall protection equipment when working at elevations greater than six feet (6').	Fall Protection	



Main Support Channels

When laying out the ladder, safety cage, and platforms be sure to always start from the head service platform and work the way down the leg. Keep in mind a rest platform needs to be located at every 30' of vertical descent to comply with O.S.H.A., standards.

Take time now and review all instructions and drawings before attempting to assemble the platforms. Layout all parts for easy identification. Determine if the equipment is left or right hand shaft. The support channels will mount in the same location for right hand or left hand drive setup. The support channels will extend same distance on each side of the head. Start the **head service platform** assembly by attaching two (2) support channels to the head platform clips. Use 3/8" x 1" bolts and whiz nuts. *(See Figure 4A.)*



Figure 4A

Decking

The drive deck and hatch deck sections are interchangeable. All shown views are consistent for a right hand drive elevator. If you are assembling a left hand drive elevator the hatch deck would be closest to you and the drive deck farthest *in Figure 4B*. Place outside floor sections (drive attach) on support channels in location shown below and fasten using 3/8" x 1" carriage bolts and whiz nuts. Fasten mid drive deck to the two (2) outside floor sections with 3/8" x 1" bolts and whiz nuts. Make sure not to tighten the hardware until assembly is complete.



Figure 4B 24" Platform



Figure 4C 16" Platform

Toeboards

Fasten toeboards to floor sections in the position shown *in Figure 4D* using 3/8" x 1" bolts and whiz nuts. Make sure not to tighten hardware until assembly is complete.



Figure 4D 24" Platform



Figure 4E 24" Platform

Handrail Posts

Place vertical posts in position as shown *in Figure 4F*. Fasten with $3/8" \times 1"$ bolts and whiz nuts. Make sure not to tighten hardware until assembly is complete.



Figure 4F 24" Platform

Hatch Door

Attach the hatch door hinges to the hatch deck door using $3/8" \times 1"$ carriage bolts and whiz nuts. Next attach the door hinge to the hatch deck using $3/8" \times 1"$ carriage bolts and whiz nuts. Attach hatch deck support and hatch support as shown *in Figure 4G* using $3/8" \times 1"$ carriage bolts and flange nuts. Attach hatch deck filler with $3/8" \times 1"$ carriage bolts.



Figure 4G 24" Platform



Figure 4H 16" Platform

Handrails

Attach handrails to vertical posts in position as shown *in Figure 4I* with $3/8" \times 1"$ hardware. Attach latch assembly for deck hatch door to lower handrail next to the center vertical post using $5/16" \times 1"$ hardware. Now go back and tighten all hardware.



Figure 4I 24" Platform



Figure 4J 16" Platform

Deck Support Channel

When laying out the ladder, safety cage, and platforms be sure to always start from the head service platform and work the way down the leg. Keep in mind a rest platform needs to be located at every 30' of vertical descent to comply with O.S.H.A., standards.

Take time now and review all instructions and drawings before attempting to assemble the platforms. Layout all parts for easy identification. Determine if the equipment is left or right hand shaft. The support channels will mount in the same location for right hand or left hand drive setup. The support channels will extend same distance on each side of the head. Start the **head service platform** assembly by attaching two (2) support channels to the head platform clips. Use 3/8" x 1" bolts and whiz nuts. *(See Figure 5A.)*



Figure 5A 36" Platform

Decking

The drive deck and hatch deck sections are interchangeable. All shown views are consistent for a right hand drive elevator. If you are assembling a left hand drive elevator the hatch deck would be closest to you and the drive deck farthest *in Figure 5B*. Place outside floor sections (drive attach) on support channels in location shown below and fasten using 3/8" x 1" carriage bolts and whiz nuts. Fasten mid drive deck to the two (2) outside floor sections with 3/8" x 1" carriage bolts and whiz nuts. Make sure not to tighten the hardware until assembly is complete.



Figure 5B 36" Platform

Toeboards

Fasten toeboards to floor sections in the position shown *in Figure 5C* using 3/8" x 1" bolts and whiz nuts. Make sure not to tighten hardware until assembly is complete.



Figure 5C 36" Platform

Handrail Posts

Place handrail posts in position as shown *in Figure 5D*. Fasten with 3/8" x 1" bolts and whiz nuts. Make sure not to tighten hardware until assembly is complete.



Figure 5D 36" Platform

Hatch Door

Attach the hatch door hinges to the hatch deck door using 1" carriage bolts and whiz nuts. Next attach the door hinge to the hatch deck using $3/8 \times 1$ " carriage bolts and whiz nuts. Attach hatch deck support and hatch support as shown *in Figure 5F* using 3/8" x 1" bolts and flange nuts. Attach hatch deck filler with 3/8" x 1" carriage bolts.



Figure 5E 36" Platform



Figure 5F 36" Platform

Handrails

Attach handrails to handrail posts in position as shown *in Figure 5G* with $3/8" \times 1"$ hardware. Attach latch assembly for deck hatch door to lower handrail next to the center vertical post using $5/16" \times 1"$ hardware. Now go back and tighten all hardware.



Figure 5G 36" Platform

Tie Angle Attachment

Attach the up and down legs together with the tie angles. Position the tie angles as shown and fasten with the 1/2"-13 x 1" bolts.





Ref #	Description	
1	Trunking Section	
2	1/2"-13 Hex Nut	
3	Tie Angle	
4	1/2"-13 x 1" Hex Bolt	

Tie Angle and Crossbraces



Ladder Standoff Bracket

Attach the ladder standoff bracket to the tie angles.



Figure 6C

Ref #	Description	
1	1/2"-13 x 1" Hex Bolt	
2	1/2"-13 Hex Nut	
3	Ladder Standoff Bracket	
4	Tie Angle	

Ladder Attachment

When attaching the ladder to the standoffs the ladder is attached through the second hole down from the end of the ladder. The first hole is used to attach the safety cage hoop.

NOTE: On 16" and 24" the standoff angles and cages mount inside ladder. On 30" and 36" the standoff angle and cages mount to outside of ladder.





Ref #	Description	
1	1/2"-13 x 1" Hex Bolt	
2	1/2"-13 Hex Nut	
3	10' Ladder Section	
4	27" Safety Cage Hoop	

Safety Cage Hoop Assembly

Bolt all safety cage hoops to ladder as shown *in Figure 6E*. Leave all bolts loose until the vertical bars are in place and then tighten all hardware.



Figure 6E

14' Ladder Assembly



Safety Cage Vertical Bar Attachment

Bolt all safety cage vertical bars to the cage hoops as shown in Figure 6G.



Figure 6G

Ref #	Description	
1	1/2"-13 x 1" Hex Bolt	
2	1/2"-13 Hex Nut	
3	Safety Cage Vertical Nut	







Ref #	Description	
1	1/2"-13 x 1" Hex Bolt	
2	1/2"-13 Hex Nut	
3	Safety Cage Tapper Vertical Bar	
4	30" Safety Cage Hoop	
5	27" Safety Cage Hoop	

Ref #	Description	
1	1/2"-13 x 1" Hex Bolt	
2	1/2"-13 Hex Nut	
3	Safety Cage Tapper Vertical Bar	
4	31" Safety Cage Hoop	
5	27" Safety Cage Hoop	
6	3/8"-16 Hex Bolt	
7	3/8"-16 Flange Nut	

Mounting Channels

Attach the mounting channels to the tie angles with 1/2" x 3/4" bolts and whiz nuts. For 16" and 24" bucket elevators, special tie angles are included in the rest platform packages (GECT1640FCRP) and must be mounted in place of the standard tie angles. (See Figure 7A.)



Figure 7A

Cross Channels

Attach the cross channels to the mounting channels with 3/8" x 3/4" bolts and hex nuts. (See Figure 7B.)



Figure 7B

Rest Platform Deck Plate

With $3/8" \times 3/4"$ bolts and flange nuts bolt the deck plate to the mounting and cross channels as shown, with the extrusions in the deck plate facing up. With $1/2" \times 1"$ hex bolts and flange nuts snug the ladder standoffs in place on the top of the rear cross channels. The standoffs will be used to attach the upper portion of the 14' ladder. (See Figure 7C.)



Figure 7C

Rest Platform Corner Posts

Next attach the handrail posts to the mounting and cross channels as shown with 3/8" x 3/4" bolts and whiz nuts as shown. Leaving hardware loose will help when fitting other parts in place. (See Figure 7D.)



Figure 7D

Short and Long Handrail

Bolt on all the short and long handrails as shown using 3/8" x 3/4" hex bolts and flange nuts. *(See Figure 7E.)*



Figure 7E

14' Complete Rest Platform Assembly

Attach upper portion of 14' ladder with 1/2" x 1" hex bolts and flanges nuts. Tighten all bolts and nuts. (See Figure 7F.)



Figure 7F

Platform Clamps

This assembly is designed to be located at any elevation on trunking that is needed to provide access to other equipment. Determine elevation of platform surface and work from there. Locate all parts required for assembly by using the charts shown in the following figures.

Locate all parts to assemble clamps onto the trunking. Measure the distance between the clamps to assure proper location for support channels and knee brace attachment. Attach a clamp half and support clip on one (1) end of the support channel using 1/2" hardware. Next attach the clamp rod weldment onto the clamp half using 1/2" nuts. Next place this assembly around trunk and attach other clamp half and support clip using 1/2" hardware.



NOTE: When tightening clamps onto trunking, do not overtighten and collapse the trunking.

Figure 8A

Ref #	Part #	Description
1	GSB30144	Clamp Clip
2	DSP16001	4 x 5 Platform Clamp Channel
3	DSP16002	4 x 5 Platform Clamp Band
4	DSP16005	4 x 5 Platform Clamp Rod Weldment

Support Channels and Knee Braces

With clamps fastened securely to the trunk, attach the platform support channels to the middle clamp, use 1/2" hardware with this assembly. The knee braces will attach in the upper set of holes on side of support channel and to the lower clamp. Attach knee brace diagonals to bottom side of knee braces. Before tightening hardware the support channels must be perpendicular to the trunk, now tighten all hardware.



Figure 8B

Ref #	Part #	Description
1	GSB30146	Deck Platform Support Channel
1	GSB30210	Deck Platform Support Channel
2	GSB30147	Brace Channel
3	GSB30148	Knee Brace

Platform Deck

With support assembly attached to trunk and hardware tightened, proceed with attaching floor deck weldment to the support channels using 1/2" hardware.



Figure 8C

Ref #	Part #	Description
1	GSB30141	Platform Deck Weldment

Vertical Posts and Toeboard

Locate the toeboard cover plate and bolt over unused notched toeboard area using 3/8" hardware. Next attach all vertical posts in position shown with 3/8" hardware. Now bolt the handrail brace plate to the vertical post as shown *in Figure 8D*. Make sure not to tighten hardware till handrail assembly is complete.



Figure 8D

Ref #	Part #	Description
1	GSB30142	Toeboard Filler Plate
2	GSB30143	Handrail Support Plate
3	GSB30149	Vertical Post - 43-1/2"

Handrail

Attach all handrails in position shown *in Figure 8E* using 3/8" hardware. Next attach handrail brace using 3/8" hardware. Now go back and tighten all hardware.



Figure 8E

Ref #	Part #	Description	
1	GSB30153	37-13/16" Horizontal Handrail	
2	GSB30151	46-11/16" Horizontal Handrail	
3	GSB30152	56-3/8" Horizontal Handrail	
4	GSB30150	Handrail Brace	

Platform Clamps

This assembly is designed to be located at any elevation on trunking that is needed to provide access to other equipment. Determine elevation of platform surface and work from there. Locate all parts required for assembly by using the charts shown in the following figures.

Locate all clamp halves, clamp brackets, threaded rods, and hardware to assemble clamps onto the trunking. Measure the distance between the clamps to assure proper location for support channels and knee brace attachment. See clamp detail for hardware orientation. Place 5/8" nuts and lock washers on a threaded rod (one from each end). Place a clamp half on each end of the rod and thread another nut and lock washer to hold clamp in place. Now place that assembly around trunk and place a clamp bracket onto the opposite end of the clamp assembly and use 1/2" hardware to fasten parts together. Adjust the position of the inside nuts of the rod assembly to allow the clamps to be tightened onto the trunking.

NOTE: Tighten clamps onto trunking, do not overtighten and collapse the trunking. Position inside nuts back to the clamp and tighten.



Figure 9A

Support Channels and Knee Braces

With clamps fastened securely to the trunk, attach the platform support channels to the middle clamp, use 1/2" hardware with this assembly. The knee braces will attach in the upper set of holes on side of support channel and to the lower clamp. Before tightening hardware the support channels must be perpendicular to the trunk, now tighten all hardware. The toeboards will not be centered on trunking but should be offset to the ladder side. The platform is designed to work for either side of trunking access.



Figure 9B

Toeboards

With support assembly attached to trunk and hardware tightened, proceed by attaching the notched toeboard and unnotched toeboard to the top of the support channel using the 5/16" hardware provided. (Leave hardware loose.) (See Figure 9D on Page 42.)



Figure 9C

Platform Decking

Attach the floor deck panels to the support channels. Then attach end toeboards to the platform decking with the 5/16" hardware provided. After all pieces have been attached and positioned properly, tighten all hardware.



Figure 9D

Handrails

Locate the toeboard cover plate (DSP36001) and bolt over the unused notched toeboard area. Attach handrail posts to the toeboards as shown using the 5/16" hardware provided. (Leave hardware loose until all handrails are in place.) Attach all handrail angles and brace angle. (See Figure 9F on Page 44.) After all pieces have been attached go back and tighten all hardware. See Chart below for part numbers and lengths of all handrails.



Figure 9E

Part #	Model Size	Length
DSP36009	Handrail	51-1/2"
DSP36010	Handrail	74-7/8"
DSP36011	Handrail	74"
DSP36012	Post	43-1/2"
DSP36013	Brace	37-3/4"

Crossbraces for Knee Braces

Attach knee brace diagonals to bottom side of the knee braces, this will add extra stability to the distributor platform. (See Figure 9F.)



Figure 9F



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

Warranty Extensions: The Limited Warranty period is extended for the following products:

	Product	Warranty Period
AP Fans and	Performer Series Direct Drive Fan Motor	3 Years
Flooring	All Fiberglass Housings	Lifetime
	All Fiberglass Propellers	Lifetime
Cumberland	Feeder System Pan Assemblies	5 Years **
Feeding/Watering	Feed Tubes (1.75" & 2.00")	10 Years *
Systems	Centerless Augers	10 Years *
Systems	Watering Nipples	10 Years *
Grain Systems	Grain Bin Structural Design	5 Years
Grain Systems	Portable & Tower Dryers	2 Years
Farm Fans Zimmerman	Portable & Tower Dryer Frames and Internal Infrastructure †	5 Years

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

- ** Warranty prorated from list price:
 0 to 3 years no cost to end-user
 3 to 5 years end-user pays 50%
- † Motors, burner components and moving parts not included. Portable Dryer screens included. Tower Dryer screens not included.

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

Conditions and Limitations:

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

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

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

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

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

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

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