

Distributor Cable Control

Installation Manual

PNEG-971

Version: 2.0

Date: 10-12-15



PNEG-971

Equipment Information

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

Model #: _____

Date Purchased: _____

Serial #: _____

Dealer name and phone #: _____

RPM: _____

Head Pulley Dia.: _____

Discharge Height: _____

Horsepower: _____

Spout Dia.: _____

of Spouts: _____

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

Chapter 1 Introduction	4
Chapter 2 Safety	5
Safety Guidelines	5
Cautionary Symbols Definitions	6
Safety Cautions	7
Safety Sign-Off Sheet	9
Chapter 3 Decal Locations	10
Chapter 4 Part Identification	11
Chapter 5 Installation	12
Installation of Cable Wheel and Coupler Connector	12
Connector Pulley Assembly	14
Cable Guide Assembly	15
Upper Cable Guide Assembly	16
Control Handle Installation	17
Lower Cable Wheel Assembly	18
Cable Guides	19
Cable Guides	20
Chapter 6 Warranty	21

1. Introduction

Thank you for choosing this product. It is designed to give excellent performance and service for many years.

This manual covers general information on the distributor cable control installation. Due to the wide variety of field conditions we cannot cover every aspect of installation. We offer one method for installing equipment but, rely on your qualified contractor's experience and techniques. Some conditions and surroundings do not allow certain practices during the installation of equipment. We can not be responsible for the installation of the distributor and accessories. We encourage anyone installing, or maintaining this equipment to thoroughly read this manual before proceeding.

The company is the vendor of the distributor and certain of its optional accessories only, and does not assume responsibility for the installation. The installation recommendations contained within this manual are for consideration only.

READ THIS MANUAL carefully to learn how to properly use and install this 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. Report any damage or shortages by recording a detailed description on the Bill of Lading to justify the Customer's claim from the Transport Firm. Our responsibility for damage to the equipment ends with acceptance by the delivering carrier. Save all paperwork and documentation furnished with any of the equipment.

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

A WARRANTY is provided as part of the company's support program for customers who use and maintain their equipment as described in the manual. The warranty is explained on the warranty page located on the inside back cover of this manual.

This warranty provides you the assurance that the company will back its products where 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. Save these safety guidelines for future reference.

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 should 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-0001-2

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, **may result in serious injury or death.**



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



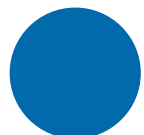
This symbol is used to address practices not related to personal injury.



This symbol indicates a general hazard.



This symbol indicates a prohibited activity.



This symbol indicates a mandatory action.

ST-0005

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

2. Safety

Maintain Equipment and Work Area

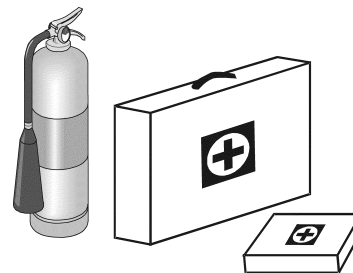
- Understand service procedures before doing work. Keep area clean and dry.
- Never service equipment while it is operating. Keep hands, feet, and clothing away from moving parts
- Keep your equipment in proper working condition. Replace worn or broken parts immediately.



ST-0003-1

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**

Safety Sign-Off Sheet

Below is a sign-off sheet that can be used to verify that all personnel have read and understood the safety instructions. This sign-off sheet is provided for your convenience and personal record keeping.

[illegible]

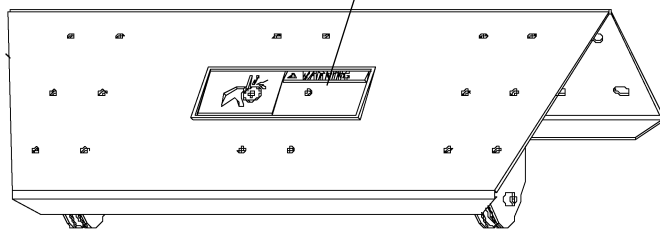
ST-0007

3. Decal Locations

Install safety decals on components as *shown below*. Always insure that safety decals are in place and in good condition. If a decal cannot be easily read for any reason or has been painted over, replace it immediately. Contact your dealer or the manufacturer to order a replacement decal free of charge.

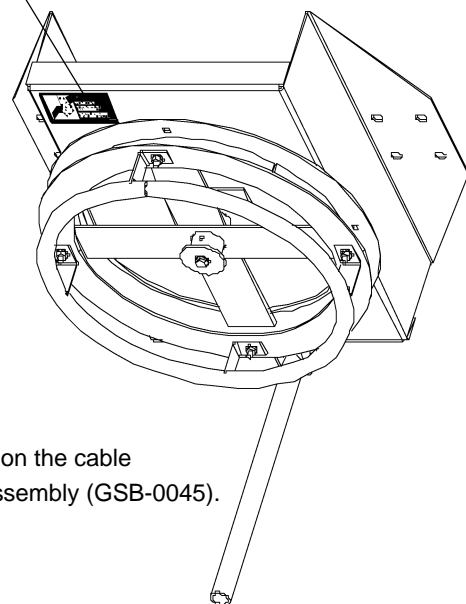


DC-857



DC-857

Located on the cable
guide assembly (GSB-0007).



DC-857

Located on the cable
wheel assembly (GSB-0045).

NOTE: Cable is not supplied with cable control. 3/16" Aircraft cable is recommended.

6", 8" and 10" Distributors (GSB-DCG)		
Part #	Description	Qty
GSB-0006	Spacer, Bottom Guide	1
GSB-0007	Cable Guide Assembly, Top	1
GSB-0015	Cable Wheel Weldment, Top	1
GSB-0049	Cable Wheel Assembly, Bottom	1
GSB-0030	Control Handle	1
GSB-0031	Control Handle Brackets	2
GSB-0037	Coupler Connector Weldment	1
GSB-0045	Connector Pulley Assembly	1
GSB-DCG-HDW	Hardware, Distributors Cable Control	1

12" and 14" Distributors (GSB-DCG-1)		
Part #	Description	Qty
GSB-0006	Spacer, Bottom Guide	1
GSB-0007	Cable Guide Assembly, Top	1
GSB-0059	Cable Wheel Weldment, Top	1
GSB-0049	Cable Wheel Assembly, Bottom	1
GSB-0030	Control Handle	1
GSB-0031	Control Handle Brackets	2
GSB-0052	Coupler Connector Weldment	1
GSB-0045	Connector Pulley Assembly	1
GSB-DCG-HDW	Hardware, Distributors Cable Control	1

Distributor Hardware (GSB-DCG-HDW)		
Part #	Description	Qty
S-8762	Clamp 3/16" Cable	8
S-1146	Bolt HHCS 5/16-18 x 1 ZN Grade 2	6
S-10268	Flange Nut 5/16" JS500 Grade 5	6
S-3729	Hex Nut 1/2"-13 ZN YDP Grade 5	8
S-7329	Bolt HHCS 5/16-18 x 2 ZN Grade 2	1
S-7382	Nut Nylock 5/16-18 ZN Grade 5	1
S-8268	Bolt HHCS 1/2-13 x 2 ZN Grade 8	8

10" Bucket Elevator (GSB-10DCG)		
Part #	Description	Qty
GSB-10174	Clamp Band	4

16"-36" Bucket Elevator (1636 DCG)		
Part #	Description	Qty
DSP16002	Clamp Band	4
DSP16005	Clamp Rod Weldment	2

5. Installation

Installation of Cable Wheel and Coupler Connector

Once the distributor has been installed the installation of the cable controls can begin. The first piece to install is the cable wheel (A). This cable wheel mounts to the control pipe (B) coming from the bottom of the distributor. This cable wheel needs to be placed on the pipe far enough not to interfere with the threads on the end of the distributor control pipe. (See Figure 5A.) Once the cable wheel is in the desired location, tighten the two (2) 3/8" set screws.

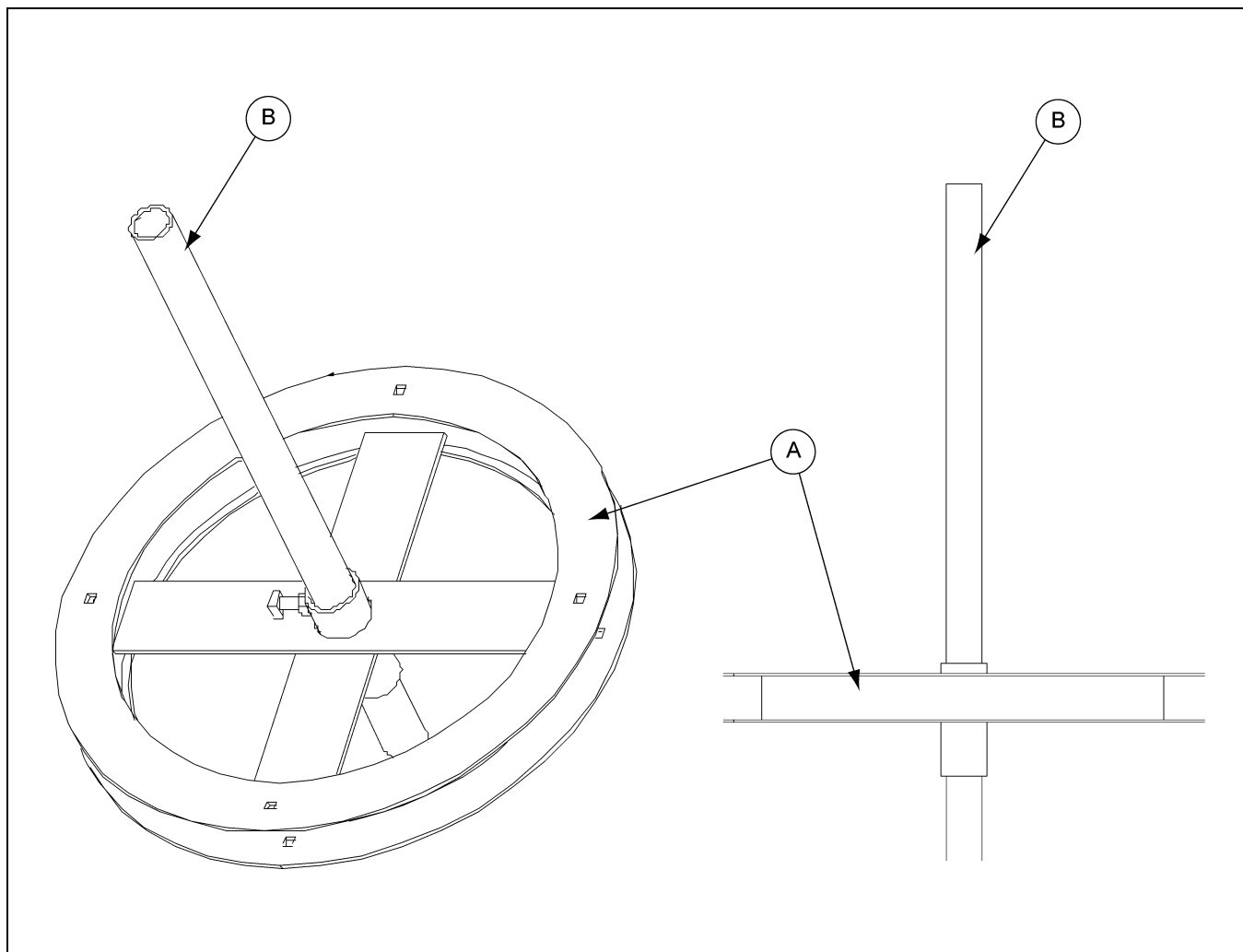


Figure 5A

Ref #	Part #	Description
A	GSB-0015 GSB-0059	Cable Wheel 6", 8", and 10" Distributors 12" and 14" Distributors
B		Distributor Control Pipe

Once the top cable wheel (A) has been installed the next piece to assemble is the coupler connector weldment (C). This piece threads onto the threads of the distributor control pipe (B) as shown in [Figure 5B](#) below. Make sure the coupler connector weldment is secured to the distributor control pipe.

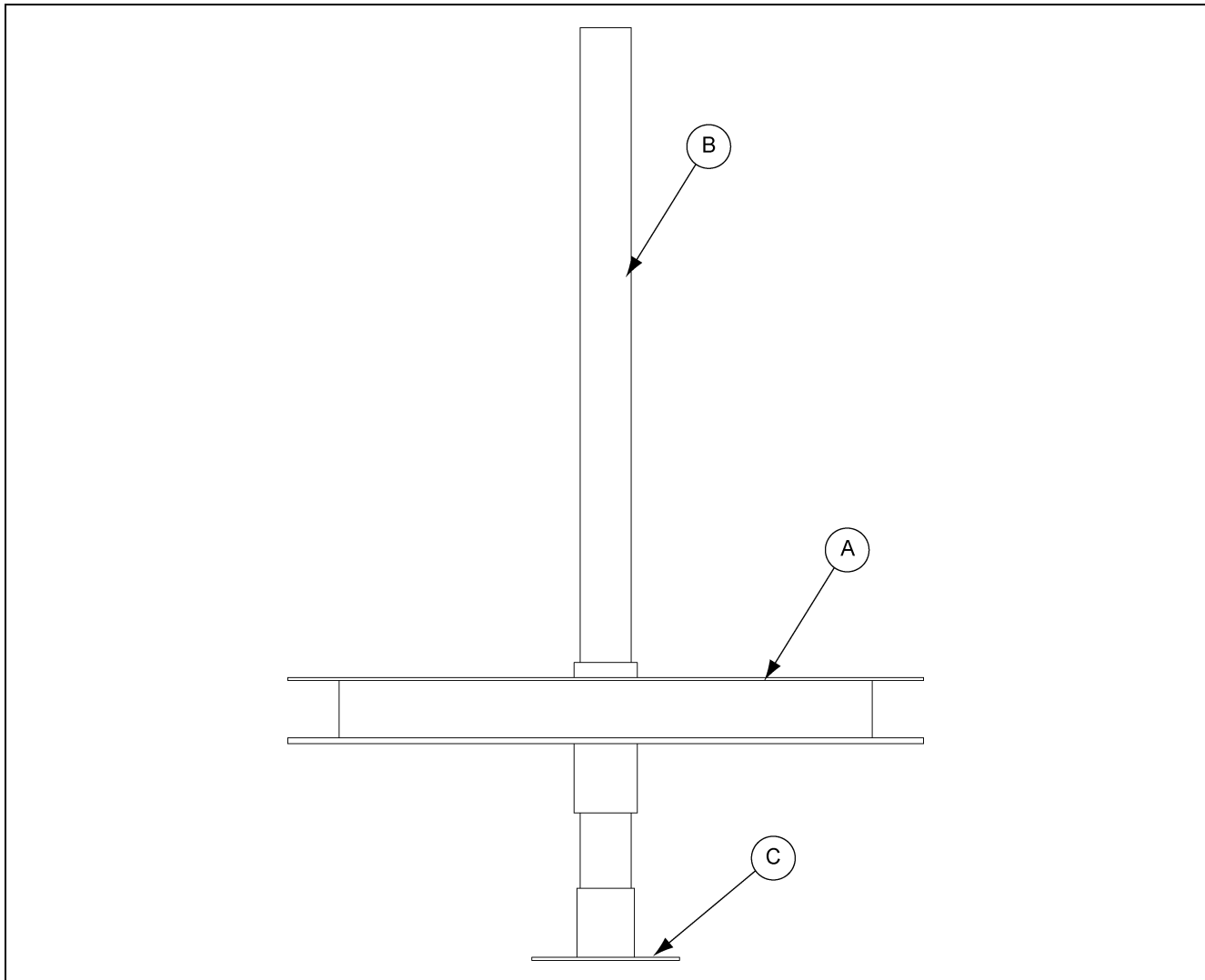


Figure 5B

Ref #	Part #	Description
A	GSB-0015 GSB-0059	Top Cable Wheel Weldment 6", 8", and 10" Distributors 12" and 14" Distributors
B		Distributor Control Pipe
C	GSB-0037 GSB-0052	Coupler Connector 6", 8", and 10" Distributors 12" and 14" Distributors

Connector Pulley Assembly

The next piece to install is the connector pulley assembly (C). This piece mounts to the coupler connector weldment (B) as shown in [Figure 5C](#) below. These are fastened together using (2) 5/16" x 1" bolts and whiz nuts, supplied in the hardware package (GSB-DCG-HDW).

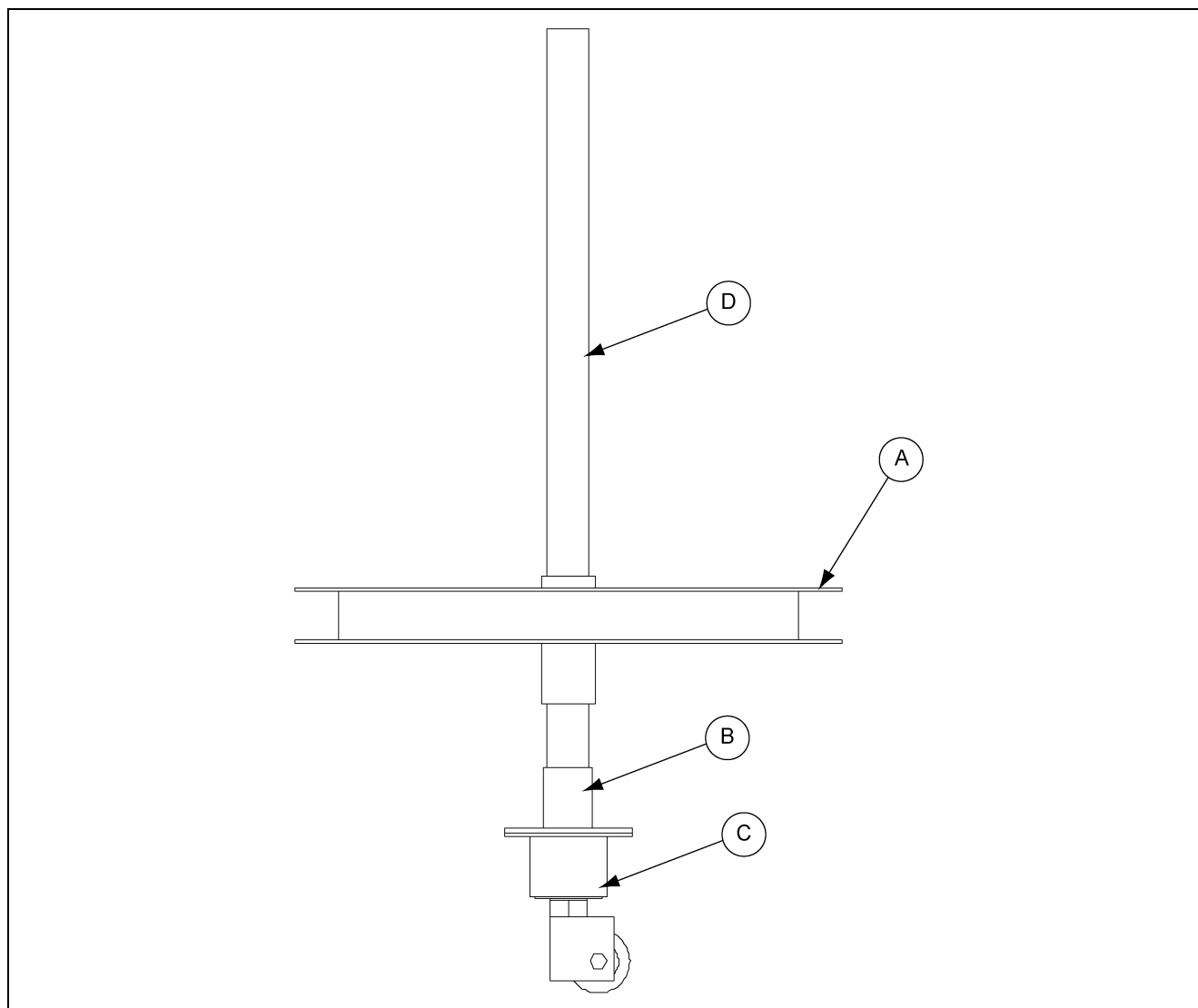


Figure 5C

Ref #	Part #	Description
A	GSB-0015 GSB-0059	Top Cable Wheel Weldment 6", 8", and 10" Distributors 12" and 14" Distributors
B	GSB-0037 GSB-0052	Coupler Connector Weldment 6", 8", and 10" Distributors 12" and 14" Distributors
C	GSB-0045	Connector Pulley Assembly
D		Distributor Pipe Control

Cable Guide Assembly

The next piece to install is the upper cable guide assembly (D). The cable guide assembly is installed on the trunking. The location on the trunking is determined by the height of the cable wheel (A). The cable must run in-line from the cable wheel to the sheaves in the cable guide assembly. This location is shown in [Figure 5D](#) below. For cable installation, [See Page 20](#).

NOTE: Cable is not supplied with cable control. The company recommends 3/16" aircraft cable.

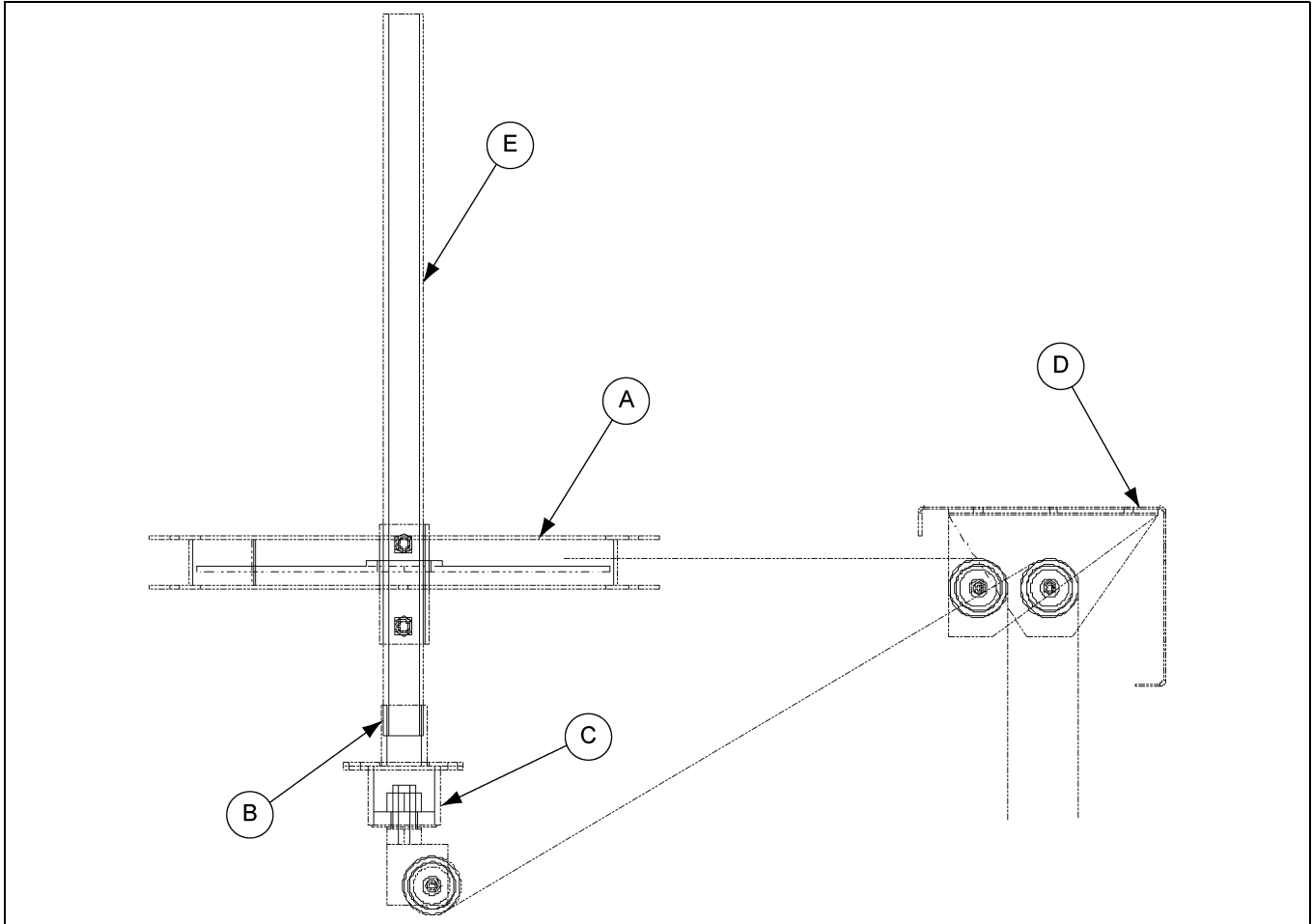


Figure 5D

Ref #	Part #	Description
A	GSB-0015 GSB-0059	Top Cable Wheel Weldment 6", 8", and 10" Distributors 12" and 14" Distributors
B	GSB-0037 GSB-0052	Coupler Connector Weldment 6", 8", and 10" Distributors 12" and 14" Distributors
C	GSB-0045	Connector Pulley Assembly
D	GSB-0007	Upper Cable Guide Assembly
E		Distributor Pipe Control

5. Installation

Upper Cable Guide Assembly

Once the location of the upper cable guide assembly is determined it must be fastened to the trunking. The assembly of the clamp band (B) and upper cable guide assembly (A) is shown in the [Figure 5E](#) and [Figure 5F](#) below. The 1/2" x 2" bolts and nuts that fasten the clamp bands (E) to the upper cable guide assembly (D) are provide in the hardware package (GSB-DCG-HDW). These clamp bands (E) vary depending on what size leg you have. Refer to the [Table below](#) to see what clamp be used.

NOTE: Use caution when tightening hardware, Do not overtighten and collapse trunking.

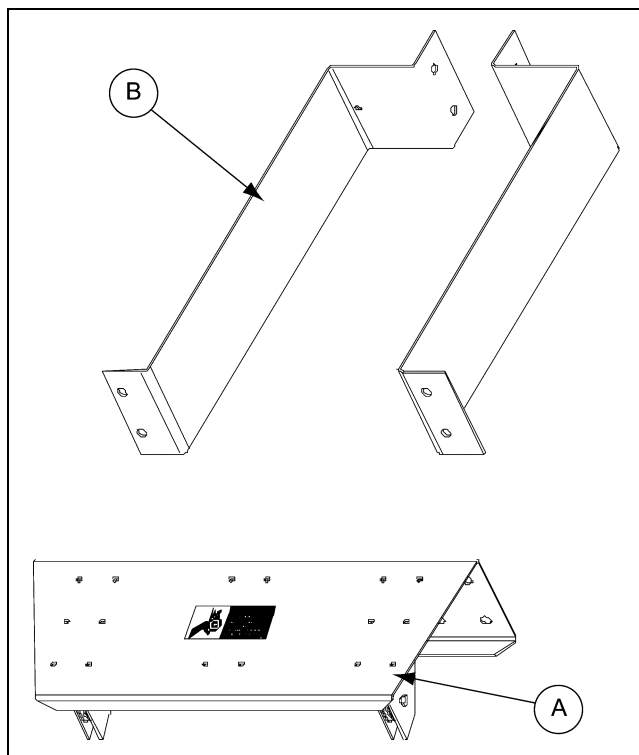


Figure 5E Trunking Removed for Clarity

Ref #	Part #	Description
A	GSB-0007	Cable Guide Assembly
B	GSB10174	10" Clamp Band (2)

Pulley Diameter	Clamp Band	Qty
10"	GSB10174	2

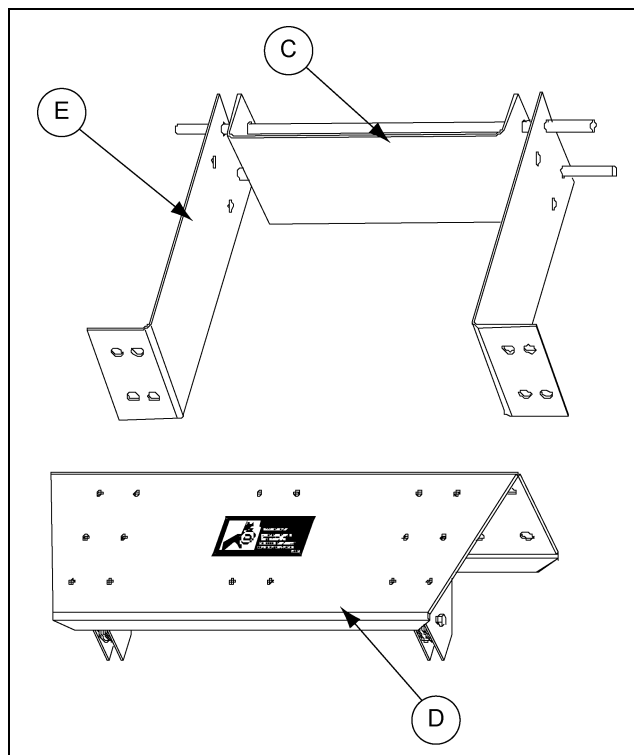


Figure 5F Trunking Removed for Clarity

Ref #	Part #	Description
C	DSP16005	Clamp Rod Weldment
D	GSB-0007	Cable Guide Assembly
E	DSP16002	16"-36" Clamp Band

Part #	16", 24", 30" and 36" Pulleys	Qty
DSP16002	Clamp Band	2
DSP16005	Clamp with Rod Weldment	1

Control Handle Installation

Once the upper assembly has been installed, the control handle needs to be assembled to the lower cable wheel assembly. There are two (2) brackets (B) that mount to the bottom of the lower cable wheel assembly (A). These brackets are fastened with 5/16" x 1" bolts and whiz nuts. The control handle (C) is then mounted between the brackets using the second hole in the control handle and the end hole on the brackets. This is fastened using 5/16" x 2" bolt and lock nut. The hardware required is located in (GSB-DCG-HDW). This assembly is shown in [Figure 5G](#) below.

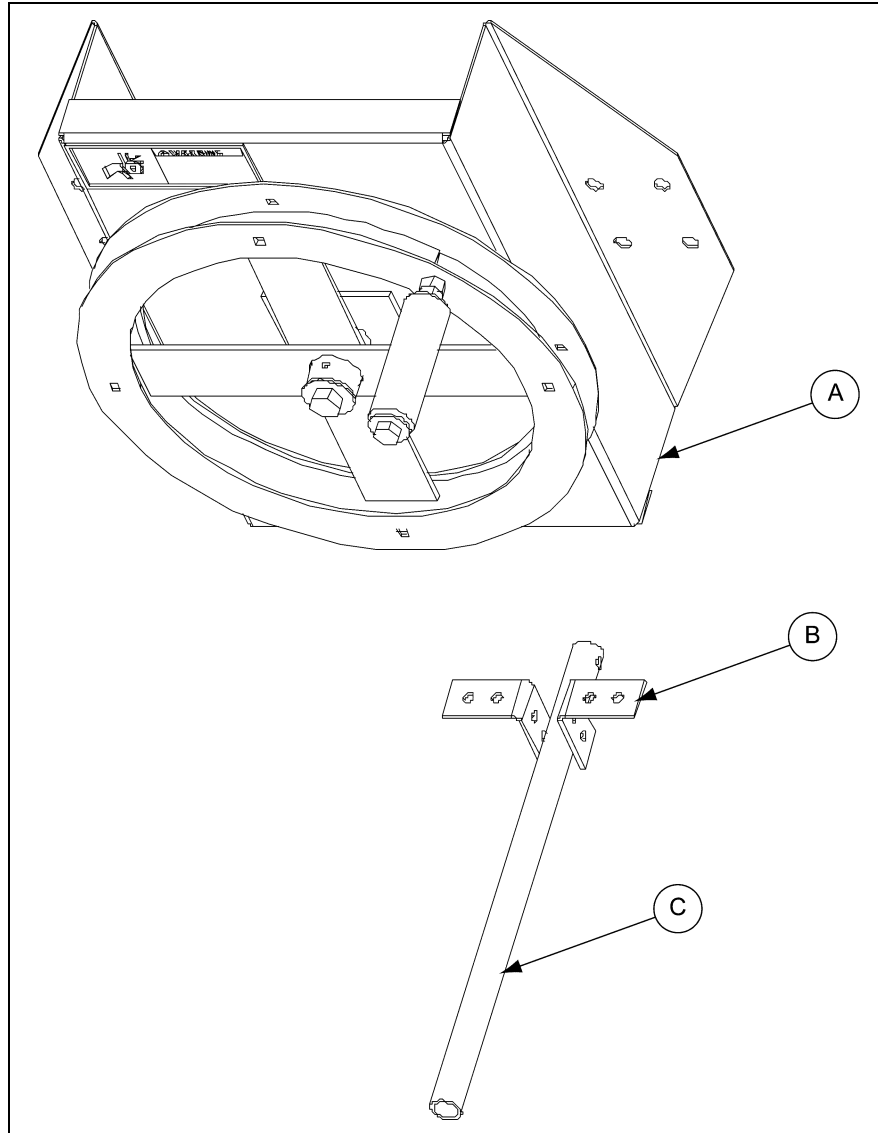


Figure 5G

Ref #	Part #	Description
A	GSB-0049	Bottom Cable Wheel Assembly
B	GSB-0031	Control Handle Brackets
C	GSB-0030	Control Handle

Lower Cable Wheel Assembly

Once the control handle has been assembled the lower cable wheel can be installed. The location of the lower cable wheel assembly (D) is decided by where the operator will be positioned. Once the desired height has been determined for the lower cable wheel, it must be fastened to the trunking. The assembly of the lower cable wheel and clamp bands (B and E) are shown in [Figure 5H](#) below. The 1/2" x 2" bolts and nuts to fasten clamp bands to the lower cable wheel are provided in the hardware package (GSB-DCG-HDW). These clamp bands vary depending on what size leg you have. Refer to [Table Page 16](#) to see what clamp bands should be used.

NOTE: Use caution when tightening hardware, Do not overtighten and collapse trunking.

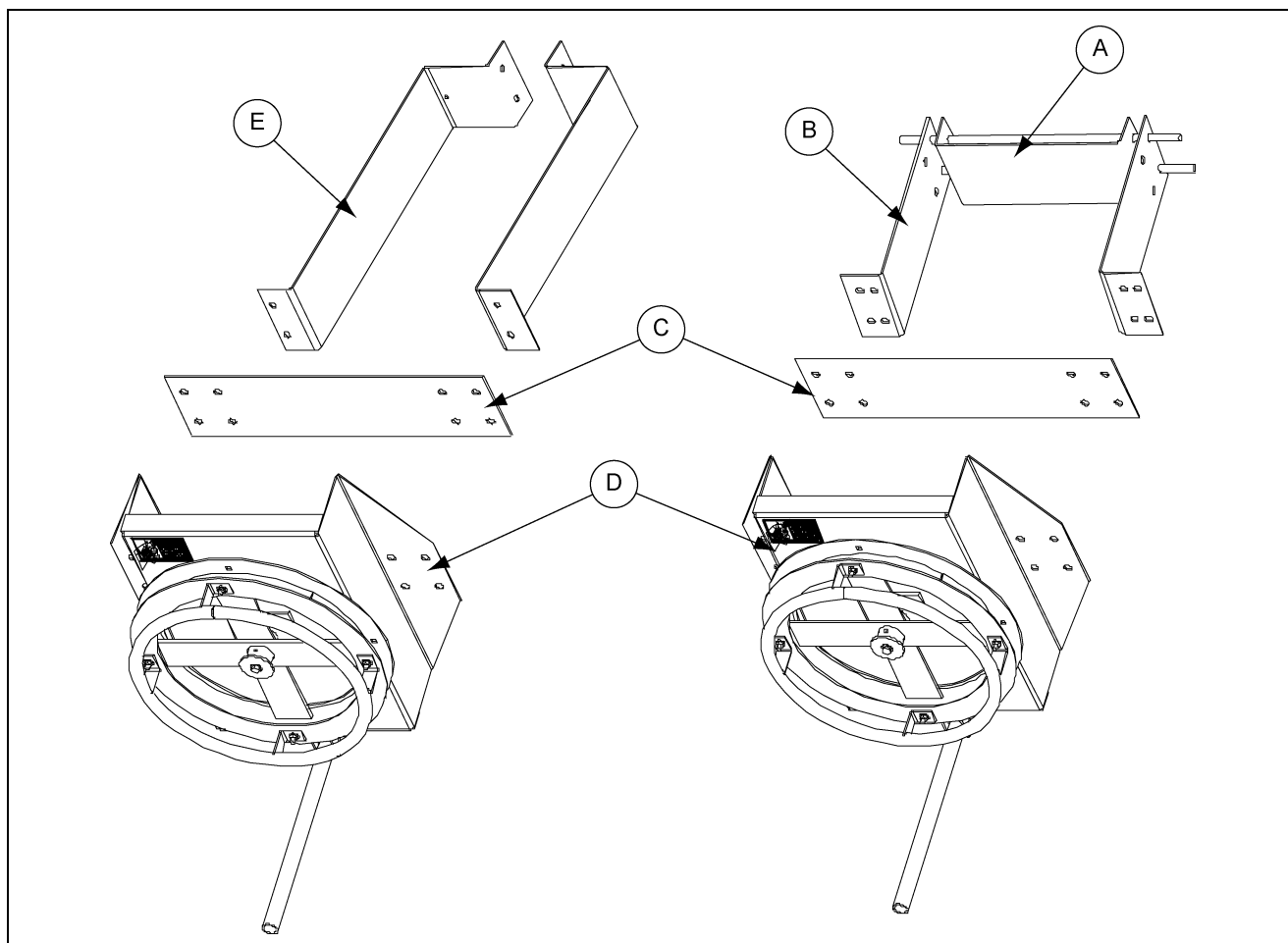


Figure 5H Trunking Removed for Clarity

Ref #	Part #	Description
A	DSP16005	Clamp Rod Weldment
B	DSP16002	16"-36" Clamp Band (2)
C	GSB-0006	Bottom Spacer Guide
D	GSB-0049	Bottom Cable Wheel Assembly
E	GSB10174	10" Clamp Band (2)

Cable Guides

To help keep the cable in-line from the upper assembly to lower assembly intermediate cable guides need to be installed. The quantity of the intermediate cable guides is determined by the height of the leg. The company recommends that they be installed every 20'. These intermediate cable guides (A) are fastened at the trunking joints (B) using the same hardware as the joint. The assembly below shows how the intermediate cable guides are located on the trunking joints [See Figure 5I](#). For cable installation, [See Page 20](#).

NOTE: Cable is not supplied with cable control. The company recommends 3/16" aircraft cable.

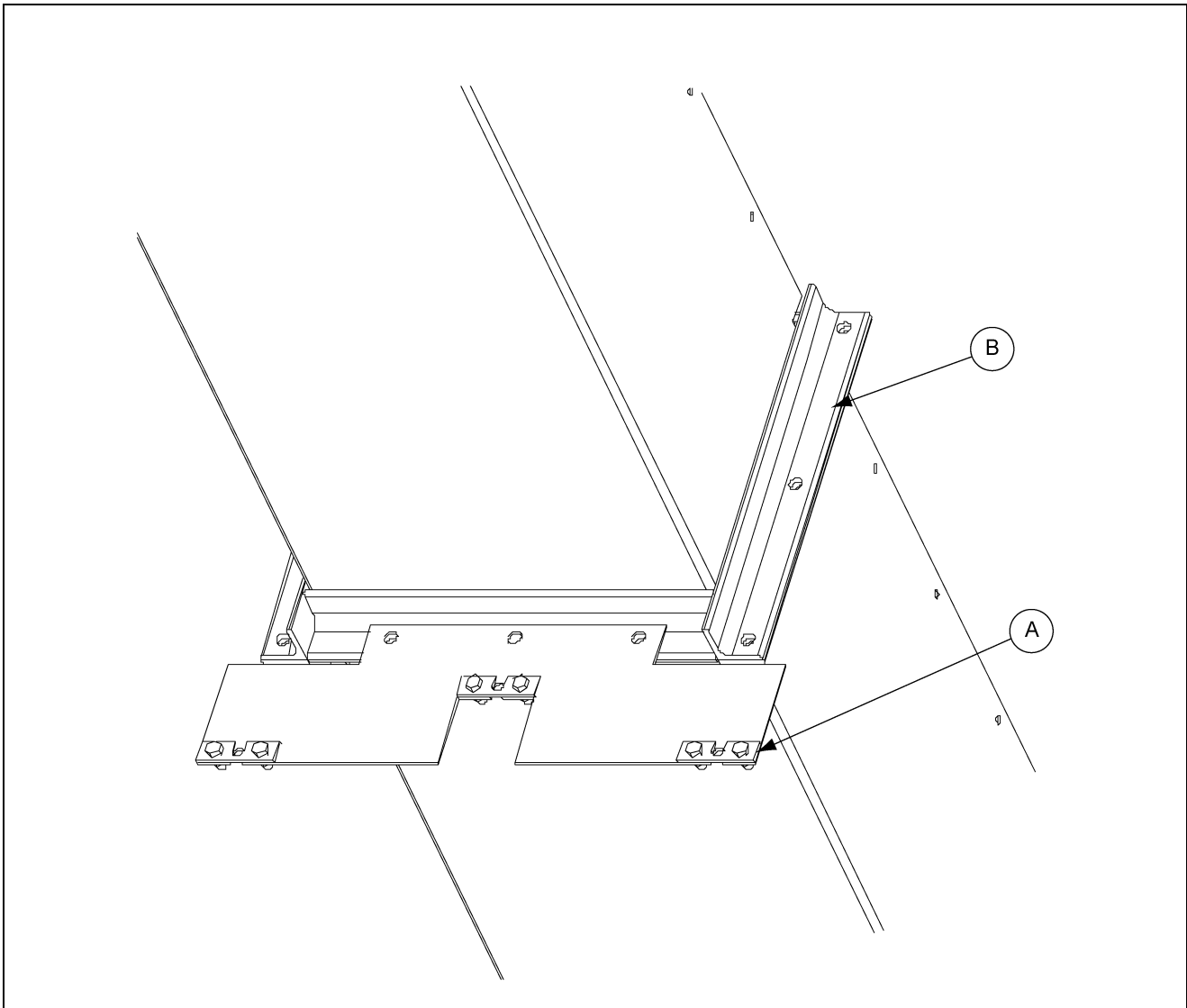


Figure 5I Trunking Removed for Clarity

Ref #	Part #	Description
A	GSB-0022	Cable Guides
B		Trunking Joint

Cable Guides

There is more than one way to install the cable for the cable control, we offer one method for installation. Rely on your qualified contractor's experience and techniques.

You will need two (2) pieces of cable. One piece should be long enough to reach from distributor to the lower control wheel assembly. Make sure there is enough extra to tie off both ends of cable. The other piece will have to be long enough to go from distributor to lower cable wheel assembly and back up to distributor. Make sure there is enough extra to wrap around the cable wheels approximately 7 times. The shorter piece will be used for lifting the spout inside distributor and the longer piece will be used to turn the spout.

With shorter piece of cable, take it and run through center pulley in upper cable guide assembly (See Figures 5E and 5F on Page 16.) Then run cable over to pulley (GSB-0045) on control pipe of distributor and continuing feeding cable up through control pipe in distributor. (See Figure 5D on Page 15.) Make sure cable is fed through all pulleys that are inside distributor. Attach this end to the sliding mechanism inside distributor by looping through eye in slide mechanism. Attach cable back to itself using cable clamp. Once this end is attached, run the cable down the side of the leg to the lower cable wheel assembly (See Figure 5H on Page 18.), running through cable guides when necessary. (See Figure 5I on Page 19.) Attach this end to the control handle (GSB-0030) on the lower cable wheel assembly by looping through end hole and attach cable back to itself using cable clamp. (See Figure 5H on Page 18.) The control handle will be pulled up to let spout turn inside distributor. Make sure when cable is clamped together that control handle still has enough travel upward to allow the spout to turn.

Take the longer piece of cable and mark the center. Start at the upper cable wheel on the control pipe of the distributor. (See Figure 5C on Page 14.) Start at the center of the cable and wrap it around the cable wheel a minimum of three (3) times. Take the ends of the cable and run them over to the upper cable guide assembly. (See Figure 5D on Page 15.) Feed the ends through the two (2) outside pulleys. Then run both cables down the leg to the lower cable wheel assembly (See Figure 5H on Page 18.), running through cable guides as necessary. (See Figure 5H on Page 18.) Take one end of cable and wrap around cable wheel a minimum of two (2) times. Loop through one of the square holes inside of cable wheel and attach back to itself with cable clamp. Take the other end and wrap a minimum of two (2) times. Loop end through one of the square holes inside on cable wheel, on opposite side as other cable end and attach back to itself with cable clamp.

NOTE: Cable is not supplied with cable control. The company recommends 3/16" aircraft cable.

GSI Group, LLC Limited Warranty

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

Warranty Extensions:

The Limited Warranty period is extended for the following products:

	Product	Warranty Period	
AP Fans and Flooring	Performer Series Direct Drive Fan Motor	3 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%
	All Fiberglass Housings	Lifetime	
	All Fiberglass Propellers	Lifetime	
AP and Cumberland	Flex-Flo/Pan Feeding System Motors	2 Years	** Warranty prorated from list price: 0 to 3 years - no cost to end-user 3 to 5 years - end-user pays 50%
Cumberland Feeding/Watering Systems	Feeder System Pan Assemblies	5 Years **	
	Feed Tubes (1-3/4" and 2.00")	10 Years *	
	Centerless Augers	10 Years *	
	Watering Nipples	10 Years *	
Grain Systems	Grain Bin Structural Design	5 Years	† Motors, burner components and moving parts not included. Portable dryer screens included. Tower dryer screens not included.
Grain Systems Farm Fans Zimmerman	Portable and Tower Dryers	2 Years	
	Portable and Tower Dryer Frames and Internal Infrastructure †	5 Years	

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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