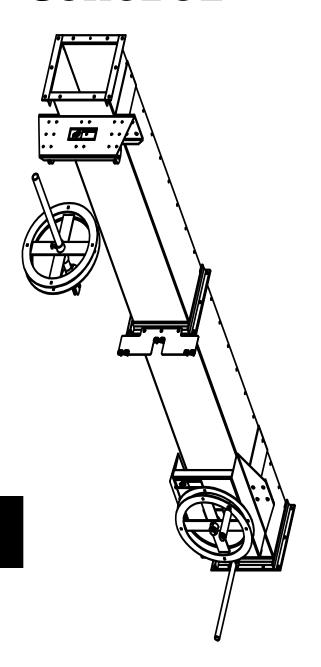
Distributor Cable Control



Installation Manual PNEG-971



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 it's 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

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

NOTE

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

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Use of the Equipment Information page will help you identify your 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 Number:	Date Purchased:
Serial Number:	Dealer Name and Phone Number:
RPM:	
Head Pulley Dia.:	
Discharge Height:	
Horsepower:	
Spout Dia :	
# of Spouts :	

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. See Training Sign Off Sheet in the back of this manual.

Safety First

The principal concern of the company is your safety and the safety of others associated with grain handling equipment. It is the responsibility of the buyer to make this manual available to the person or persons involved with this equipment.

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 who are in the area. Failure to read this manual is a misuse of the equipment.



Receiving Inspection

Carefully inspect the shipment for damage as soon as it is received. Verify that the quantity of parts or packages actually received corresponds to the quantity shown on the packing slip. Any discrepancies should be clarified immediately. One or more cartons containing the fasteners required for assembly are included with the shipment. Report any damage or shortage to the delivering carrier as soon as possible. The company's responsibility for damage to the equipment ends with acceptance by the delivering carrier. Refer to the bill of lading. Save all paperwork and documentation furnished with any of the elevator components.

Pre-Installation Preparation

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.

PART IDENTIFICATION

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

GSB-DCG				
PART#	DESCRIPTION	QTY		
GSB-0006	SPACER, BOTTOM GUIDE	1		
GSB-0007	CABLE GUIDE ASSEMBLY, TOP	1		
GSB-0007	CABLE WHEEL WELDMENT, TOP	1		
GSB-0049	CABLE WHEEL ASSEMBLY, BOTTOM	1		
GSB-0049 GSB-0030	CONTROL HANDLE	1		
GSB-0030 GSB-0031	CONTROL HANDLE BRACKETS	2		
GSB-0037	COUPLER-CONNECTOR WELDMENT	1		
GSB-0037 GSB-0045	CONNECTOR-PULLEY ASSEMBLY	1		
		1		
G2R-DCG-HDM	HARDWARE, DIST. CABLE CONTROL	I		
	GSB-DCG-HDW			
PART#	DESCRIPTION	QTY		
S-8762	CLAMP 3/16" CABLE	8		
S-1146	BOLT HHCS 5/16-18X1 ZN GR2	6		
S-3611	NUT FLANGEWZ 5/16" ZN	6		
S-3729	NUT HEX 1/2"-13 ZN YDP GR5	8		
S-7329	BOLT HHCS 5/16-18X2 ZN GR2	1		
S-7382	NUT NYLOCK 5/16-18 ZN GR5	1		
S-8268	BOLT HHCS 1/2-13X2 ZN GR8	8		
10" BUCKET EL				
	GSB-10DCG			
PART#	DESCRIPTION	QTY		
GSB-10174	CLAMP BAND	4		
16" BUCKET EL	EVATOR			
	GSB-16DCG			
PART#	DESCRIPTION	QTY		
GSB16182	CLAMP BAND	2		
24" BUCKET EL				
D. D. T. //	GSB-24DCG	27.		
PART#	DESCRIPTION	QTY		
GSB24221	CLAMP BAND	2		
30" BUCKET EL	30" BUCKET ELEVATOR			
	GSB-30DCG			
PART#	DESCRIPTION	QTY		
GSB30099	CLAMP BAND	2		
36" BLICKET EI	20" PLICKET EL EVATOR			
36" BUCKET ELEVATOR GSB-36DCG				
PART#	DESCRIPTION	∩TV		
GSB36190		QTY		
G9D30 180	CLAMP BAND	2		

Installation

Once the distributor has been installed the installation of the cable controls can begin. The first piece to install is the cable wheel (GSB-0015). This cable wheel mounts to the control pipe 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 1) Once the cable wheel is in location that is desired tighten the two 3/8 set screws.

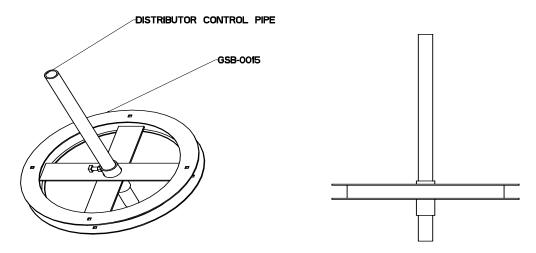
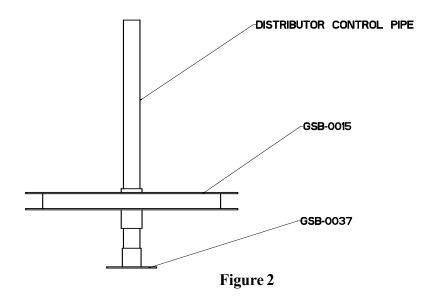
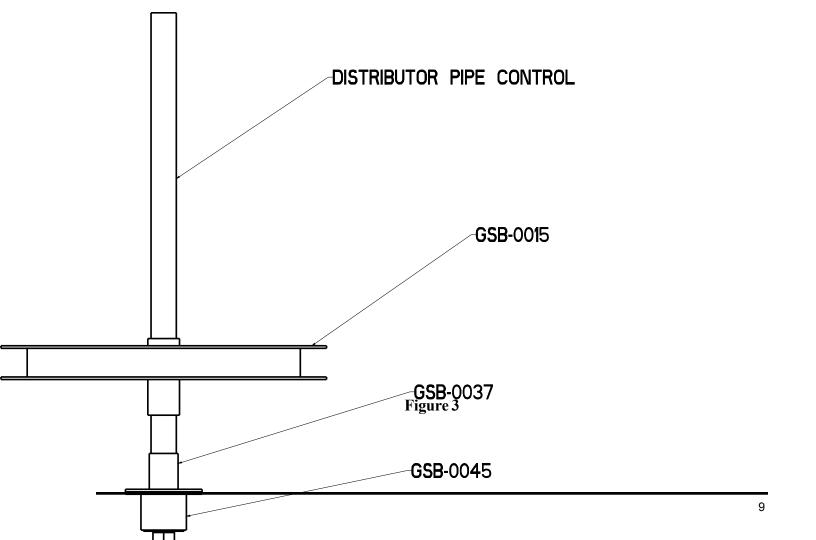


Figure 1

Once the top cable wheel has been installed the next piece to assemble is the coupler-connector weldment (GSB-0037). This piece threads onto the threads of the distributor control pipe as shown in figure below. Make sure the coupler-connector weldment is secure to the distributor control pipe.



The next piece to install is the connector-pulley assembly (GSB-0045). This piece mounts to the coupling-connector weldment (GSB-0037) as shown in the figure below. These are fastened together using (2) 5/16" x 1" bolts and whiz nuts, supplied in the hardware package (GSB-DCG-HDW).



The next piece to install is the upper cable guide assembly (GSB-0007). The cable guide assembly is installed on the trunking. The location on the trunking is determined by the height of the cable wheel (GSB-0015). The cable must run in-line from the cable wheel to the sheaves in the cable guide assembly. This location is shown in the figure below. For cable installation see page 15.

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

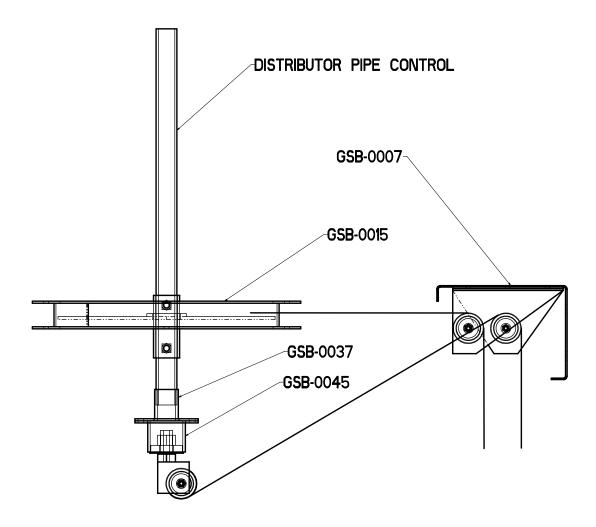


Figure 4

Once the location of the upper cable guide assembly is determined it must be fastened to the trunking. The assembly of the clamp band and upper cable guide assembly is shown in the figure below. The 1/2"x2" bolts and nuts to fasten the clamp bands to the upper cable guide assembly are provide in the hardware package (GSB-DCG-HDW). These clamp bands vary depending on what size leg you have. Refer to the table 1 below to see what clamp bands should be used. All clamp bands are one-piece except for the 10" legs which have a two-piece clamp band. **NOTE: USE CAUTION WHEN TIGHTENING HARDWARE, DO NOT OVERTIGHTEN AND COLLAPSE TRUNKING.**

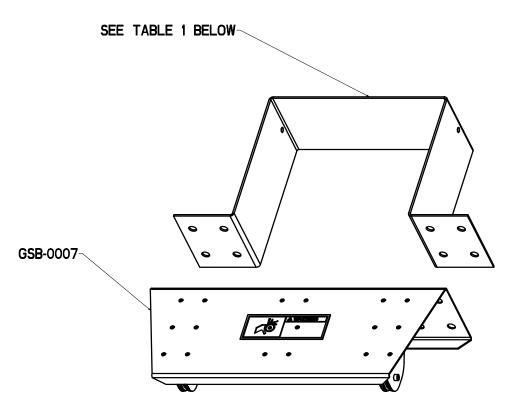


Figure 5 Some trunking removed for clarity.

Pulley Dia	Clamp Band
10"	GSB10174
16"	GSB16182
24"	GSB24221
30"	GSB30099
36"	GSB36190

Table 1

Once the upper assembly has been installed the control handle needs to assembled to the lower cable wheel assembly. There are two brackets (GSB-0031) that mount to the bottom of the lower cable wheel assembly (GSB-0049). These brackets are fastened with 5/16"x1" bolts and whiz nuts. The control handle (GSB-0030) 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"x2" bolt and lock nut. The hardware required is located in GSB-DCG-HDW. This assembly is shown in the figure below.

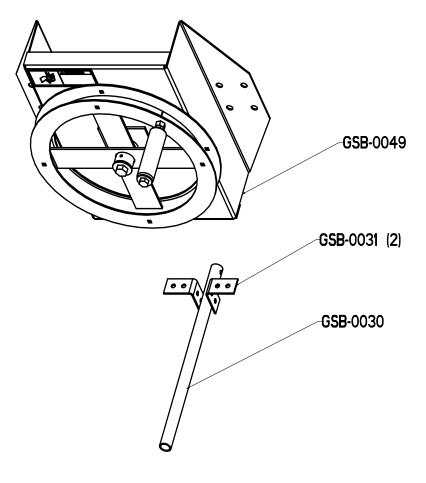


Figure 6

Once the control handle has been assembled the lower cable wheel can be installed. The location of the lower cable wheel assembly (GSB-0049) 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 are shown in the figure 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 1 on page 11 to see what clamp bands should be used. All clamp bands are one-piece except for the 10" legs which have a two-piece clamp band. **NOTE: USE CAUTION WHEN TIGHTENING HARDWARE, DO NOT OVERTIGHTEN AND COLLAPSE TRUNKING.**

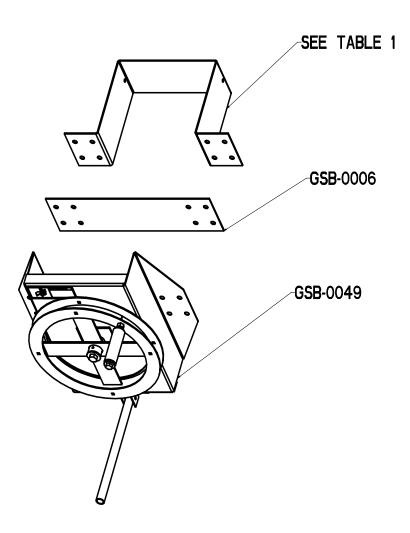


Figure 7Some trunking removed for clarity.

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 feet. These intermediate cable guides (GSB-0022) are fastened at the trunking joints using the same hardware as the joint. The assembly below shows how the intermediate cable guides are located on the trunk joints. For cable installation see page 15.

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

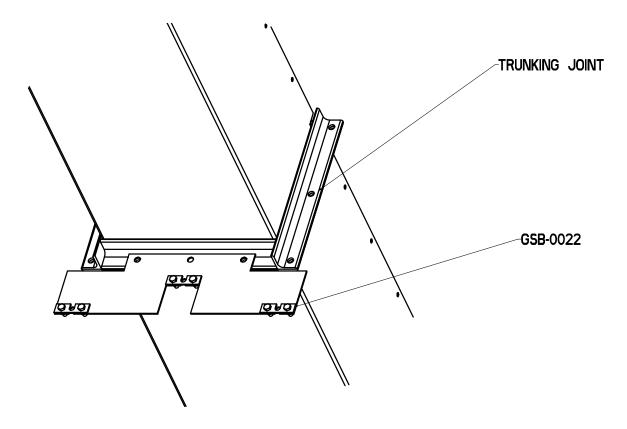


Figure 8

Cable Installation

There are more than one way of installing cable for the cable control, we offer one method for installation but, rely on your qualified contractor's experience and techniques.

You will need two 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 both ends of cable off. 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 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 (Figure 5). Then run cable over to pulley (GSB-0045) on control pipe of distributor and continuing feeding cable up through control pipe in distributor (Figure 4). 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 lower cable wheel assembly (Figure 7), running through cable guides when necessary (Figure 8). 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 (Figure 7). 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.

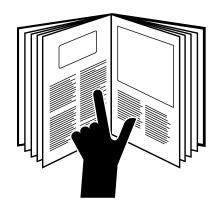
Take the longer piece of cable and mark the center. Start at the upper cable wheel on the control pipe of the distributor (Figure 3). Start at the center of the cable and wrap it around the cable wheel a minimum of three times. Take the ends of the cable and run them over to the upper cable guide assembly (Figure 4). Feed the ends through the two outside pulleys. Then run both cables down the leg to the lower cable wheel assembly (Figure 7), running through cable guides as necessary (Figure 8). Take one end of cable and wrap around cable wheel a minimum of two times. Loop through one of the square holes in side of cable wheel and attach back to itself with cable clamp. Take the other end and wrap a minimum of two times. Loop end through one of the square holes in side 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.

Employer/Employee Training Sign Off Sheet

The company is making every effort to warn, guard, and educate the consumer when using the various kinds of equipment that we manufacture. The company has included this sign off sheet for you and your staff to use in the training process on installation and operation of the equipment described in this manual. Read the entire manual, sign off, and date on chart below.

DATE	EMPLOYEE SIGNATURE	EMPLOYER SIGNATURE



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THE GSI GROUP

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