Shibuya Hoppmann™

Model WEP Series Elevating Prefeeders

ANSI/Metric Installation & Maintenance Manual

Refer all servicing to qualified personnel.

This manual is intended for use by qualified mechanics and electricians who install or service the Hoppmann WEP Series Wide Belt Elevating Prefeeders.

Record your serial plate information here for future reference ➲

Model Number	Serial Number/Date

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Quick Start

Thank You for Choosing Shibuya Hoppmann

Thank you for purchasing a system from Shibuya Hoppmann. Our prefeeders, feeders, and automated systems possess an industry-wide reputation of excellence for their quiet and rapid handling of parts, ease of use and low maintenance requirements.

About This Manual

Assumptions

Shibuya Hoppmann Corporation assumes that all procedures contained in this manual will be performed by a qualified mechanic or electrician who must install or service the WEP-Series prefeeders. All procedures in this manual should be performed by qualified personnel or under their direction.

Models Covered

This manual covers three (3) basic styles of prefeeders models: **WEP-40 Prefeeder, WEP-80 Prefeeder, and the WEP-120 Prefeeder.** If you are unsure of your model, locate the inventory number on the serial plate of your prefeeder.

Before You Start

Tools You Will Need

The WEP Series prefeeders are both "soft ANSI" and metric construction, meaning that metric threads and hardware are used throughout. The prefeeders require metric tools for repair and/or adjustment.

Equipment Improvements & Document Revisions Notice

Shibuya Hoppmann Corporation (SHC) continually improves its products, and reserves the right to change or discontinue specifications and designs shown in this manual without notice and without incurring obligation. Occasionally older versions of equipment may have different spare parts/replacement parts requirements. Please be sure to contact SHC before ordering specific parts for older style prefeeders. SHC has made every effort to verify the information contained in this manual, but reserves the right to correct any error at the time of the manual's next revision. 04.2014

Important - Read First

Caution Symbols & Messages

Caution Symbols and Messages

Caution symbols and messages in this manual call attention to hazardous voltages, moving parts, and other hazardous conditions. Please understand what the different warning labels and indicators refer to and how to avoid possible injury and/or damage to personnel and equipment.

The lightning bolt symbol serves as a caution to denote possible personal injury and/or damage to the equipment due to electrical hazards.

The exclamation point symbol serves as a caution to denote possible personal injury and/or damage to the equipment.

Danger - Electrical/Voltage Hazard

The voltages in this equipment can cause death or serious injury. **Service should be performed only by qualified service personnel.** Read the safety precautions in Chapter 2 before operating or servicing this piece of equipment, including any Lockout/Tagout procedures.

Danger - Mechanical Hazard

To reduce the risk of injury from moving parts, keep all safety covers in place, secure loose clothing, and wear safety glasses or other protective eye wear when operating machine.

To reduce the risk of injury from moving parts, padlock and tag the main electrical and pneumatic disconnects before adjusting or replacing change parts or performing mechanical maintenance. Ensure that power is off and cannot be reactivated accidentally.

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Description & Specifications

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The WEP Series Elevating Prefeeder: Overview

Function

The WEP Series Prefeeders are designed to load parts into a feeder or other equipment for singulation and/or orientation. The supply hopper capacity ranges from 40 cubic feet (WEP-40) to 120 cubic foot (WEP-120).

Parts are loaded into the hopper at floor level. Two independently controlled variable speed drives ensure gentle product metering. The conveyor belt forms the bottom of the supply hopper and moves horizontally, delivering parts into the cleated elevator belt. Product is then raised out of the hopper by means of the cleated belt and metered into the recipient feeder bowl or other equipment.

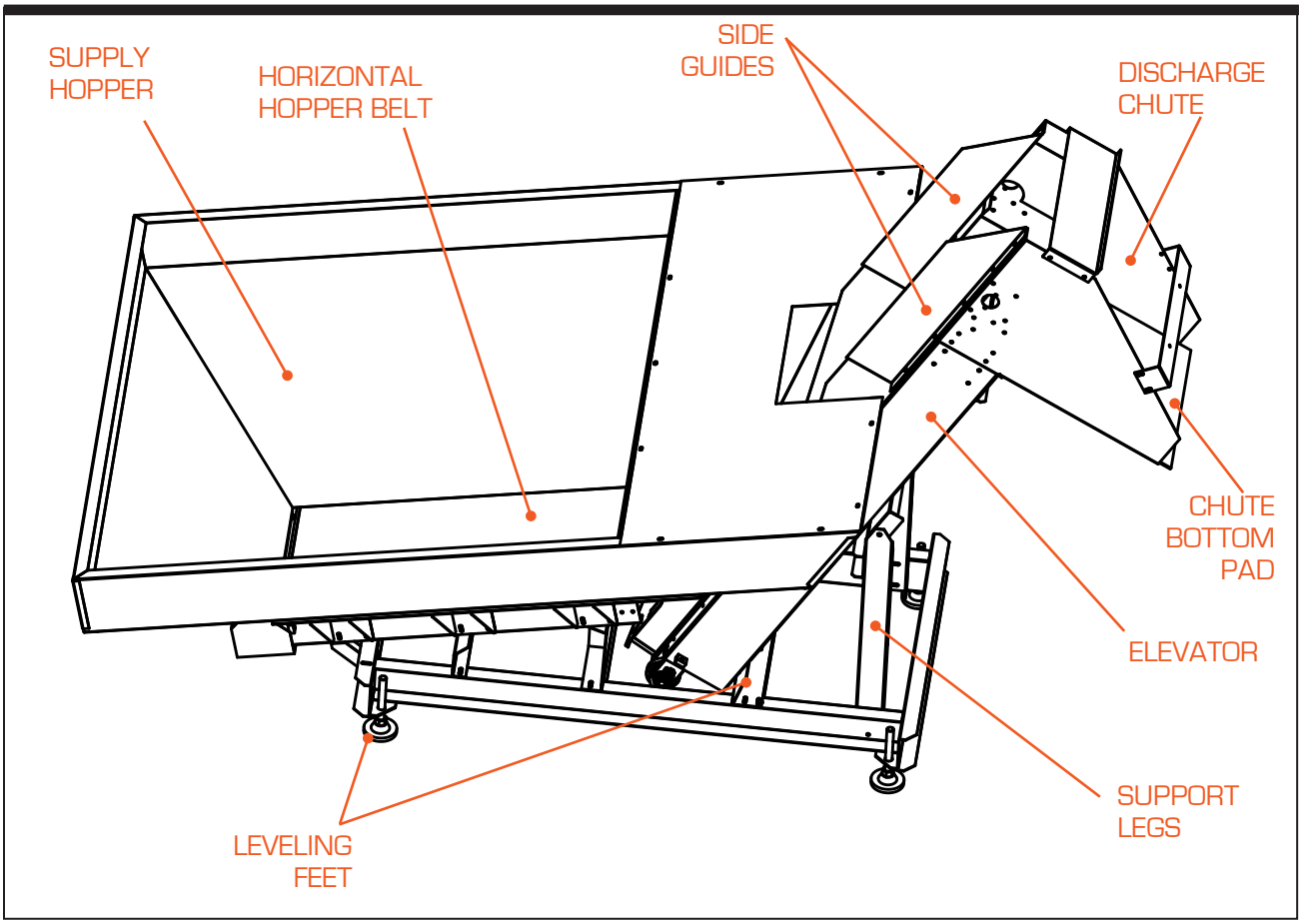

Figure 1-1. WEP Series Typical Wide Belt, Elevating Prefeeder - WEP-120 Shown

WEP-40 Prefeeder Specifications

Standard Features

The WEP-40 wide belt elevating prefeeder is specially designed to handle large parts. Two independently controlled variable speed drives ensure gentle product metering. Designed for floor level parts loading, the 40 ft^3 capacity hopper delivers product at an average belt speed of 23 feet per minute. The cleated elevator belt has a nominal cleat height of 4" and a cleat pitch of 12", allowing for maximum product loading.

Optional Features

Elevator extension(s), hopper extensions, continuous welded hopper seams, integrated safety covers, washdown motors, NEMA 1 encased controller, and casters are optional equipment for the WEP-40.

Specifications

Please refer to the tables below for WEP-40 specifications:

Specifications	DC	AC
Horizontal Belt Motor	1/2hp	1/2hp
Elevating Belt Motor	1/2hp	1/2hp
Supply Voltage	90VDC	230/460 VAC
Average Belt Speed	23'/min.	7.01 meters/min.
Cleat Height (Nominal)	4.00"	102mm
Cleat Pitch	12.00"	305mm
WEP-40 Hopper Capacity	40 ft^3	1133 liters

Table 1-1. WEP-40 Specifications

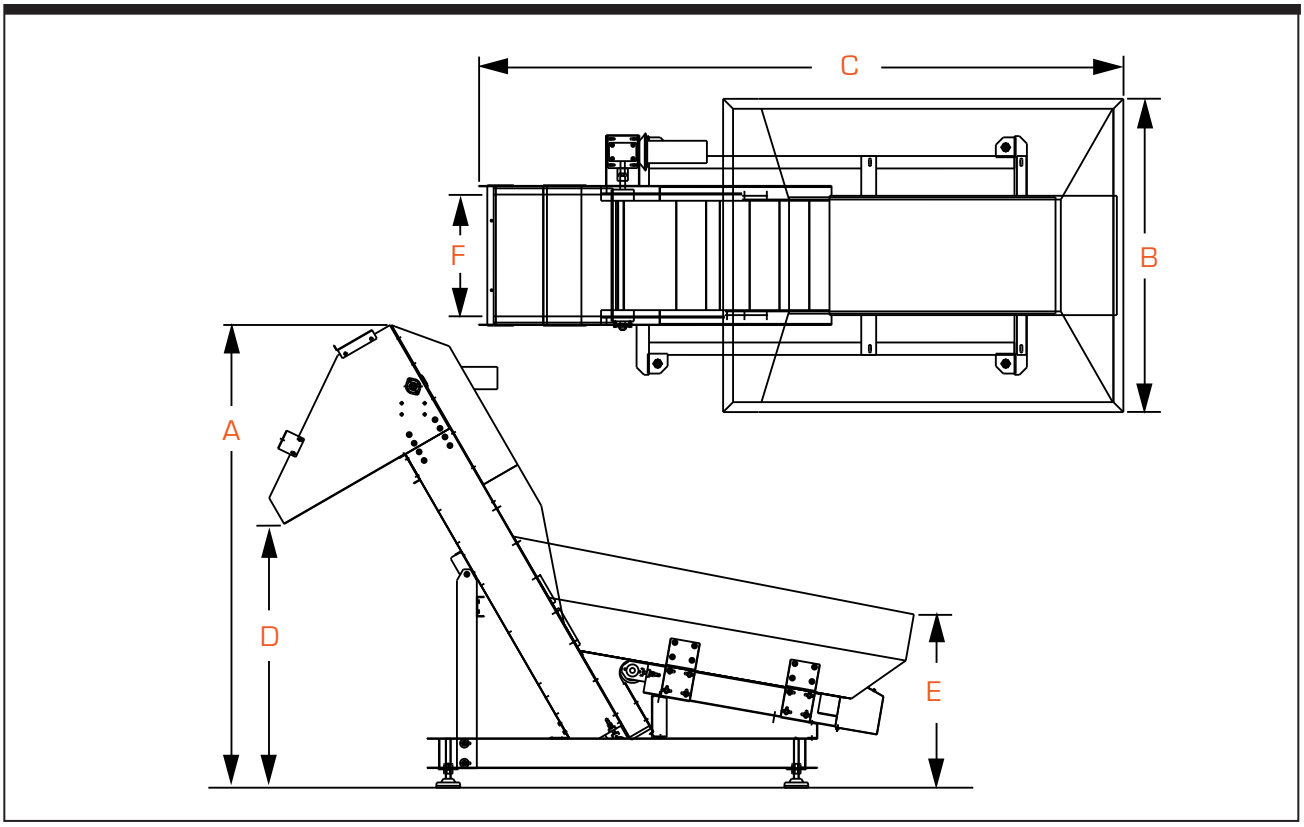

Figure 1-2. WEP-40 Dimensions View

Dimension Specifications		ANSI	Metric
A	Overall Height	100"	2540mm
B	Overall Width	63"	1600mm
C	Overall Length	133"	3378mm
D	Discharge Height	60"	1524mm
E	Hopper Load Height	36"	914mm
F	Belt Width	22"	559mm
Overall Weight		2240 lbs.	1017kg

Table 1-2. WEP-40 Dimension Specifications

WEP-80 Prefeeder Specifications

Standard Features

The WEP-80 wide belt elevating prefeeder is specially designed to handle large parts. Two independently controlled variable speed drives ensure gentle product metering. Designed for floor level parts loading, the 80 ft^3 capacity hopper delivers product at an average belt speed of 23 feet per minute. The cleated elevator belt has a nominal cleat height of 4" and a cleat pitch of 12", allowing for maximum product loading.

Optional Features

Elevator extension(s), hopper extensions, continuous welded hopper seams, integrated safety covers, washdown motors, clean out doors, NEMA 1 encased controller, and casters are optional equipment for the WEP-80.

Specifications

Please refer to the tables below for WEP-80 specifications:

Specifications	DC	AC
Horizontal Belt Motor	1/2hp	1/2hp
Elevating Belt Motor	1/2hp	1/2hp
Supply Voltage	90VDC	230/460 VAC
Average Belt Speed	23'/min.	7.01 meters/min.
Cleat Height (Nominal)	4.00"	102mm
Cleat Pitch	12.00"	305mm
WEP-40 Hopper Capacity	80 ft^3	2266 liters

Table 1-3. WEP-80 Specifications

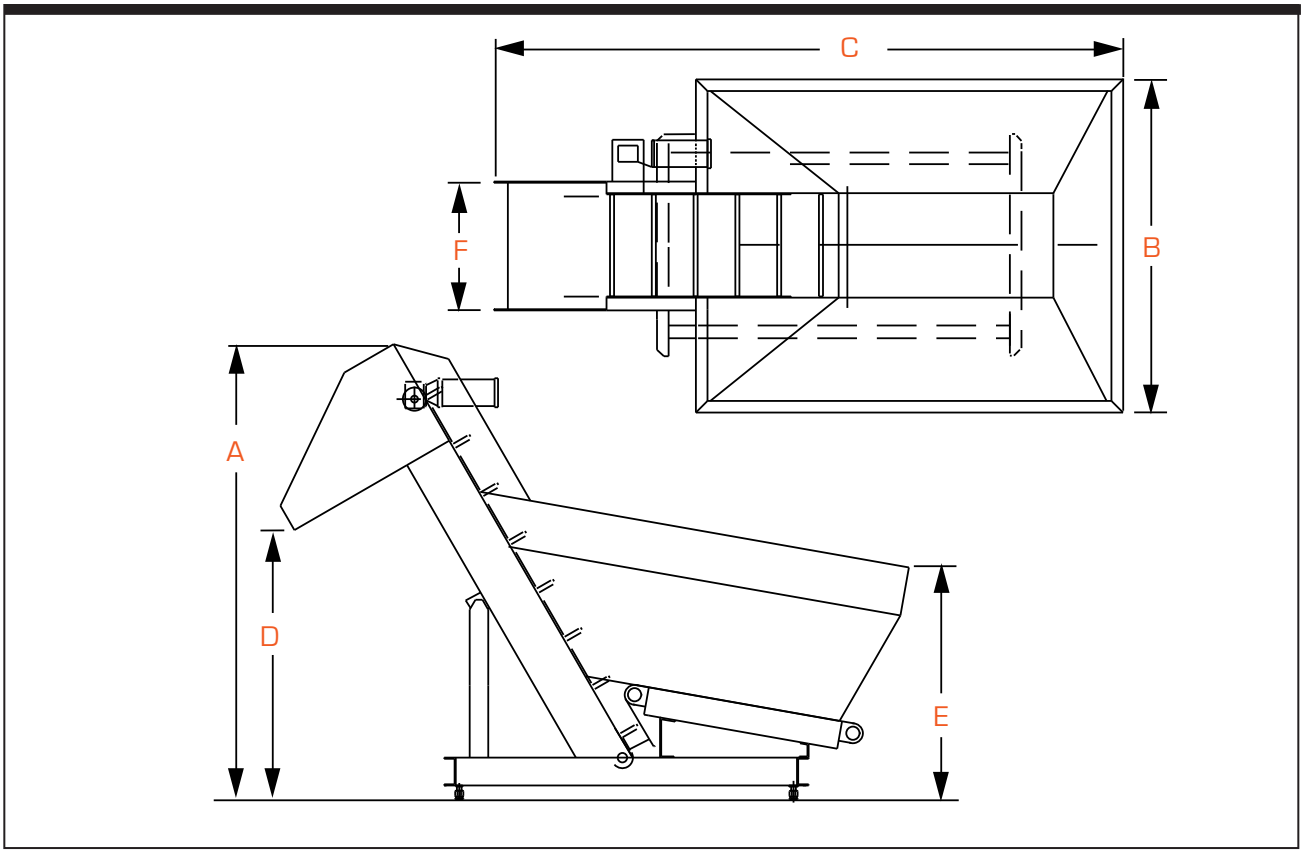

Figure 1-3. WEP-80 Dimensions View

Dimension Specifications		ANSI	Metric
A	Overall Height	100"	2540mm
B	Overall Width	72"	1829mm
C	Overall Length	135"	3454mm
D	Discharge Height	60"	1524mm
E	Hopper Load Height	50"	1270mm
F	Belt Width	22"	559mm
Overall Weight		2462 lbs.	1117kg

Table 1-4. WEP-80 Dimension Specifications

WEP-120 Prefeeder Specifications

Standard Features

The WEP-120 wide belt elevating prefeeder is specially designed to handle large parts. Two independently controlled variable speed drives ensure gentle product metering. Designed for floor level parts loading, the 120 ft^3 capacity hopper delivers product at an average belt speed of 23 feet per minute. The cleated elevator belt has a nominal cleat height of 4" and a cleat pitch of 12", allowing for maximum product loading.

Optional Features

Elevator extension(s), hopper extensions, continuous welded hopper seams, integrated safety covers, washdown motors, clean out doors, NEMA 1 encased controller, and casters are optional equipment for the WEP-120.

Specifications

Please refer to the tables below for WEP-120 specifications:

Specifications	DC	AC
Horizontal Belt Motor	1/2hp	1/2hp
Elevating Belt Motor	1/2hp	1/2hp
Supply Voltage	90VDC	230/460 VAC, 3Ph
Average Belt Speed	23'/min.	7.01 meters/min.
Cleat Height (Nominal)	4.00"	102mm
Cleat Pitch	12.00"	305mm
WEP-40 Hopper Capacity	120 ft^3	3400 liters

Table 1-5. WEP-120 Specifications

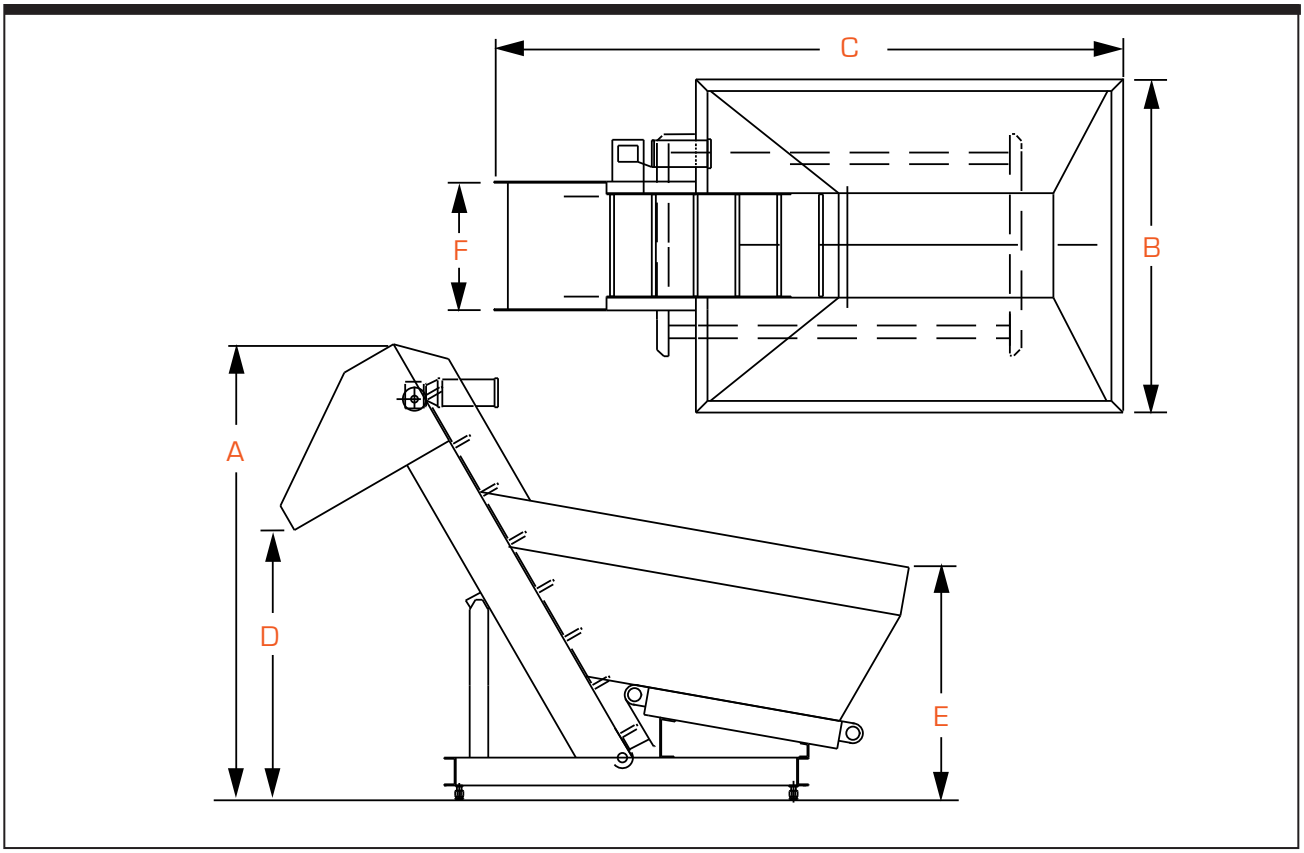

Figure 1-4. WEP-120 Dimensions View

Dimension Specifications		ANSI	Metric
A	Overall Height	100"	2540mm
B	Overall Width	85"	2159mm
C	Overall Length	160"	3454mm
D	Discharge Height	60"	1524mm
E	Hopper Load Height	40"	1016mm
F	Belt Width	22"	559mm
Overall Weight		2500 lbs.	3400kg

Table 1-6. WEP-120 Dimension Specifications

Notes

Safety Precautions

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Safety Precautions

This prefeeder has been designed to be as safe as possible for operators. However, even well-built machines can be installed or operated in a hazardous manner. Safety precautions must be observed by users.

Specific Warnings & Cautions

Turn Power Off! Before servicing the prefeeder, make sure you have turned off compressed air and electrical power in a way that prevents accidental reactivation. Padlock, and clearly tag, the appropriate electrical and pneumatic disconnects. Lockout/ Tagout procedures are covered in the United States Code of Federal Regulation (CFR), Title 29, Part 1910.147, "The Control of Hazardous Energy."

Dress Properly. To reduce the risk of injury from moving parts, secure loose clothing. Do not wear jewelry or neckties near the prefeeder. Wear safety glasses or other protective eye wear when operating or performing maintenance on the prefeeder. Never place hands or tools in the prefeeder while it is operating.

Install Safety Covers. Make sure the prefeeder remains safe to operate. Be sure all safety covers have been installed before returning the prefeeder to normal operations. Safety covers on the prefeeder include any covers installed by your direct supplier, as well as standard, permanent guarding.

Operating & Maintenance: Do's & Don'ts

Don't Install the Prefeeder Near Flammable Gas, Vapor or Dust. You must install additional approved explosion-proof or dust-ignition-proof enclosures if installation occurs under these conditions. Without such additional enclosures, normal sparking of the brushes inside the (DC) motor could ignite flammable gas, vapor, or dust.

Do Not Overfill The Hopper. Overfilling the hopper can cause parts to jam inside the hopper, and may damage the prefeeder belt and associated guides.

Do Use the Same or Identical Mounting Screws if Replacing the Motor. If longer mounting screws are used, they may come into contact with parts of the motor that conduct electricity.

Ensure Air is On. Before turning on the system, be sure air is on, or parts may jam. This only applies to systems operating with air.

Do Not Speed Up Prefeeder. Never raise the prefeeder speed to increase the delivery rate. Too many parts in the feeder may prevent it from operating properly.

Avoid Solvents. Do not use solvents for cleaning unless specified, as they may damage surfaces, causing jams or lowered output rates.

Avoid Routine Use of EMERGENCY STOP or E-STOP. Use of EMERGENCY STOP (E-STOP) to shut down the system may cause jams or misoriented parts.

Installation & Start-Up

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If the Prefeeder is Already Set Up

If you've bought a prefeeder as part of a Shibuya Hoppmann feeder system, then your direct supplier will have performed all the procedures in this chapter. However, you will still need to:

- ❒ **Position Your Prefeeder.** Follow the equipment layout drawing provided by your direct supplier.
- ❒ **Connect Electrical Wiring.** Follow as-built electrical diagrams provided by your direct supplier.
- ❒ **Make Pneumatic Connections.** If your prefeeder has a hopper agitator, your direct supplier will give you setup specifications.
- ❒ **Install & Test the Rest of the System.** Installation is complete.

Note: If the prefeeder is drop-shipped to your location, follow the procedures in this chapter to finish setting up the prefeeder.

Unpacking and Inspection

Step 1– Inspect and Unpack the Crate. Remove packing materials from sensors, covers, and moving parts. Make a visual check to be sure parts have not come loose during shipping. If you find any concealed damage, call the shipping carrier and your direct supplier immediately. **Do not attempt to fix the problem yourself unless told to do so by your direct supplier.**

Step 2– Record Serial Number of Prefeeder. If you have not already done so, record the prefeeder's model and serial number on the front of this manual. This information is helpful when ordering replacement parts or service.

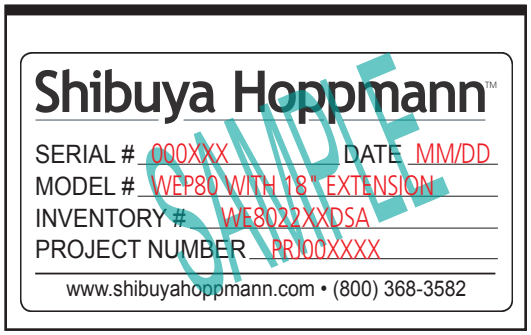

Figure 3-1. Sample Serial Plate

Physical Setup

Step 1–Position the Prefeeder. Place the prefeeder as shown on the equipment layout drawing provided by your direct supplier.

Step 2–Position the Feeder. If you are using a Shibuya Hoppmann Centrifugal Feeder, position the prefeeder so discharged product falls halfway between the center and the inside radius of the bowl (opposite from the point where product loads onto the rim for qualification—refer to Centrifugal Feeder manual). Avoid positioning the prefeeder in a way that allows product to bounce up onto the rim of the bowl and disturb parts that are already oriented. If you are not using a Shibuya Hoppmann Centrifugal Feeder, follow the equipment layout drawing provided by your direct supplier, or the prefeeder may not operate correctly. Level the unit by adjusting the leveling feet and tighten the locknuts.

Step 3–Connect Power and Air. Connect the prefeeder to power and compressed air (if applicable). If your prefeeder has a hopper agitator, your direct supplier will provide you with setup specifications.

Installing Elevator Extensions

When adding elevator extensions, the prefeeder's higher center of gravity may cause it to tip. **Before installation, take necessary steps to stabilize the prefeeder. To avoid possible injury, have someone assist you by supporting the head section during removal and installation**.

Step 1–Loosen Take-Up Pulleys and Remove Belt Lacing Pin. To install an elevator extension to an WEP series prefeeder, first rotate the belt so that splice area (location of the lace and pin, see Figure 3-3) are located in the interior of the hopper, just below the side guides. This position will allow easy access to the belt pin for removal. Loosen both sides of the lower pulley take-up brackets (see Figure 3-2). With the belt now loose, remove the belt lace pin.

Once the pin has been removed, slide the upper portion of the belt up the elevator channel and out the dump chute of the prefeeder's head. You do not need to remove the belt completely, as it is easier to re-fix the belt once the extension has been added.

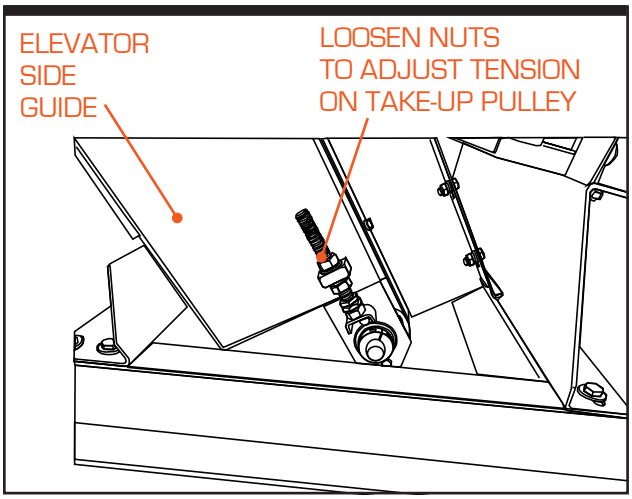

Figure 3-2. Take-Up Pulley at Base of Elevator

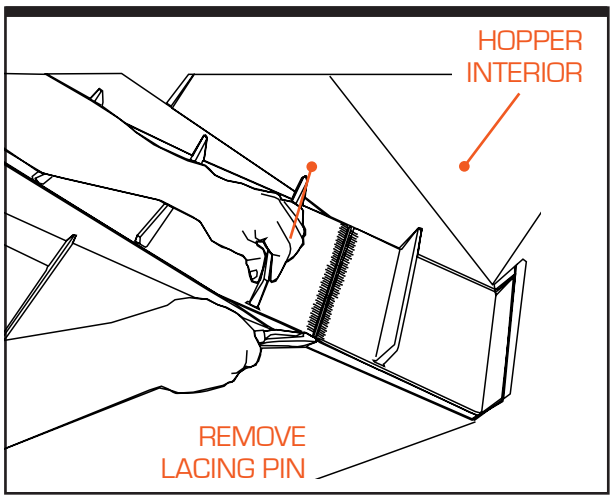

Figure 3-3. Remove Lacing Pin to Remove Belt

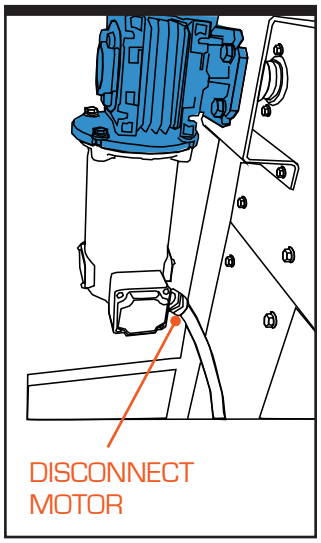

Figure 3-4. Disconnect Power

Step 2–Disconnect Power and Lockout/Tag Out the Prefeeder. If power has already been supplied to the prefeeder, first lock out and tag out the power supply, then disconnect the wiring to the drive motor (undo the nut at the base of the motor connection box and disconnect wiring - see Figure 3-4).

Step 3–Remove Channel Cover. Located on the underside of the prefeeder's elevator is a cover over the belt return (Figure 3-5). Undo the four hex bolts that hold the upper cover plate in place, and set the plate aside. Pull the belt down from the prefeeder's head, and let the belt hang (see Figure 3-6).

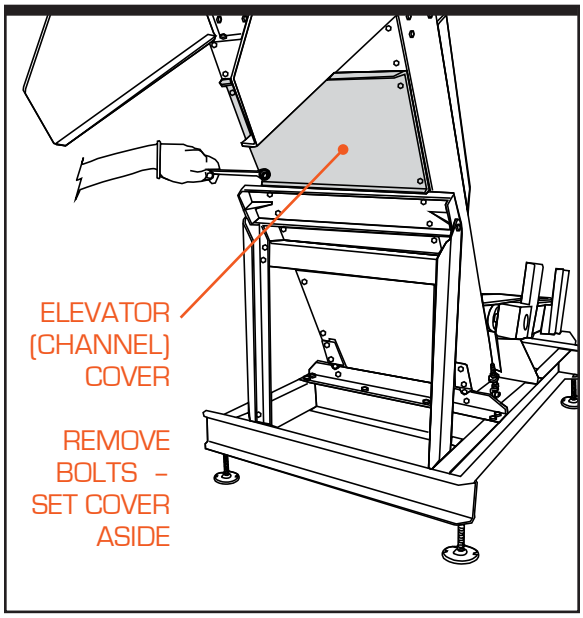

Figure 3-5. Remove Elevator Cover

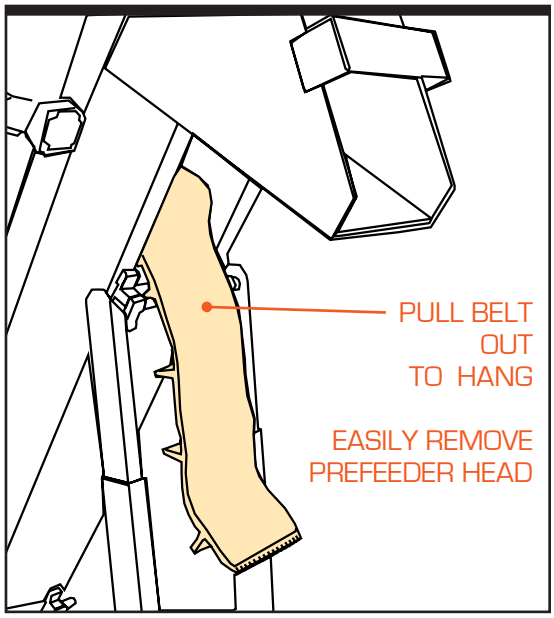

Figure 3-6. Pull Belt Out to Remove Head

Step 4–Remove Prefeeder Head. Remove the side guide bolts on the prefeeder head. This frees the two exit guides (left hand and right hand) which help guide the belt. Set these exit guides (see Figure 3-7) to the side. Remove any hardware on the side guides from the head portion of the prefeeder, and set aside. You will not be removing the side guides on the channel, just disconnecting them. Then remove the two bolts on both sides of the prefeeder channel or neck (see Figure 3-8) and set aside.

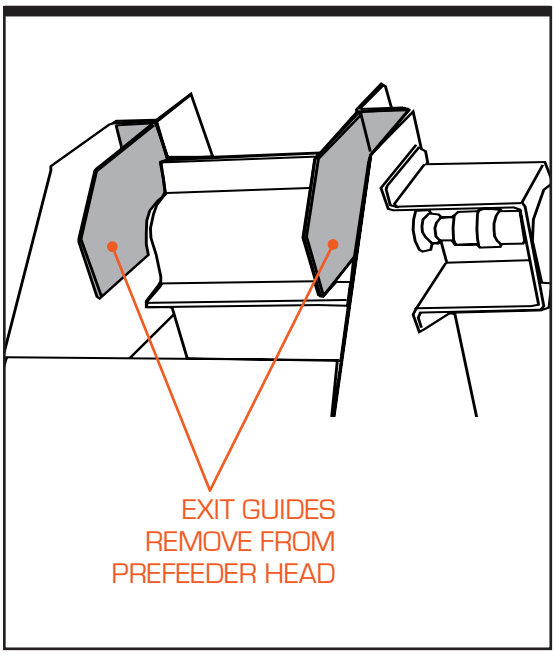

Figure 3-7. Left Hand and Right Hand Exit Guides

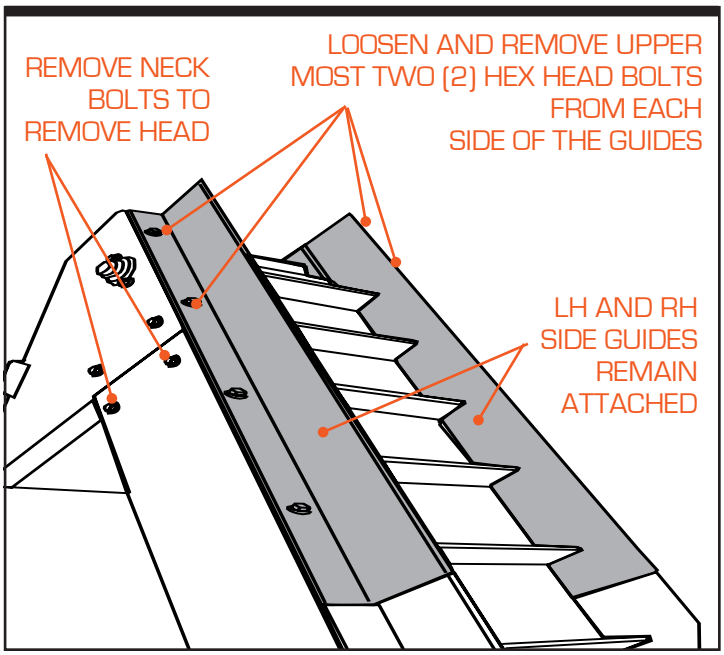

Figure 3-8. Side Guides - Remove Hardware

The head of the prefeeder (with the drive motor assembly) should be supported during this removal process. Guide the head up and off the neck of the prefeeder, allowing the belt to slide through the chute area, remaining "attached" to the prefeeder. Set the head to the side.

Step 5–The Elevator Extension Kit Contents. The extension kit will include the following: Channel Extension (1), Side Guide Extension (2), Splice Plates (2), Channel Cover (1), associated hardware, and Belt Extension (see Figure 3-9 on the following page).

Step 6–Install Extension. Attach the splice plates to the extension channel (inside), hand-tightening the bolts prior to installing the extension on the prefeeder. Then lift the extension up slide it onto the prefeeder neck, securing it with hand-tightened hex head bolts (2). Before tightening the bolts, align the seams of the existing channel and the new extension as closely as possible. Tighten the extension channel bolts and splice plate bolts at this time.

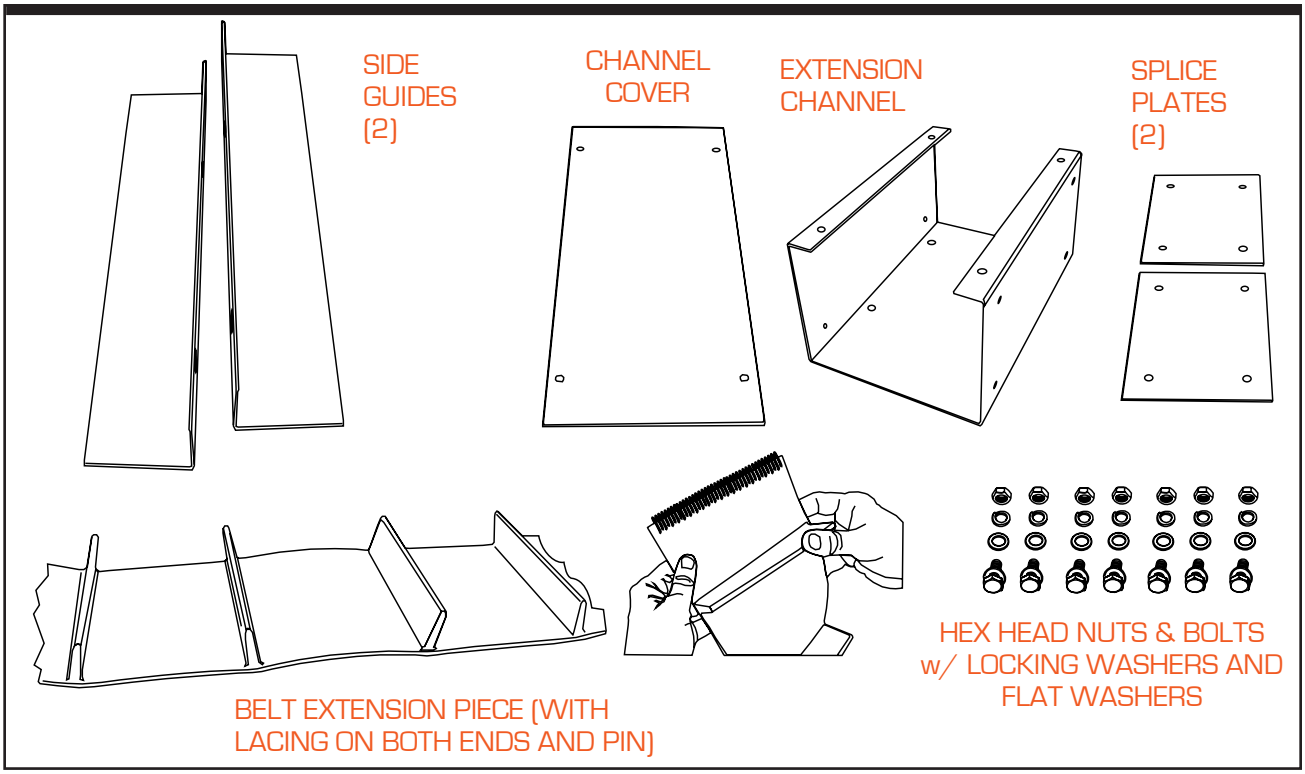

Figure 3-9. Extension Kit for Prefeeder Extension

Step 7–Re-Install the Prefeeder Head. Reinstall the head of the prefeeder over the new extension, aligning the head's splice plates with the holes on the extended neck. Hand tighten the bolts, then tighten them once the pieces are aligned.

Step 8–Re-Install LH/RH Exit Guides and New Side Guides. Replace the left hand and right hand exit guides (removed in Step 4) and align the new side guide extensions along the channel, using the holes provided in the channel. Once aligned, attach with the new hardware (Figure 3-9).

Step 9–Attach New Belt Extension. Both ends of the new extension belt are laced. Attach one end of the belt extension to the part of the belt hanging out of the prefeeder's channel (Figure 3-6), using the lacing pin to lock both ends together (Figure 3-10).

Feed the belt back through the neck of the prefeeder and through the head, letting it flow down the elevator of the prefeeder towards the hopper. Attach the other end of the belt extension to the end of the belt rising up from the base of the hopper. Retighten the take-up pulley to apply some tension to the belt (refer to Step 12 for more information on tracking/adjusting your belt).

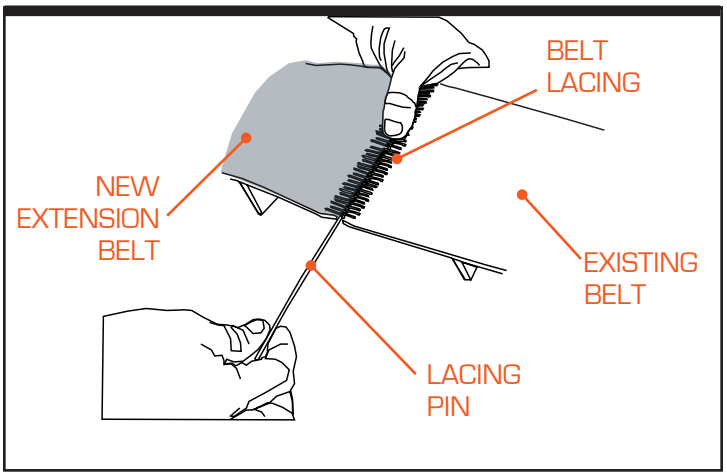

Figure 3-10. Attach New Belt Extension to Existing Belt

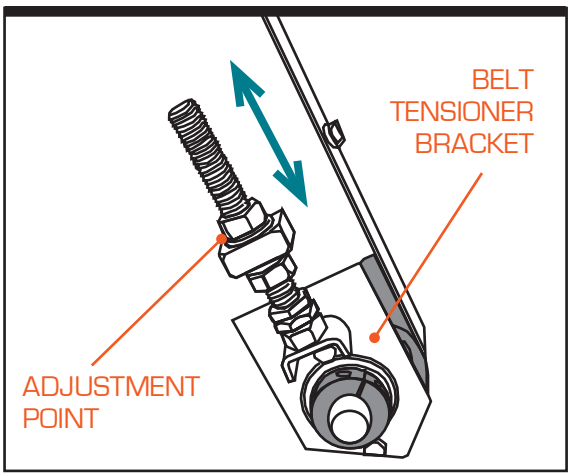

Figure 3-11. Tracking Adjustment of Belt at Tensioner

Step 10–Install the Elevator Covers. Reinstall the elevator cover and the new elevator cover extension on the underside of the prefeeder.

Step 11–Reconnect Power. Restore power to the motor.

Step 12–Adjust Tracking. Turn the prefeeder on and set to a slow speed to observe tracking of the belt on the elevator. Run a new belt at least several complete revolutions before adjusting the tracking. If the belt pulls to one side or if the belt moves from side to side, adjust the tensioner bracket on the side to which the belt is pulling (see Figure 3-11).

Do not overtighten the belt. The elevator extensions added call for greater slack in the belt. This is normal, and should not be adjusted by overcompensating for the slack. You may apply too much tension and destroy the belt lacing. For more information on belt tracking, refer to "Installing Belts and Belt Extensions" further in this chapter.

Step 13–Adjust Dump Heights. Once the extension is installed, you can make minor height adjustments by adjustments to the level feet. **It is strongly recommended that the frame of the prefeeeder be reinforced and/or additionally supported, when the elevator extensions are more than 72" for a WEP Series Prefeeder.**

A base extension support kit may be purchased from Shibuya Hoppmann Corporation, however, they may need to be customized for your prefeeder. Please contact Shibuya Hoppmann Corporation for additional information on this frame base kit.

Replacing/Installing Belts and Belt Extensions

Step 1–Disconnect Power and Lockout/Tag Out the Prefeeder. Lockout and tag out any power supply to the prefeeder.

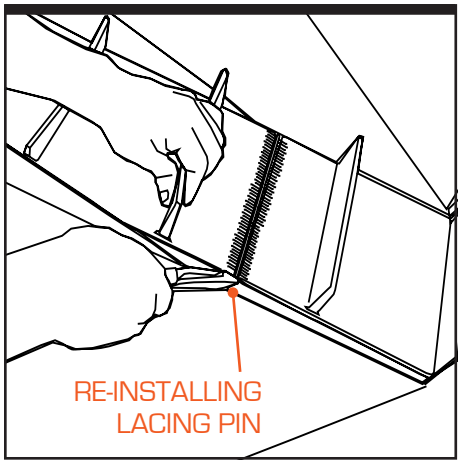

Figure 3-12. Re-Installing Lacing Pin

Step 2–Install Belt. Install the belt by feeding it through the prefeeder's hopper (downward), up the underside of the elevator channel, through the head, and back down the elevator channel into the hopper, cleats facing up. The belt lacings on both ends of the belt, should meet in the hopper area of the prefeeder (see Figure 3-12). You may need to remove the elevator covers (underside of the prefeeder channel) to feed the belt. Once the belt is completely fed into the prefeeder, and the lacing pin installed, replace the elevator covers.

WEP Replacement Elevator Belts			
Prefeeder Model	Part Number	Length of Extension	Belt Length
WEP-40	BELTLACE38	Standard Belt - No Extension	180"
	BELTLACE05	24" Extension Belt	48"
WEP-80	BELTLACE03	Standard Belt - No Extension	191"
	BELTLACE05	24" Extension Belt	48"
WEP-120	BELTLACE03	Standard Belt - No Extension	191"
	BELTLACE05	24" Extension Belt	48"

Table 3-1. Belt Description Table - Standard and Extensions

Step 3–Tension Belt. Use the tensioner brackets on the base of the prefeeder (see Figure 3-11 on page 23) to remove excessive slack in the belt before beginning tracking.

Do not overtighten the belt. When tightening the take-up pulley, apply minimum tension necessary to take-up slack and properly track the belt. If you apply too much tension, you can easily destroy the belt lacing or decrease the life of the pulley bearings.

Step 4–Turn on Power and Adjust Tracking. Restore power to the prefeeder and turn it on, setting it to a slow speed to observe tracking of the belt. Run a new belt at least several complete revolutions before adjusting the tracking. If the belt pulls to one side or if the belt moves from side to side, adjust the tensioner bracket on the side to which the belt is pulling (refer back to Figure 3-11).

Step 5–Adjust Tracking Again. Run the prefeeder for at least five (5) minutes. Continue to adjust tracking until the prefeeder runs consistently without tracking problems.

Step 6–Adjust Tensioning. A properly tensioned belt will not slip with a hopper full of product. **To avoid injury, turn off the prefeeder before checking tension.** Tighten or loosen the tension equally to ensure proper tension. Tighten the locknuts of the tension rod.

Do not set tools where they can fall into the hopper or any moving parts.

Do not overtighten the belt. The elevator extensions added call for greater slack in the belt. This is normal, and should not be adjusted by overcompensating for the slack. You may apply too much tension and destroy the belt lacing.

Level Sensor

The prefeeder is usually controlled by a level sensor mounted in the centrifugal feeder or other equipment. The sensor keeps the level of product, from the prefeeder to the equipment, relatively constant by controlling the amount of product metered into the receiving equipment. The proper proximity sensor is a standard mm diameter threaded sensor (choice of sensor dependent on electrical system specifications). For further information contact Shibuya Hoppmann Corporation, or your direct supplier.

Establishing the Correct Prefeeder Speed

The speed of the prefeeder should be set so that the minimum amount of product is in the feeder (or other equipment), and the required rate is still obtained. You may have to adjust the settings, and count product to find the optimum speed.

Wiring Schematics

The following page shows the motors and reducers for the WEP Series prefeeders. The wiring schematic (Figure 3-13) is shown on page 28, for the prefeeders with AC drives.

Prefeeder Motor/Line Input/Reducer/Controller Information			
Description	**WE4022XDSA**	**WE8022XDSA**	**WE12022DSA**
Horizontal Belt Drive			
DC Motor	MOTRPM0102 – 1/2hp, 90VDC	MOTRPM0102 – 1/2hp, 90VDC	MOTRPM0102 – 1/2hp, 90VDC
Reducer	NMRV630060 – 60:1, 56C	NMRV630060 – 60:1, 56C	NMRV630060 – 60:1, 56C
Elevator Belt Drive			
DC Motor	MOTRPM0102 – 1/2hp, 90VDC	MOTRPM0102 – 1/2hp, 90VDC	MOTRPM0102 – 1/2hp, 90VDC
Reducer	NMRV630100 – 100:1, 56C	NMRV630100 – 100:1, 56C	NMRV630100 – 100:1, 56C
Line Input	115 VAC	115 VAC	115 VAC, 60 Hz
Controller	DC Controller and schematic are not provided with the unit. Refer to your controller manufacturer's documentation		

Table 3-3. Prefeeder Motor/Line Input/Reducer/Controller Information - DC Units

Prefeeder Motor/Line Input/Reducer/Controller Information			
Description	**WE4022XASA**	**WE8022XASA**	**WE12022ASA**
Horizontal Belt Drive			
AC Motor	MOTRAC0050-M 1/2hp, 230/460	MOTRAC0050-M 1/2hp, 230/460	MOTRAC0050-M 1/2hp, 230/460
Reducer	NMRV630060 – 60:1, 56C	NMRV630060 – 60:1, 56C	NMRV630060 – 60:1, 56C
Elevator Belt Drive			
AC Motor	MOTRAC0050-M 1/2hp, 230/460	MOTRAC0050-M 1/2hp, 230/460	MOTRAC0050-M 1/2hp, 230/460
Reducer	NMRV630100 – 100:1, 56C	NMRV630100 – 100:1, 56C	NMRV630100 – 100:1, 56C
Line Input	208-230/460VAC, 3Ph	208-230/460VAC, 3Ph	208-230/460VAC, 3Ph
Inverter Option	AC Variable Speed Inverter Option - not provided with the unit. Contact Shibuya Hoppmann for inverter specifications/order instructions, if desired.		

Table 3-3. Prefeeder Motor/Line Input/Reducer/Inverter Information - AC Units

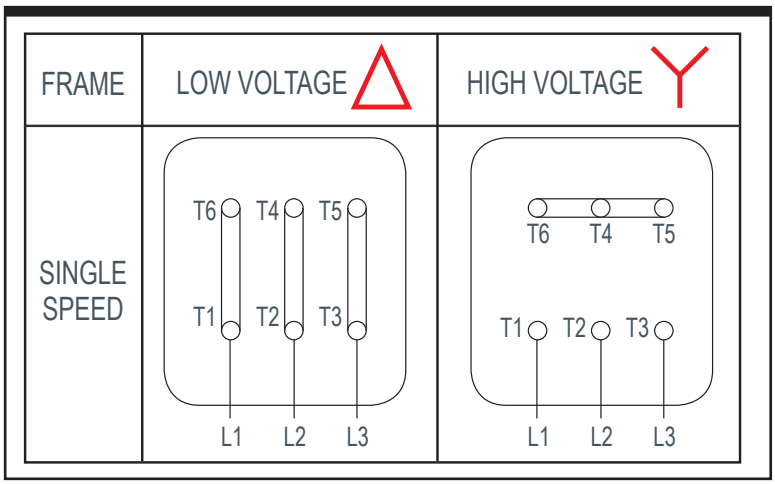

Figure 3-13. Wiring Diagram - AC Prefeeders

Preventive Maintenance

4

Upper Drive Pulley

The main components of the upper drive pulley assembly are a drive motor and gear reducer, a drive coupling and a pair of flanged bearings. Each bearing assembly consists of a bearing insert (bearing plus a clamp collar) and a pair of bearing flanges. Refer to Figure 4-1 for part description. The bearing inserts are lubrication free. If a bearing requires replacement, the bearing flanges can be reused if they appear unworn and undamaged.

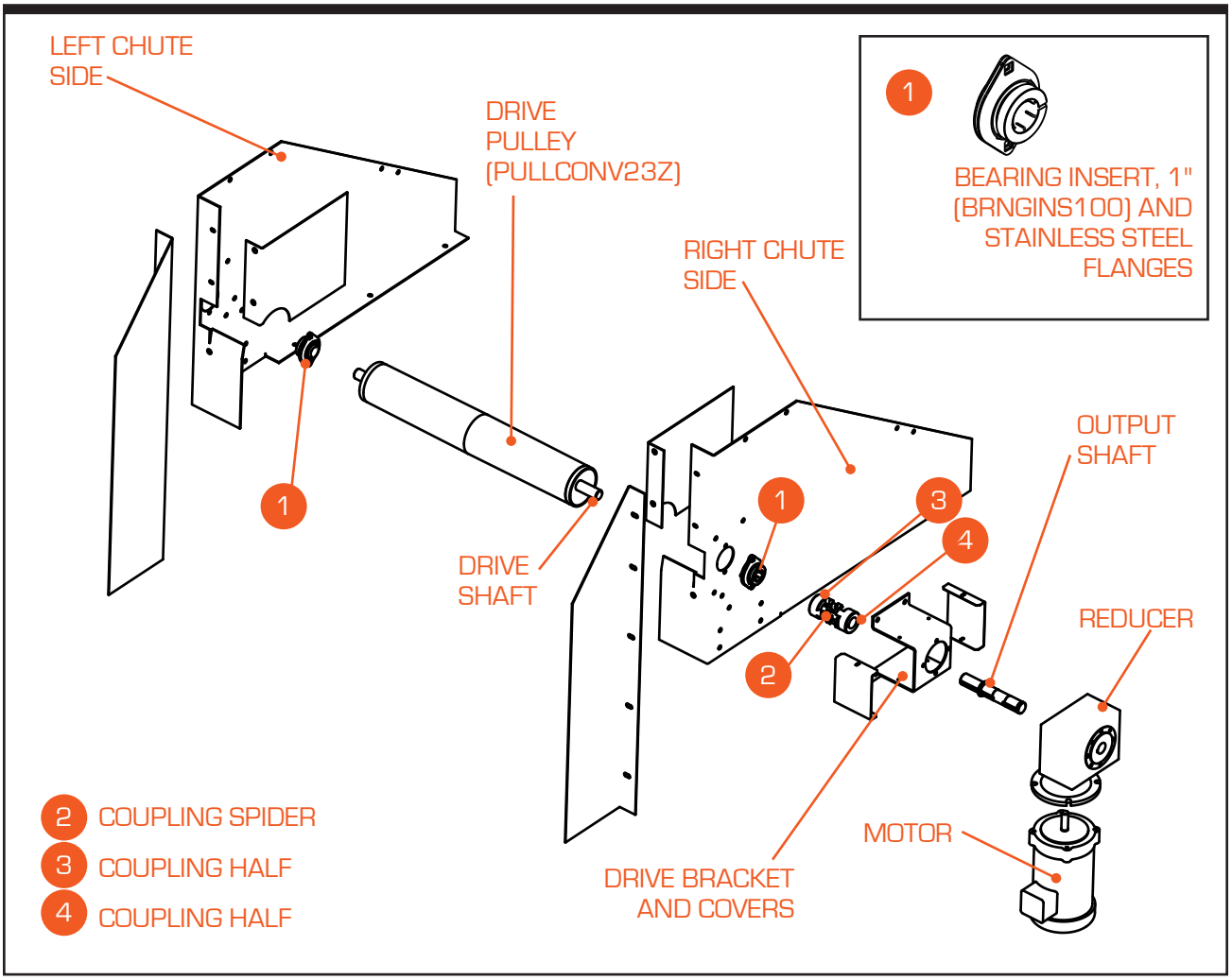

Figure 4-1. Drive Pulley (Head) with DC Motor/Reducer Sub-Assembly

Lower Take-Up Pulley

The main components of the lower take-up pulley assembly consist of two belt tensioner brackets, a take-up shaft, two bearing assemblies and a drive pulley (see Figure 4-2). Like the drive pulley bearings, each bearing assembly consists of a bearing insert (bearing plus a clamp collar) and a pair of bearing flanges. The bearing inserts are lubrication free. If a bearing requires replacement, the bearing flanges can be reused if they appear unworn and undamaged.

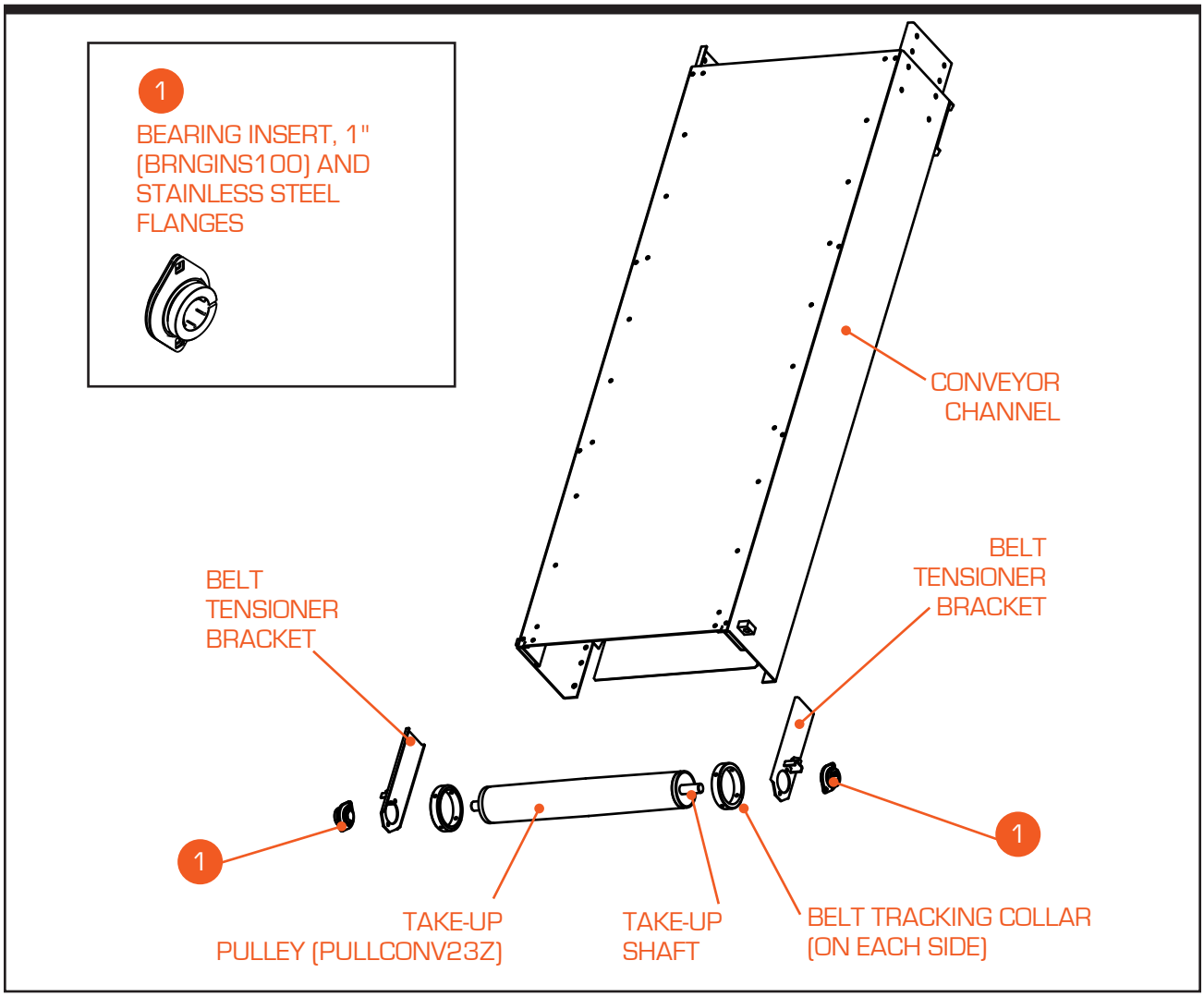

Figure 4-2. Lower Take-Up Pulley on Elevator - Sub-Assembly

Horizontal Belt

The main components of the horizontal belt assembly consists of the two belt tensioner assemblies at the back end of the hopper for the take-up pulley, a drive pulley at the top end (adjacent to the elevator), the take-up shaft, the horizontal conveyor belt, and bearings (see Figure 4-3). The bearings on both the take-up pulley end and the drive belt end are both lubrication free. If the bearing inserts need to be replaced, the flanges an also be reused if they are unworn/undamaged.

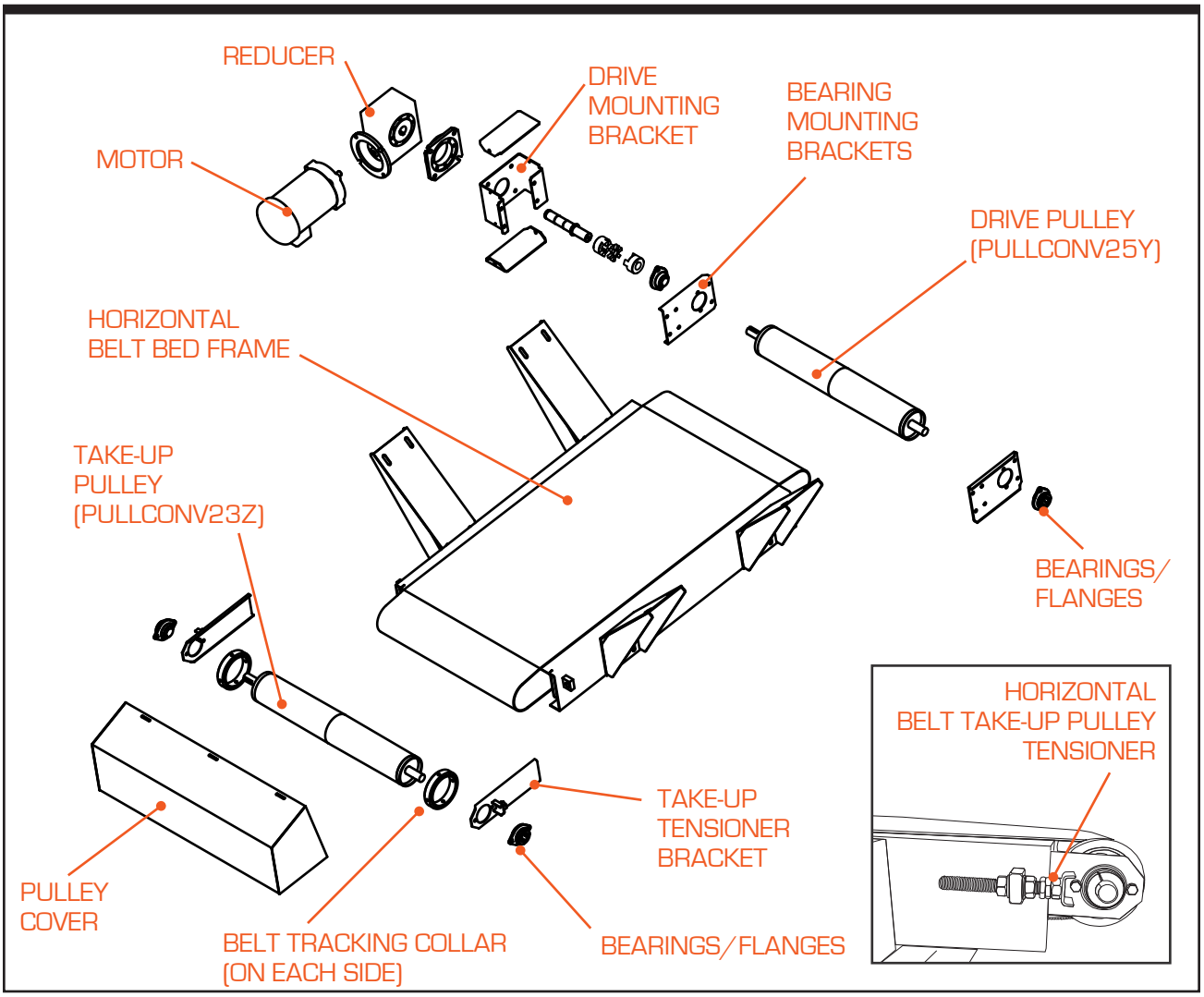

Figure 4-3. Horizontal Belt Sub-Assembly

Reducers

The reducers are lubricated for life and maintenance free.

Routine Cleaning

When necessary, clean the belt surface with a cloth dampened with water, or you can use a mild household cleaner. Wipe off damp surfaces with a dry, clean cloth.

The entire prefeeder can be wiped down with a clean cloth, and stainless steel cleaner may be used if needed. Do not use any type of abrasive cleanser on the equipment.

Replacement Parts

5

Replacement Parts

Replacement parts lists for the Hoppmann prefeeders are listed on the following pages. When ordering replacement parts, please reference the model name and number of your feeder located on the serial plate (see Figure 5-1). This helps in making sure you receive the correct replacement parts.

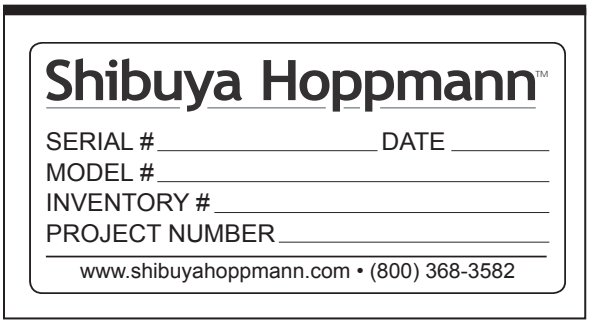

Figure 5-1. Sample Serial Plate

If you received a customized Shibuya Hoppmann system, please refer to your system's Operation Manual when ordering spares, as your prefeeder may have been altered.

Having the serial number in addition to the part number you wish to order will help us to accurately assist you in getting the correct parts. You may order your prefeeder's spare parts directly from Shibuya Hoppmann by email, phone or fax (see the contact information listed below).

Shibuya Hoppmann Spares and Service Department

- **Email**: Spares@Hoppmann.com
- **Phone**: 540.829.2564 (1.800.368.3582)
- **Fax**: 540.829.1726
- **Mail**: Shibuya Hoppmann Corporation
  Attn: Spares Department
  13129 Airpark Drive, Suite 120
  Elkwood, Virginia 22718 USA
  www.ShibuyaHoppmann.com

Notes: Occasional product serial numbers will be preceded by a "V" or "C", which indicates the equipment has been customized for you specifically. When calling for parts, be sure to indicate if your equipment has this configuration (example: VWE4022XDSA or CWE120DSA).

WEP-40 Elevating Prefeeder

WE4022XDSA (DC Motor)			
Critical	Part Number	Description	Qty.
X	BELT241101	Belt, Polyflake Endless, 1/8" x 24" x 110" (Horizontal)	1
X	BELTLACE38	Belt, 4" Cleat x 22" Wide x 180" Long (Elevator)	1
	NMRV63SHAF	Shaft, Single Output 1 1/8"	2
	PULLCONV23Z	Pulley, 4" Diameter x 26" Long, Zinc Plated	3
	PULLCONV25Y	Pulley Lagged, 4" Diameter x 26" Long w/Steel-It	1
X	MOTRPM0102	1/2hp Motor, 90VDC, 56C, 1750RPM	2
X	NMRV630060	Speed Reducer, 60:1, 56C (Horizontal)	1
X	NMRV630100	Speed Reducer, 100:1, 56C (Elevator)	1
	BRNGINS100	Insert Bearing, ANSI, 1.0"	8
	FLNGSS1/25	25mm Stainless Steel Flange	16
	COUPHALF01	Coupling Half, 1" L095	2
	COUPHALF14	Coupling Half, 1 1/8" L095	2
	COUPSPID03	Coupling Spider, L090/95-SOX	2

WE4022XASA (AC Motor)			
Critical	Part Number	Description	Qty.
X	BELT241101	Belt, Polyflake Endless, 1/8" x 24" x 110" (Horizontal)	1
X	BELTLACE38	Belt, 4" Cleat x 22" Wide x 180" Long (Elevator)	1
	NMRV63SHAF	Shaft, Single Output 1 1/8"	2
	PULLCONV23Z	Pulley, 4" Diameter x 26" Long, Zinc Plated	3
	PULLCONV25Y	Pulley Lagged, 4" Diameter x 26" Long w/Steel-It	1
X	MOTRAC0050-M	1/2hp AC Motor, 208-230/460 56C P04D	2
X	NMRV630060	Speed Reducer, 60:1, 56C (Horizontal)	1
X	NMRV630100	Speed Reducer, 100:1, 56C (Elevator)	1
	BRNGINS100	Insert Bearing, ANSI, 1.0"	8
	FLNGSS1/25	25mm Stainless Steel Flange	16
	COUPHALF01	Coupling Half, 1" L095	2
	COUPHALF14	Coupling Half, 1 1/8" L095	2
	COUPSPID03	Coupling Spider, L090/95-SOX	2

WEP-80 Elevating Prefeeder

WE8022XDSA (DC Motor)

Critical	Part Number	Description	Qty.
X	BELT241101	Belt, Polyflake Endless, 1/8" x 24" x 110" (Horizontal)	1
X	BELTLACE03	Belt, Conveyor, 22" Wide, 4" Cleats, 12" Centers, 191" L	1
	NMRV63SHAF	Shaft, Single Output 1 1/8"	2
	PULLCONV23Z	Pulley, 4" Diameter x 26" Long, Zinc Plated	3
	PULLCONV25Y	Pulley Lagged, 4" Diameter x 26" Long w/Steel-It	1
X	MOTRPM0102	1/2hp Motor, 90VDC, 56C, 1750RPM	2
X	NMRV630060	Speed Reducer, 60:1, 56C (Horizontal)	1
X	NMRV630100	Speed Reducer, 100:1, 56C (Elevator)	1
	BRNGINS100	Insert Bearing, ANSI, 1.0"	8
	FLNGSS1/25	25mm Stainless Steel Flange	16
	COUPHALF01	Coupling Half, 1" L095	2
	COUPHALF14	Coupling Half, 1 1/8" L095	2
	COUPSPID03	Coupling Spider, L090/95-SOX	2

WE8022XASA (AC Motor)

Critical	Part Number	Description	Qty.
X	BELT241101	Belt, Polyflake Endless, 1/8" x 24" x 110" (Horizontal)	1
X	BELTLACE03	Belt, Conveyor, 22" Wide, 4" Cleats, 12" Centers, 191" L	1
	NMRV63SHAF	Shaft, Single Output 1 1/8"	2
	PULLCONV23Z	Pulley, 4" Diameter x 26" Long, Zinc Plated	3
	PULLCONV25Y	Pulley Lagged, 4" Diameter x 26" Long w/Steel-It	1
X	MOTRAC0050-M	1/2hp AC Motor, 208-230/460 56C P04D	2
X	NMRV630060	Speed Reducer, 60:1, 56C (Horizontal)	1
X	NMRV630100	Speed Reducer, 100:1, 56C (Elevator)	1
	BRNGINS100	Insert Bearing, ANSI, 1.0"	8
	FLNGSS1/25	25mm Stainless Steel Flange	16
X	BELTEP4126	Standard EP-04/06 Belt, 126" Long *	1
	COUPHALF14	Coupling Half, 1 1/8" L095	2
	COUPSPID03	Coupling Spider, L090/95-SOX	2

WEP-120 Elevating Prefeeder

WE12022DSA (DC Motor)			
Critical	Part Number	Description	Qty.
X	BELT241101	Belt, Polyflake Endless, 1/8" x 24" x 110" (Horizontal)	1
X	BELTLACE03	Belt, 4" Cleat x 22" Wide x 180" Long (Elevator)	1
	NMRV63SHAF	Shaft, Single Output 1 1/8"	2
	PULLCONV23Z	Pulley, 4" Diameter x 26" Long, Zinc Plated	3
	PULLCONV25Y	Pulley Lagged, 4" Diameter x 26" Long w/Steel-It	1
X	MOTRAC0050-M	1/2hp AC Motor, 208-230/460 56C P04D	2
X	NMRV630060	Speed Reducer, 60:1, 56C (Horizontal)	1
X	NMRV630100	Speed Reducer, 100:1, 56C (Elevator)	1
	BRNGINS100	Insert Bearing, ANSI, 1.0"	8
	FLNGSS1/25	25mm Stainless Steel Flange	16
	COUPHALF01	Coupling Half, 1" L095	2
	COUPHALF14	Coupling Half, 1 1/8" L095	2
	COUPSPID03	Coupling Spider, L090/95-SOX	2

WE12022ASA (AC Motor)			
Critical	Part Number	Description	Qty.
X	BELT241101	Belt, Polyflake Endless, 1/8" x 24" x 110" (Horizontal)	1
X	BELTLACE38	Belt, 4" Cleat x 22" Wide x 180" Long (Elevator)	1
	NMRV63SHAF	Shaft, Single Output 1 1/8"	2
	PULLCONV23Z	Pulley, 4" Diameter x 26" Long, Zinc Plated	3
	PULLCONV25Y	Pulley Lagged, 4" Diameter x 26" Long w/Steel-It	1
X	MOTRPM0102	1/2hp Motor, 90VDC, 56C, 1750RPM	2
X	NMRV630060	Speed Reducer, 60:1, 56C (Horizontal)	1
X	NMRV630100	Speed Reducer, 100:1, 56C (Elevator)	1
	BRNGINS100	Insert Bearing, ANSI, 1.0"	8
	FLNGSS1/25	25mm Stainless Steel Flange	16
	COUPHALF01	Coupling Half, 1" L095	2
	COUPHALF14	Coupling Half, 1 1/8" L095	2
	COUPSPID03	Coupling Spider, L090/95-SOX	2

Warranty

6

Warranty

Shibuya Hoppmann Corporation warrants that each item of its own manufacture delivered hereunder shall, at the time of delivery and for a period of twelve (12) months thereafter, be free from defects in materials or workmanship; and if any such item shall prove to be defective in material or workmanship under normal intended usage and maintenance during the warranty period, upon examination by Shibuya Hoppmann Corporation, then Shibuya Hoppmann Corporation shall repair or replace, at its sole option, such defective item at its own expense; provided, however, that the owner shall be required to ship such defective item, freight prepaid, to Shibuya Hoppmann Corporation's plant in Elkwood, Virginia. The warranty on components not manufactured by Shibuya Hoppmann Corporation, but a part of the feeder, is limited to the warranty provided by the original manufacturer of said components to the extent, and only to the extent, that such original manufacturer actually honors such warranty.

ALL WARRANTIES HEREUNDER ARE EXPRESSLY LIMITED TO THE REPAIR OR REPLACEMENT OF DEFECTIVE ITEMS AS SET FORTH HEREIN, AND IN NO EVENT SHALL SHIBUYA HOPPMANN CORPORATION BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES BY REASON OF ANY BREACH OF WARRANTY OR DEFECT IN MATERIAL OR WORKMANSHIP. SHIBUYA HOPPMANN CORPORATION SHALL NOT BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ITEMS WHICH HAVE BEEN SUBJECTED TO NEGLECT, ACCIDENT OR IMPROPER USE, OR WHICH HAVE BEEN ALTERED BY OTHER THAN AUTHORIZED SHIBUYA HOPPMANN CORPORATION PERSONNEL.

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Notes

Notes

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