



# PPCC Manuals for: Installation, Maintenance, Safety, and Parts List

*Recommended Spare Parts in Highlighted Print*

## Wire Mesh Horizontal Conveyor Manual

Serial # \_\_\_\_\_

Model # WH \_\_\_\_\_

Computer Code \_\_\_\_\_

# SAFETY FIRST!



Failure to follow all safety stickers, placards and maintenance manual instructions may result in serious injury to operators or maintenance personnel.

## NOTE:

Equipment may start automatically if a sensing device, such as a photo-eye or proximity switch, is accidentally blocked. Equipment may start automatically when a zone is placed in the “automatic” mode. Disable control system outputs before working on any automatic equipment.

## FOLLOW YOUR SAFETY PROCEDURES AND INSTRUCTIONS FOR ALL OPERATOR AND MAINTENANCE PROCEDURES.

### SOME SAFETY DO'S AND DON'TS:

- **DO NOT** enter areas designated “Authorized Personnel Only” or confined spaces without prior authorization and without following (L.O.T.O.) procedures.
- **DO NOT** operate any equipment without all factory-supplied guards securely installed in their proper locations.
- **DO NOT** bypass or defeat any safety device at any time.
- **DO NOT** reset any tripped EMERGENCY STOP button or cable without first determining the cause of the trip.
- **DO NOT** reach over, around, or through any guard or safety barrier without first following proper (L.O.T.O.) procedures.
- **DO NOT** clean or work under any lift table without using proper maintenance stops.
- **DO NOT** walk, sit, ride, or climb on conveyor at any time.
- **DO NOT** remove or alter conveyor guards of safety barriers.
- **DO NOT** load conveyor beyond design limits.
- **DO** follow plant Lock-Out, Tag-out (L.O.T.O.) procedures when working on machinery, including pneumatic devices.
- **DO** disable the control circuit output before working on any conveyor.
- **DO** lock-out the main and any auxiliary control panels before working on any conveyor.
- **DO** be aware that hazardous voltages may still be present in control cabinets even if the disconnect is locked out.
- **DO** lock-out the air supply to all equipment before working on or around any pneumatic device.
- **DO** verify that the energy source to the equipment is off before beginning any work.
- **DO** keep clothing, hair, fingers, and other body parts away from conveyor at all times.
- **DO** use all required personal protective equipment at all times when working on equipment.
- **DO** allow only authorized maintenance personnel to service conveyor.
- **DO** know the location and function of all start/stop controls.
- **DO** keep all start/stop controls free of obstruction.
- **DO** keep all personnel clear of conveyor when starting.
- **DO** operate conveyor with trained personnel only.
- **DO** verify that all personnel are clear of conveyor before switching into automatic mode.

\*\*\*\*\*POWER-PACK CONVEYOR COMPANY\*\*\*\*\*  
\*\*\*\*\*IF IT'S NOT SAFE, DON'T DO IT\*\*\*\*\*

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## Caution Stickers



Located on side of Conveyor



Located on side of Conveyor



Located on Guard

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# Introduction



## Receiving Instructions:

**A.** Check the number of crates, boxes, skids, etc. received against the Bill of Lading, to make sure all items shipped have been received. Check to see if any equipment was damaged in transit. If damages occurred, note damages on freight bill and immediately contact the motor carrier to a file claim for the damages.

## Approval Drawings:

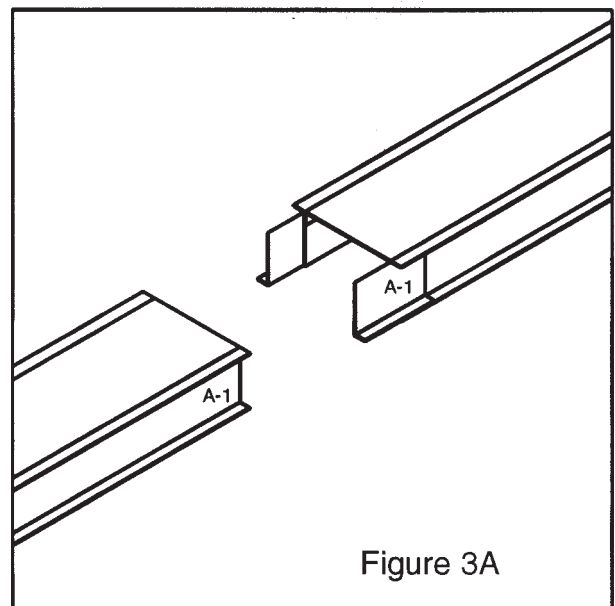
**B.** PPCC supplies approval drawings and a Bill of Material (BOM) on each conveyor to your engineering department for approval before fabrication. If you have a design or dimension question please refer to these drawings. For any additional assistance contact PPCC at (440) 975-9955 and ask for the Engineering Manager.

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# Installation

## Match Mark Numbers

All body sections are match marked with letters and numbers as follows: A-1 to A-1 etc. at body splice. See figure 3A.

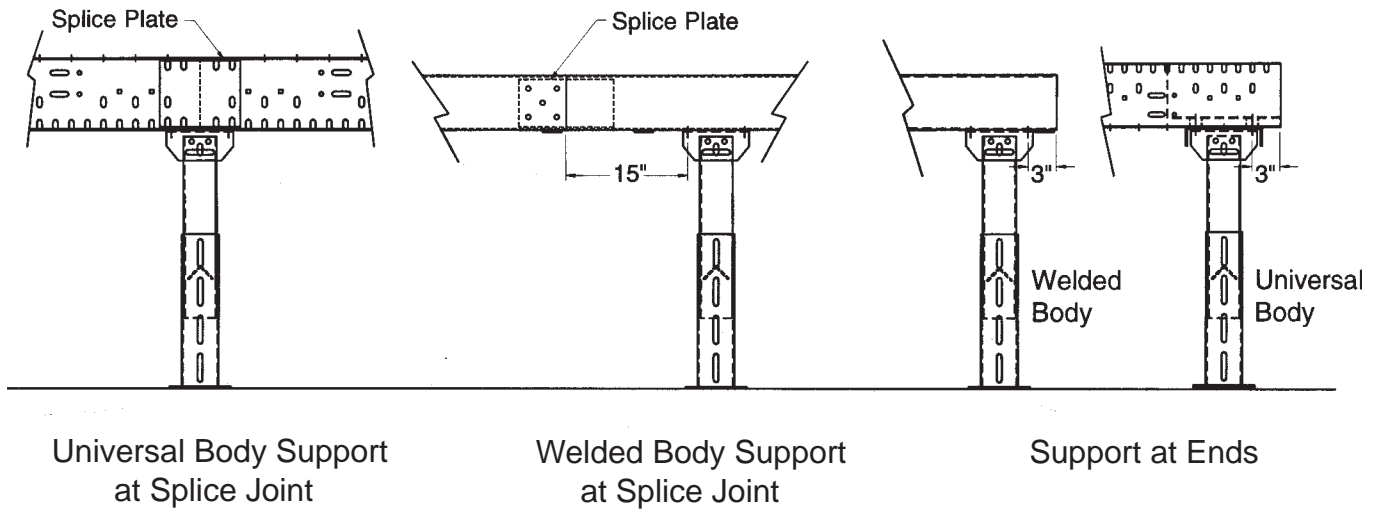


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# Floor Support Installation



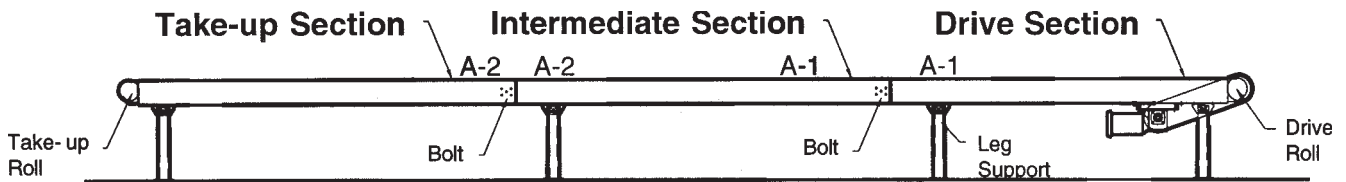
Universal Body Support at Splice Joint

Welded Body Support at Splice Joint

Support at Ends

# Conveyor Setup

Figure 4A



Bolt conveyor section A-1 to matching section A-1 etc. See figure 4A.

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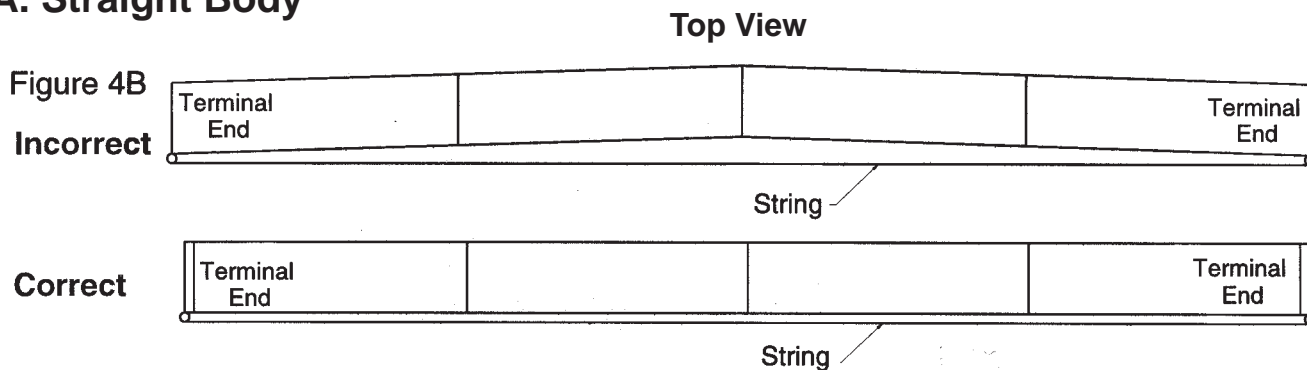
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# Conveyor Alignment

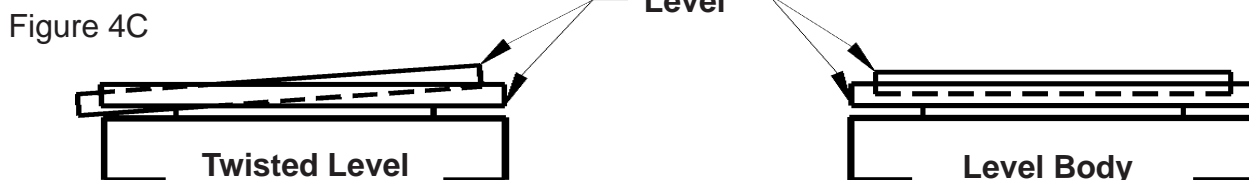


## A. Straight Body



Make sure conveyor is not installed with a bow. Place a string from one terminal end to the other and pull tight to determine see if the conveyor is straight or bowed. If the conveyor is bowed, align body section until parallel with string. Then lag conveyor to the floor.

## B. Level Body



Make sure conveyor body is not twisted. Set level across belt at each end of conveyor or over each set of legs. Sight across tops of level for parallel edges. If not parallel adjust or shim legs until conveyor bed is level. Then lag down to floor.

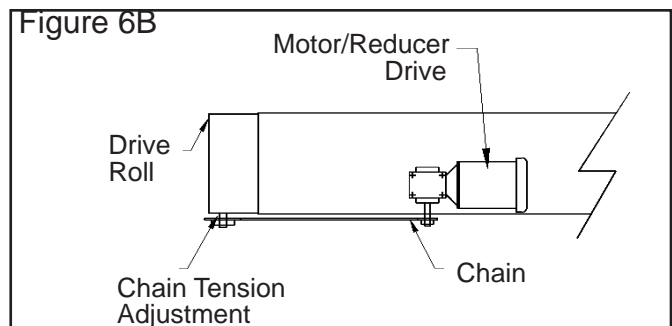
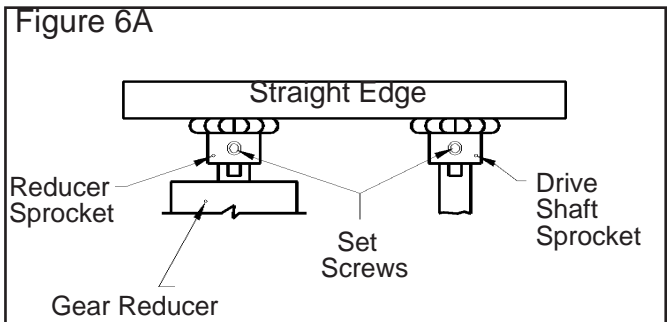
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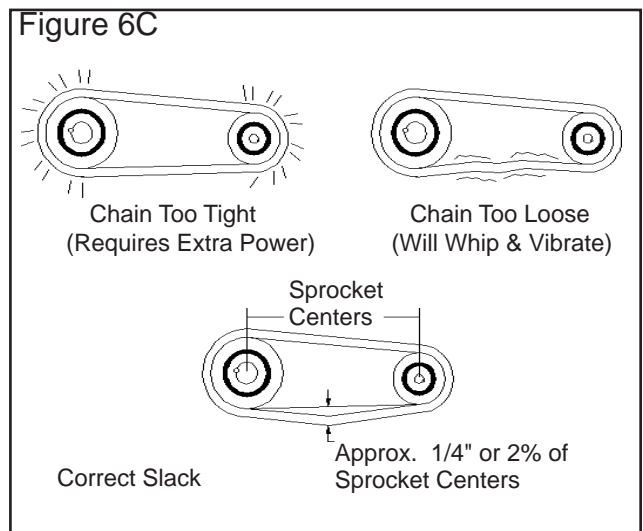
## Drive Chain Alignment & Tension

The drive chain and sprockets should be checked periodically for proper tension and alignment. Improper adjustment will cause premature wear to the drive components.



### TO MAKE ADJUSTMENTS

- 1... Remove chain guard.
- 2... Check sprocket alignment by placing a straight edge across the face of both sprockets (Figure 6A). Loosen set screws and adjust as needed. Retighten set screws.
- 3... To adjust chain tension, loosen bolts on motor base. Tighten until desired chain tension is reached (Figure 6C). Retighten mounting belt.
- 4... Lubricate chain per maintenance instructions.
- 5... Replace chain guard so that it does not interfere with drive.



**CAUTION!**  
NEVER REMOVE CHAIN GUARDS WHILE THE CONVEYOR IS OPERATING. ALWAYS REPLACE GUARDS AFTER ADJUSTMENTS ARE MADE.

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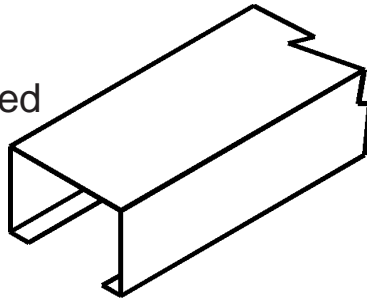
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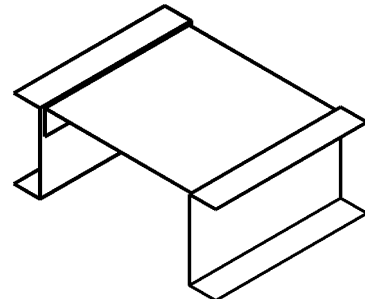
## Bed Styles



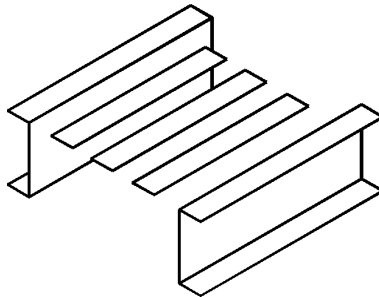
Solid Slider Bed



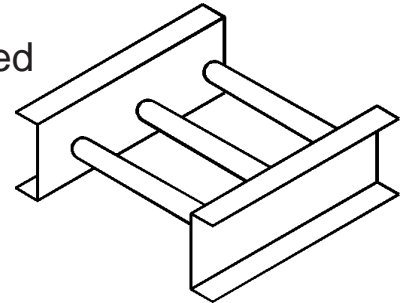
or



Plastic or Steel  
Rail Slider Bed

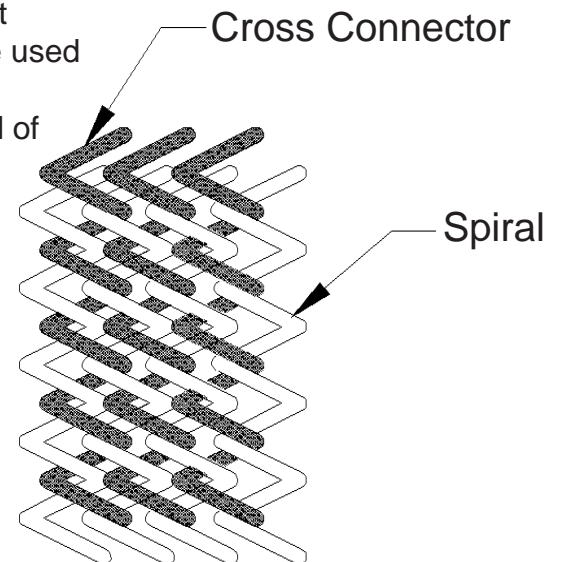


Roller Bed



## Remove & Install Balanced Weave Belt

1. **MAKE SURE MAIN POWER SWITCH IS SHUT OFF & LOCKED OUT.**
2. Balance weave belts, cut any cross connectors, where it is welded to spiral both sides of belt.
3. Balance weave, remove cross connector.
4. **Note 3! CAUTION:** On incline conveyors belt may have tendency to run down conveyor when drive chain is not connected to drive sprockets. Safety chains should be used at all times to prevent run away belt.
5. Pull belt through end of conveyor (if necessary with aid of cable puller).



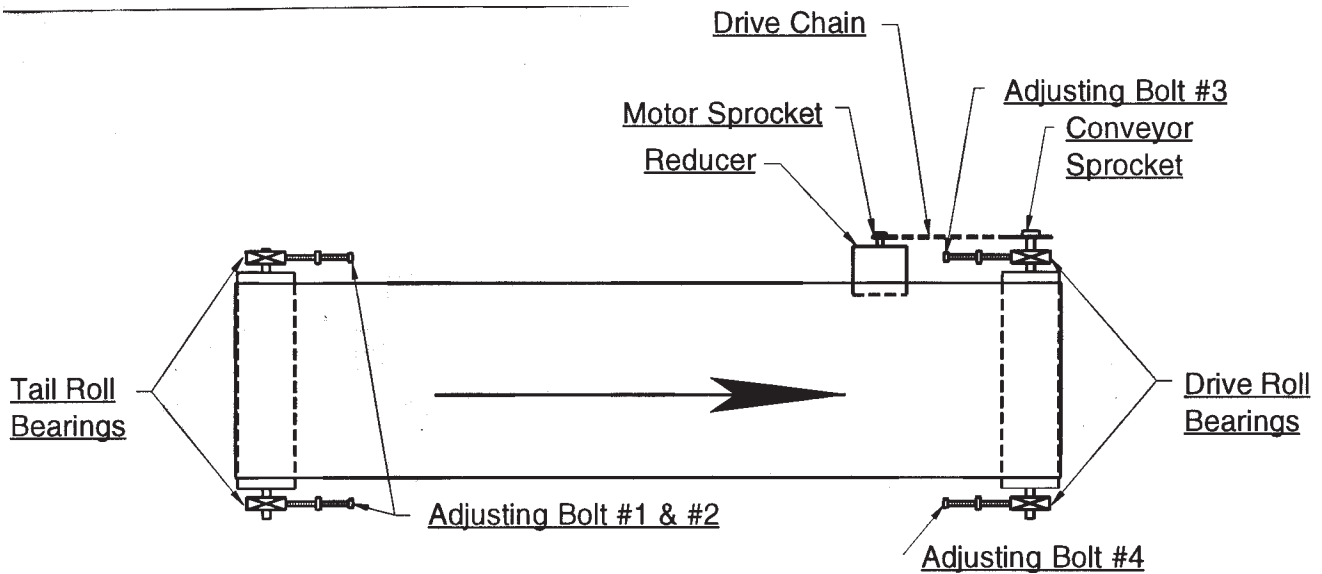
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# Belt Tracking Non-Reversing - Balanced Weave



**Belt Tension:** Increase belt tension by taking an even number of turns on adjusting bolts #1 & #2 at end opposite drive. If belt tends to run to one side, adjust bolt on that side to re-center belt on roll.

**Chain Tension:** Remove chain guard. Turn adjusting bolt #3 to tighten drive chain. Replace guard. Run conveyor, center belt on roll by adjusting bolt #4.

**WARNING- DO NOT RUN CONVEYOR WITH CHAIN GUARD DETACHED. CAUTION: OVERTIGHTEN DRIVE CHAIN WILL CAUSE EXCESSIVE WEAR ON DRIVE COMPONENTS**

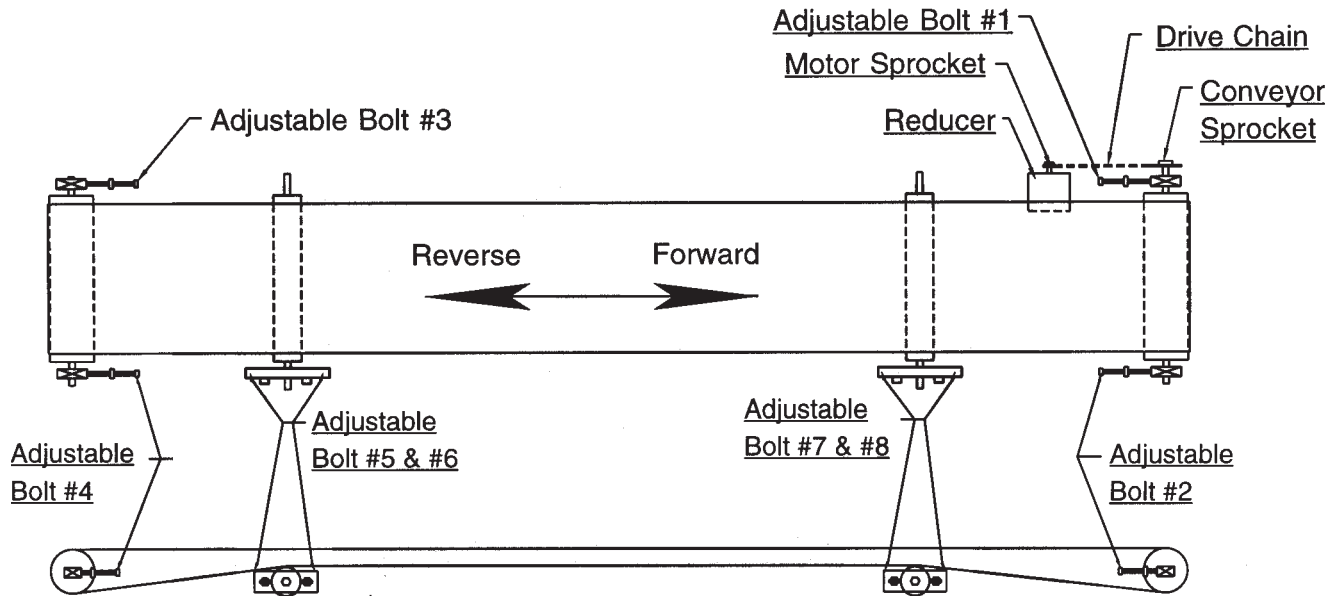
**CAUTION: DO NOT RIDE, SIT, STAND OR WALK ON CONVEYOR AT ANYTIME.**

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# Belt Tracking Reversing - Balanced Weave



**Belt Tension:** Increases belt tension by taking an even number of turns on adjusting bolts #3 & #4 on end opposite drive.

**Belt Alignments:** Forward travel adjust bolt #4 for belt alignment on drive roll. Loosen bolts #5 & #6 and slide plate to adjust belt alignment on tail roll, then reverse direction of travel and adjust bolt #2 for belt alignment on tail roll. Loosen bolts #7 & #8 and slide plate to adjust belt alignment on drive roll. Re-check both directions for alignment.

**Chain Tension:** Remove chain guard. Turn adjusting bolt #3 to tighten drive chain. Turn adjusting bolt #4 same number of turns as adjusting bolt #3. Replace guard. Run conveyor, adjust belt per belt alignment above

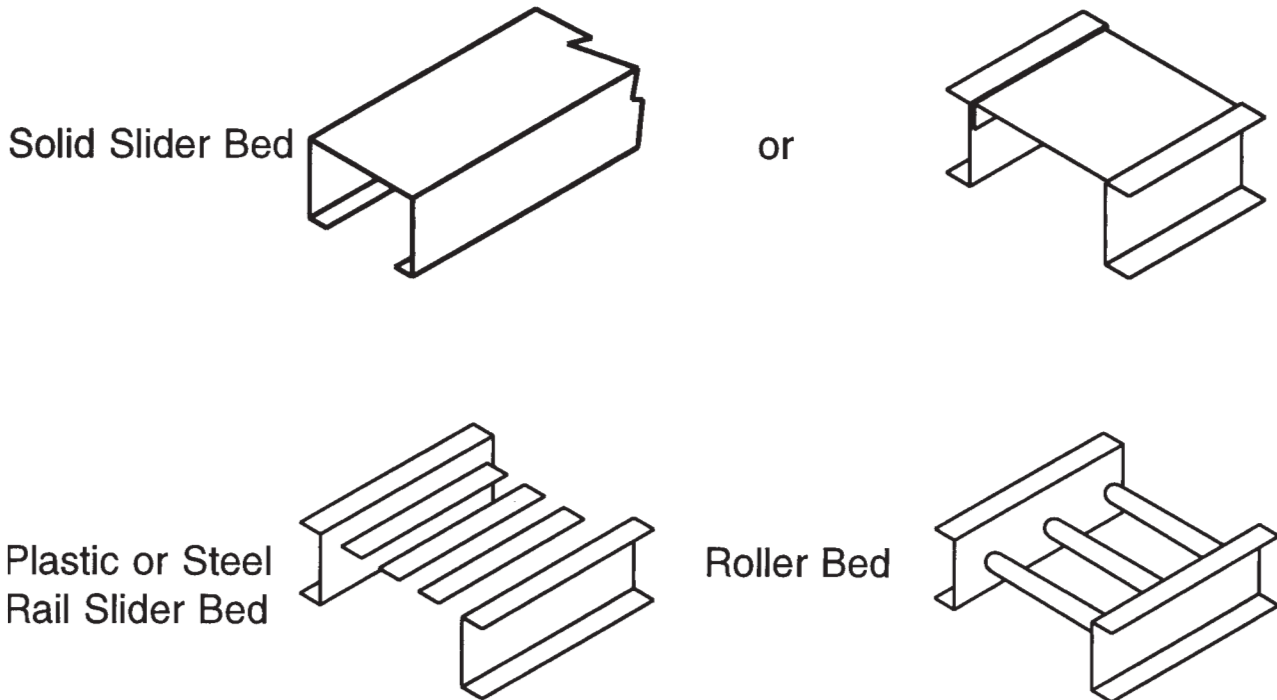
#4. **DANGER- DO NOT RUN CONVEYOR WITH CHAIN GUARD DETACHED. CAUTION- OVER TIGHTENING DRIVE CHAIN WILL CAUSE EXCESSIVE WEAR ON DRIVE COMPONENTS.**

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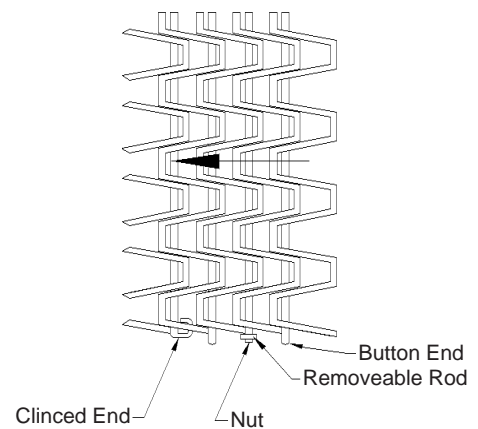
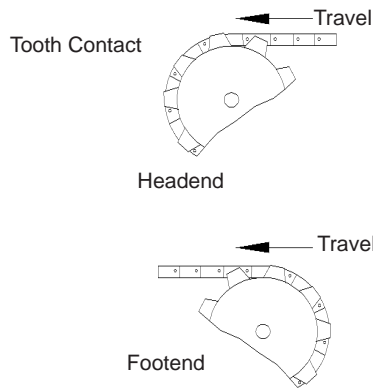
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# Bed Styles



# Remove & Install Flat Wire Mesh Belt



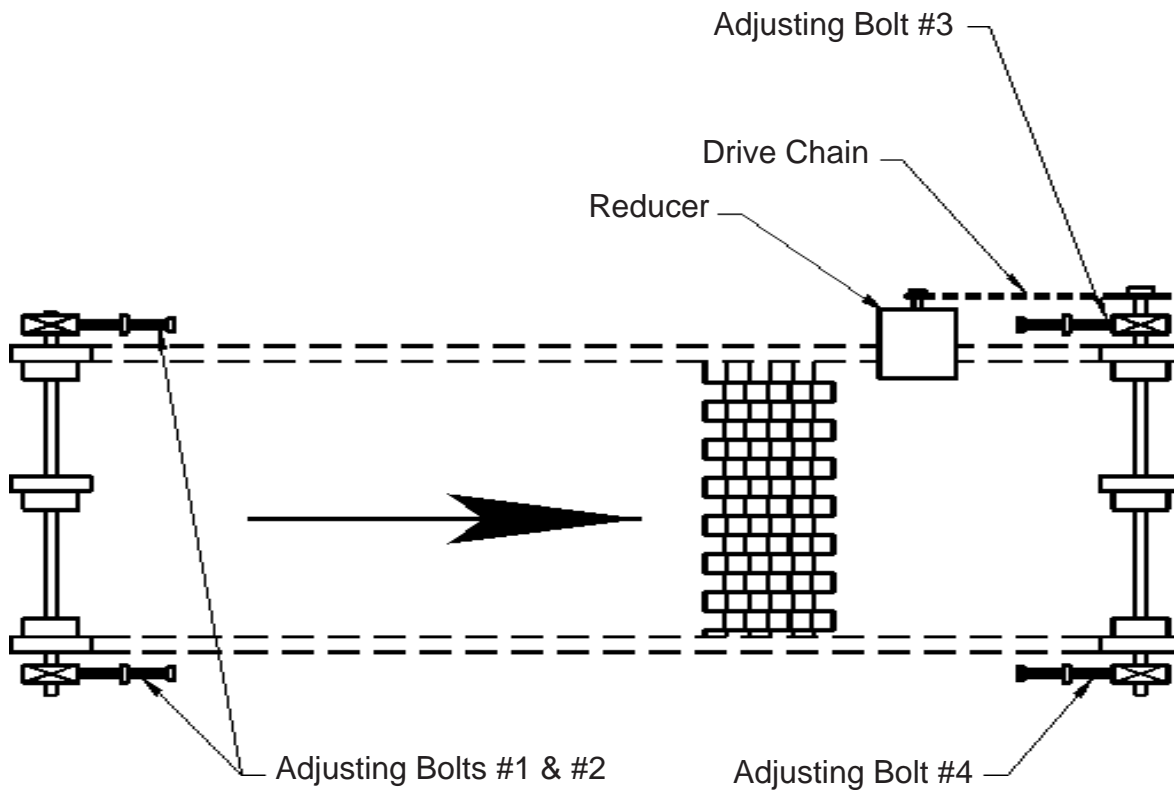
1. MAKE SURE MAIN POWER SWITCH IS SHUT OFF & LOCKED OUT.
2. Conveyor belt will be equipped with one or more bolt cross rods. Remove nut.
3. Disconnect drive chain and pull rod out of belt. **CAUTION:** On incline conveyors belt may have tendency to run down conveyor when drive chain is not connected to drive sprockets. Safety chains should be used at all times to prevent run away belt.
4. Pull belt through end of conveyor (if necessary with aid of cable puller). **NOTE:** When installing belt check for proper direction of travel. Also rod contact on head & tail sprockets.

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# Belt Tracking Flat Wire Mesh Belt



**BELT TENSION:** Increase belt tension by taking an even number of turns on adjusting bolts #1 & #2 at end opposite drive. If chain runs over to one side of sprocket take more turns on side chain tends to run over to. Over tightening belt will cause excessive wear on conveyor components.

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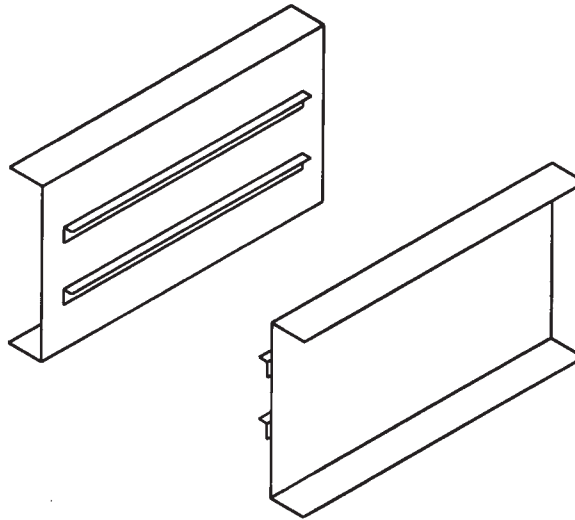
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# Chain Drive Balanced Weave Belt

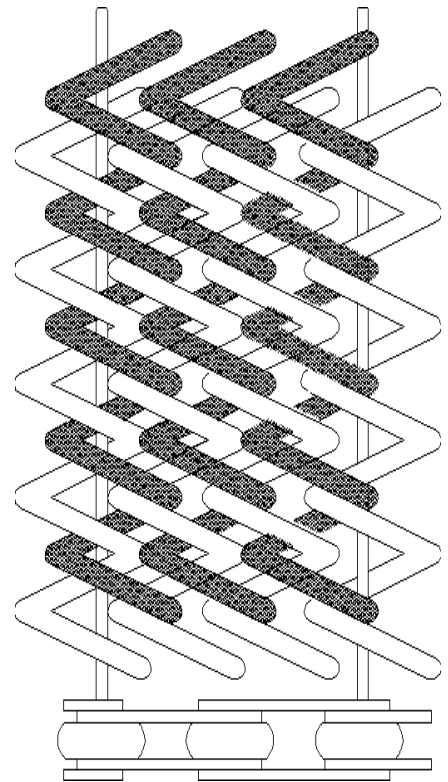


Open Roller Chain Bed



## Remove & Install Balanced Weave Chain Drive

1. **MAKE SURE MAIN POWER SWITCH IS SHUT OFF & LOCKED OUT.**
2. Balanced weave chain drive belt. Find removable chain link & removable cotter pin both sides of belt. Cut cross connector where it is welded to spiral next to rod that is to be removed.
3. Balance weave chain drive, disconnected drive chain and remove cross connector and rod.
4. **NOTE: 3! CAUTION:** On incline conveyors belt may have tendency to run down conveyor when drive chain is not connected to drive sprockets. Safety chains should be used at all times to prevent run away belt.
5. Pull belt through end of conveyor (if necessary with aid of cable puller).

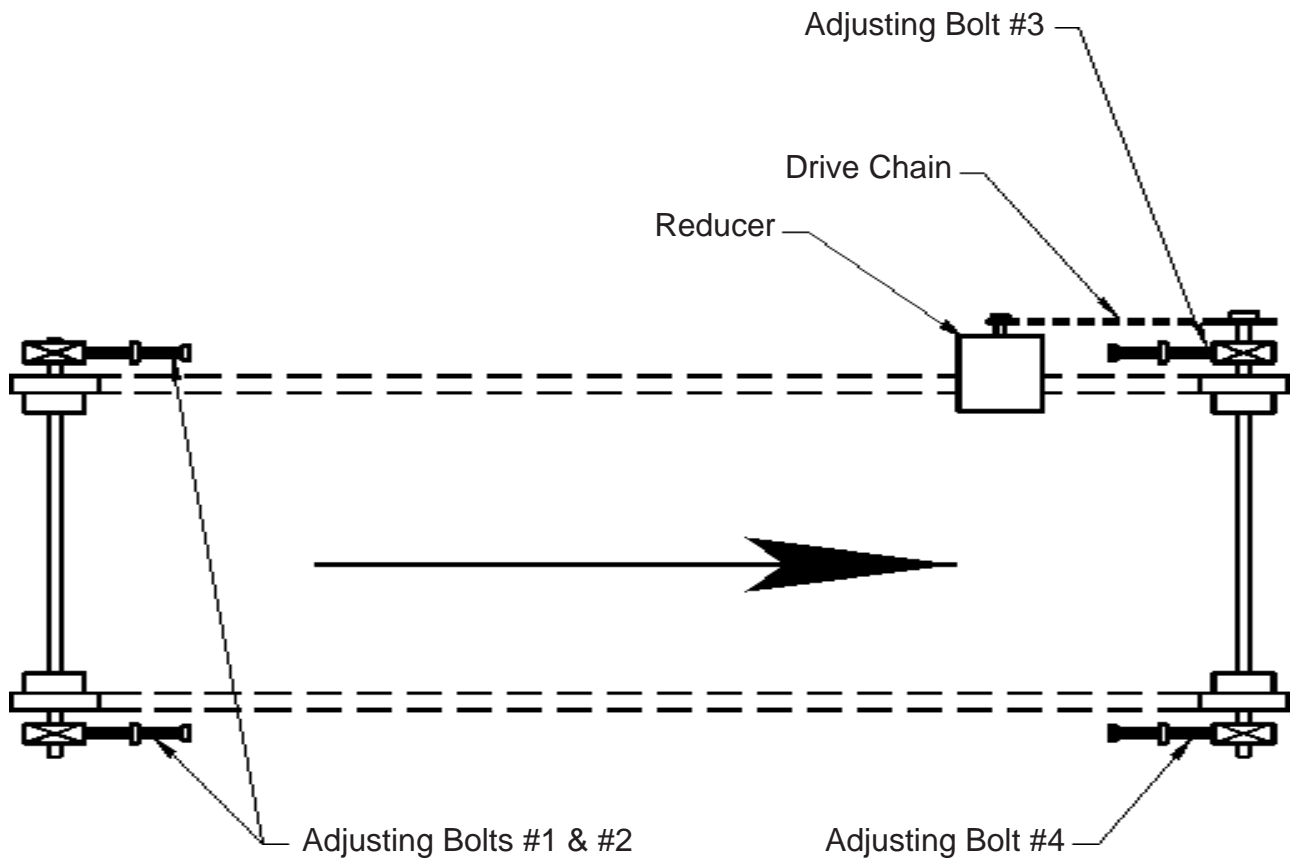


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# Belt Tracking Chain Drive Balanced Weave Belt



**DRIVE CHAIN TENSION:** Remove chain guard. Turn adjusting bolts #3 to tighten drive chain. Replace guard. Run conveyor, center belt chain on sprockets by adjusting bolt #4.

**DANGER- DO NOT RUN CONVEYOR WITH CHAIN GUARD DETACHED.** Over tightening drive chain will cause excessive wear on drive components.

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# Ask About These Additional Creative Solutions To Material Handling Problems

Power-Pack offers you a broad range of material handling products, accessories and technologies. Each one is designed to meet specific conveying needs while meeting your company's production requirements and long-term operating costs as well.

## **SlimLine Conveyors**

These low profile units are designed for part, slug or scrap removal from under stamping presses or other applications that require a compact and reliable conveyor. They feature a sleek design, rugged construction and a wide selection to choose from.

## **Universal Conveyors**

The common frame design used in all 12 models of belt and roller Universal conveyors provides economy and durability for today – and quick interchangeability to meet new needs in the future. Each model can be selected for light, standard or heavy duty applications.

## **Welded Construction Conveyors**

When specifications call for "one piece formed body and welded construction throughout," Power-Pack welded construction conveyors are the right choice. They are available in light, standard and heavy duty construction. Stainless steel models are also available.

## **Specific Application And OEM Conveyors**

Power-Pack offers a wide selection of pre-engineered bulk material handling, part handling, manufacturing and processing conveyors. Each one, including bucket, magnetic and steel hinge belt types can be modified to meet your specific application needs.

## **Conveyor Types Available**

Horizontal Slider Bed  
Horizontal Flanged Belt  
Horizontal "V" Tracking  
Incline  
Cleated Incline  
Gravity  
Horizontal Belt Over Roller  
Belt Driven Live Roller  
Zero Pressure  
Chain Driven Live Roller  
Skewed Chain Driven Live Roller  
Wire Mesh Horizontal  
Wire Mesh Incline  
Wire Mesh Cleated Incline  
Wire Mesh "L" Style  
Wire Mesh "Z" Style  
Floor To Floor  
Cleated Incline With Nose Over  
Table Top Horizontal  
Table Top Curve  
Die  
SlimLine Horizontal  
SlimLine Incline  
SlimLine Cleated Incline  
Steel Hinge Belt Conveyor  
Steel Hinge Belt Incline  
Steel Hinge Cleated Incline  
Steel Hinge "L" Style  
Steel Hinge "Z" Style  
Self-Cleaning Horizontal  
Self-Cleaning Incline  
Self-Cleaning Cleated Incline  
Flanged Trough Horizontal  
Flanged Trough Cleated Incline  
Corrugated Horizontal  
Corrugated Incline  
Corrugated Cleated Incline  
Corrugated "L" Style  
Corrugated "S" Style  
Troughing Idler Horizontal  
Troughing Idler Incline  
Troughing Cleated Incline  
Magnetic Horizontal  
Magnetic Incline  
Magnetic Cleated Incline  
Magnetic Incline W/Nose Over  
Magnetic Vertical  
Drag Chain Horizontal  
Drag Chain Incline  
Drag Chain "L" Style  
Roller Chain Horizontal  
Slat Horizontal  
Bucket Elevator  
Belt Curves  
Wash Conveyor  
Roller Flight

## **Conveyor Components**

If your company is looking to build its own conveyors – these pre-engineered modules can help reduce engineering and assembly time. Included are: Power-Pack's patented drive and take-up pulley assemblies, motor packages, leg supports, frames, belts, rollers and more.

## **Trailer Mounted Sequencing Conveyors**

These unique mobile conveyors are specially designed to provide fast plant-to-plant loading of components for just-in-time delivery to line set.

## **Custom Conveyors**

Need a special conveyor design for an in-plant or OEM application? Power-Pack's 60-plus years of material handling, manufacturing and processing experience is at your disposal to design and manufacture a cost-effective solution.

## **Systems – Synchronized, High Throughput and Storage & Retrieval**

Power-Pack systems engineers specialize in creating advanced systems to reduce manufacturing and inventory costs. Innovative systems which can help your company rapidly meet new market demands or competitive pressures.

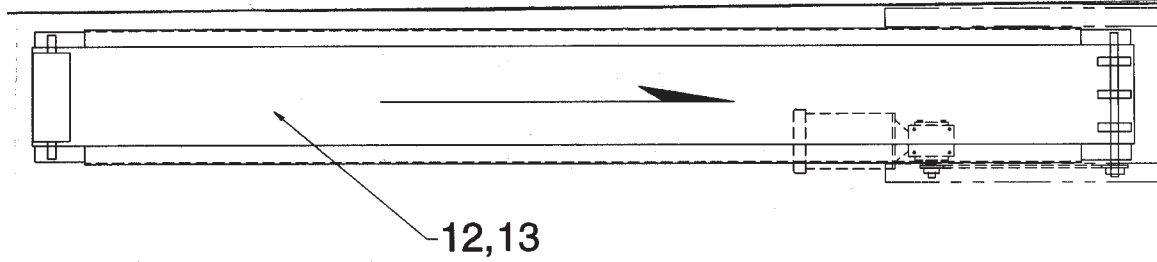
## **Preview The Newest Innovations**

To keep your engineering staff abreast of the latest material handling technology, ask for our latest video tape titled: "Advanced Handling Systems."

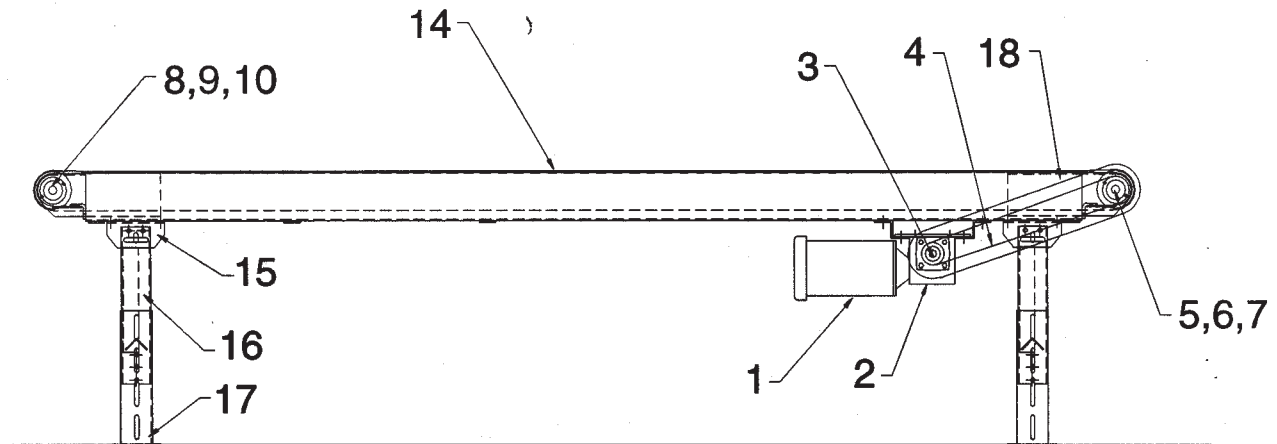


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**TOP VIEW**



**SIDE VIEW**

## Parts List & Spare Parts

Reference No.	Quantity	Description
1	1	<b>Motor</b>
2	1	<b>Reducer</b>
3	1	Reducer Sprocket
4	1	Roller Chain
5	1	Conveyor Sprocket
6	1	Drive Roll
7	2	<b>Drive Roll Bearings</b>
8	1	Tail Roll
9	2	<b>Tail Roll Bearings</b>
10	4	Adjusting Set Screws
12	1	Belt
13	1	<b>Lacer</b>
14	-	Conveyor Frame Complete (1'-10' sections)
15	-	Swivel Leg Pads
16	-	Fixed Legs
17	-	Chain Guard
18	1	Adjustable Legs

Recommended Spare Parts in Highlighted Print.

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**Quality Products,  
Quality Service,  
Innovative Design:**

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