



# OWNER'S MANUAL



## Minimum Pressure Accumulation

Model 138VP • 196VP

DO NOT OPERATE BEFORE READING THIS HANDBOOK  
KEEP IN A SAFE PLACE - DO NOT DISCARD

# TECH HANDBOOK FOR 138VP / 196VP

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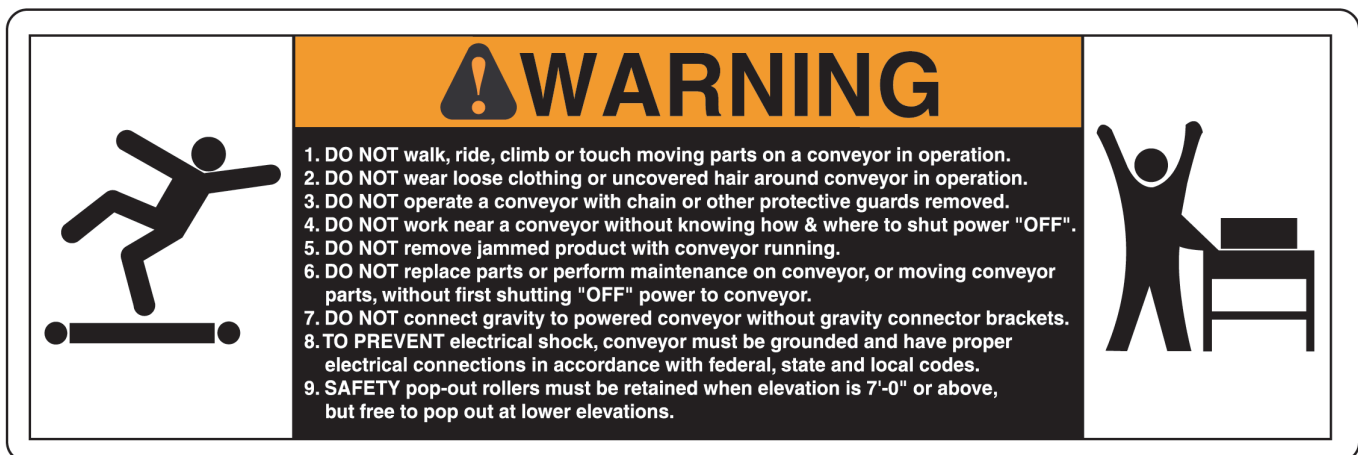
## WARNING LABELS



ABOVE: Label attached to all protective guards (drives, roller guards, etc.)



ABOVE: Label placed near all pulleys (center drives, end drives, tail pulleys)



ABOVE: Label placed near all drive assemblies and at 30' intervals

# CAUTIONS, WARNINGS AND HAZARDS

## INTRODUCTION

This manual was prepared as a “how-to-guide” for installers, end-users and maintenance personnel. It is also intended to educate both owner (purchaser) and all individuals working around the unit, of potential hazards.

With proper installation and maintenance, conveyors are essential for achieving a variety of functions essential in today’s industrial marketplace. By following a simple, periodic maintenance schedule, the life of a typical conveyor (or, most any type of machinery—including our automobiles!) will increase when com-

pared to a similar unit in an application receiving little or no maintenance. You may find that a conveyor can become your best workplace friend by following simple safety guidelines. Failure to follow even the most basic safety suggestions can result in serious personal injury.

Conveyors contain many moving parts—pulleys, belting, chains, sprockets, shafts, rollers, etc. Therefore, it is imperative to become familiar with basic unit operation and know all points of potential hazards.

Remember, when working around or near conveyors (and any industrial machinery) it is your responsibility to become familiar with the unit, to know potential hazards (many are noted with caution labels) and to operate unit in strict accordance with the safety guidelines in this manual.

Keep this manual in a safe place for future reference. It should be placed where appropriate personnel may maintain proper maintenance and records.


This manual must be read by all new users before operating or working near this unit.


### **WARNING**

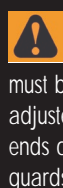
**DO NOT OPERATE BEFORE READING THIS MANUAL!  
KEEP IN SAFE PLACE--DO NOT DISCARD!**


## CAUTIONS, WARNINGS AND HAZARDS


### **WARNING**

 ALWAYS anchor permanent supports to floor (or mounting surface). Use 3/8" x 2-1/2" (or longer) wedge anchors for permanent installation in concrete flooring.

 It is the responsibility of the customer and installation personnel to supply and install net or mesh guarding on overhead mounted conveyors to prevent product and/or debris from falling to floor in areas where required.

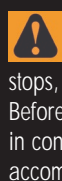
 If belt conveyor pulleys are adjusted during installation or maintenance, nip point guard (at drive end on end drive unit) must be readjusted. Nip point guard (take-up end) is automatically adjusted when take-up pulley is adjusted. Nip point guards at both ends of conveyor (center drive) must be readjusted. Center drive guards **MUST** be replaced after installation or maintenance.

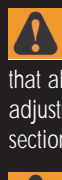
 Before unit is ready for operation, snub roller guard (cover) must be adjusted to ensure safe unit operation.

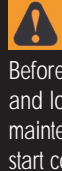
 Belt lacing must be kept in good condition for safe work environment.

 To check drive sprocket alignment, shut “OFF” and lock out power source before attempting any adjustments.

 To check drive sprocket tension, shut “OFF” and lock out power source before any adjustments are attempted.

 Electrical controls must be designed by a qualified electrical engineer to ensure that appropriate safety features (emergency stops, pull cords, switches, etc.) are installed on unit for safe operation. Before conveyor start-up, all operators and other personnel coming in contact with unit must be properly trained and must have read accompanying Tech Handbook.

 Upon start-up, if belt tracks to one side, turn unit “OFF”, lock out power source and confirm that conveyor is square and that all prime tracking components are square with bed. Belt tracking adjustments should be performed by trained personnel **ONLY**. Read section on “Belt Tracking” completely before attempting belt tracking adjustments.

 Only trained personnel shall perform maintenance functions. Before maintenance operations are performed, shut conveyor “OFF” and lock out power source to prevent unauthorized start-up. When maintenance is completed, only authorized personnel shall be permitted to start conveyor following maintenance or other emergency shut-off.





# SAFETY INFORMATION


## IMPORTANT SAFETY GUIDELINES


### **WARNING**


**WARNING:** All personnel coming in contact with this conveyor should be aware of the following safety guidelines **BEFORE USING OR WORKING AROUND CONVEYOR**. **NOTE:** ALWAYS notify Roach Manufacturing® whenever any conveyor is used in an application or condition other than was originally intended. Failure to notify Roach® may allow conveyor to be operated in a hazardous operating condition. Injuries resulting from negligence or violation of safety instructions hereby removes responsibility of product liability claims from Roach®.


 Do not operate conveyor with protective guards removed. This includes chain guards, belt guards, snub roller guards, center drive guards and any other safety guard.


 Do not walk, ride, climb, or touch moving parts on a conveyor in operation.


 Do not wear loose clothing or uncovered hair around conveyor.


 Do not work near conveyor without knowing how & where to shut power "OFF" and lock out power source.

 Do not remove jammed product with conveyor running.


 Do not replace parts or perform maintenance on conveyor, or moving conveyor parts, without first shutting "OFF" power to conveyor and locking out power source.


 Do not connect gravity to powered conveyor without safety gravity connector brackets.

 To prevent electrical shock, conveyor must be grounded, and have proper electrical connections in accordance with federal, state, and local codes.

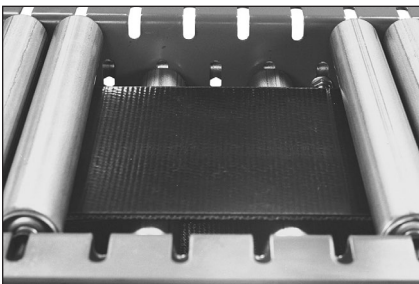
 Safety pop out rollers in conveyors installed above 7'-0" elevation must be retained by guard rail, clips, etc. Safety pop out rollers must be allowed to pop out

when conveyors are installed at or below 7'-0" elevation.

 It is the responsibility of conveyor end-user to comply with all safety standards including OSHA and other federal, state, and local codes or regulations. Install protective guarding and other related safety precautionary equipment to eliminate hazardous operating conditions which may exist when two or more vendors supply machinery for related use.

 Any violation of above safety instructions hereby removes all product liability claims from Roach Manufacturing Corporation®.

## UNDERSTANDING POP OUT ROLLERS



SLOTTED FRAME ALLOWS ROLLERS TO EASILY POP OUT (rollers removed for clarity)



WHEN GUARD RAIL IS ADDED, DO NOT COVER POP OUT SLOTS IN CONVEYOR FRAME\*

In most instances, live roller conveyor frames are equipped with slots in the frame for tread rollers. Why is this necessary? When installed below 7'-0" elevation, tread rollers must be designed to pop out of the frame to prevent injury to operator or individuals coming in contact with tread rollers. However, when installed at 7'-0" and greater elevation,

tread rollers must NOT be allowed to pop out. Individuals stationed below the conveyor could be injured by rollers that inadvertently become free from conveyor frame. Therefore, a belt driven live roller originally supplied with slotted frame and pop out rollers, must be modified if it is moved to 7'-0" or higher elevation. A special hold-down angle must be installed

**WARNING:** Belt driven live roller conveyors must have safety pop out tread rollers when installed below 7'-0" elevation. Conversely, when installed at 7'-0" or greater elevation, tread rollers must NOT be allowed to pop out of frame. Shut conveyor OFF and lock out power source until above safety considerations are completely adhered to.

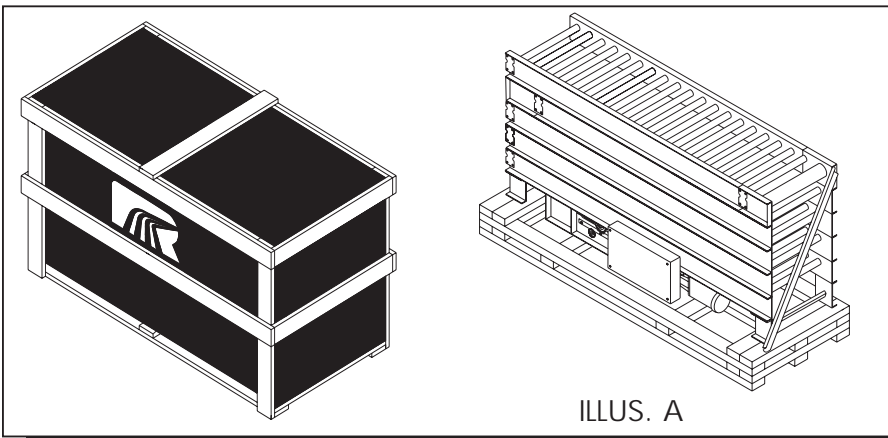
\*NOTE: Guard rail may be used to hold rollers in frame when installed at 7'-0" or higher elevations.

to eliminate pop out rollers. Also, when a live roller conveyor that does not feature pop out rollers, is used in an application below 7'-0" elevation, conveyor MUST be modified to include safety pop out rollers.

Contact Roach national sales at 870-483-7631 with conveyor serial number for additional information.



# RECEIVING AND INSPECTION SHORTAGES, DAMAGES AND RETURN AUTHORIZATIONS



ILLUS. A

NOTE: Do not return goods to factory without prior, written return authorization. Unauthorized returns are subject to refusal at factory.

Before uncrating, check the quantity of items received against bill of lading to confirm that all material has been received. Examine the condition of the equipment to determine if any damage has occurred.

Also, it is possible that some items may become separated from the original shipment. Therefore, when receiving goods,

it is imperative that the bill of lading (or, accompanying freight documentation) be checked to ensure receipt of ALL units ordered including ALL accessories.

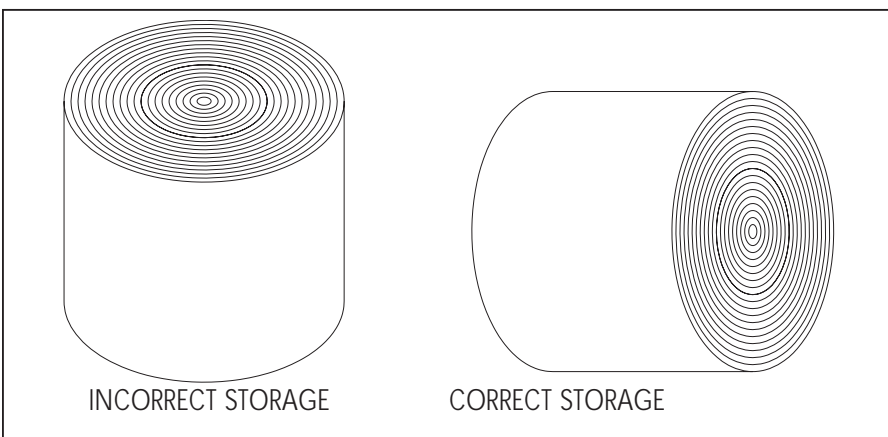
Damage and/or shortage in shipment should be reported immediately to both vendor and carrier. Obtain a signed damage report from carrier agent and send copy to vendor. Do not repair any

damage before obtaining this report.

For damaged shipments, consult factory to determine if entire shipment must be returned to factory for repair or if an immediate order should enter production to produce a new, replacement shipment.

In illustration A above, model 196VP is shown palletized for shipment.

## UNCRATING AND STORAGE



INCORRECT STORAGE

CORRECT STORAGE

NOTE: Never store belt placed directly on floor. Elevate belting to prevent contact with floor moisture.

After receipt and initial inspection is completed, carefully remove crating and look for essential components and specific accessories that may have been boxed and attached (or 'banded') to crating material. Pop out tread rollers, guard rails and hardware are often packaged and shipped in this manner. Save all hardware for subsequent use by installa-

tion personnel.

The drive section will be shipped mounted to its actual operating bed section (see illustration at top of page). Intermediate bed sections are shipped mounted on top of drive bed section with formed steel stiffener (spacer) brackets.

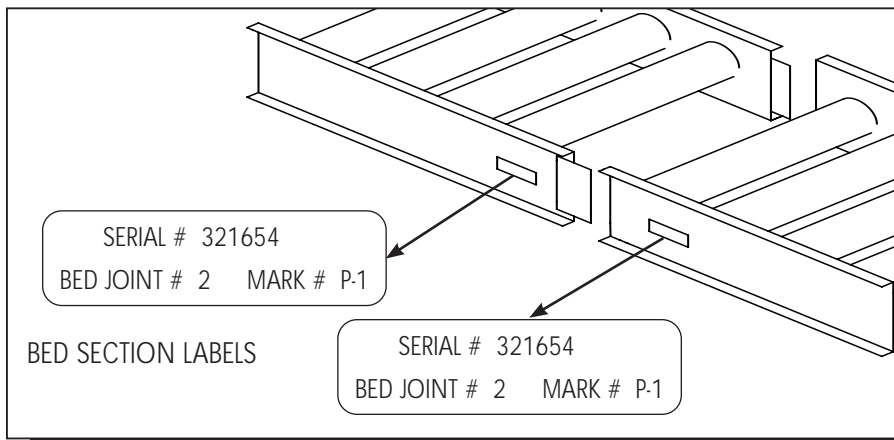
Belting must be housed in dry quarters.

Do not store belt on edge (see illustration above). Also, never store belt placed directly on floor. Elevate belting to prevent contact with floor moisture.

Some items (electric motors, gearbox, etc.) may be shipped direct from their manufacturer to final destination. Thus, the conveyor may consist of two or more separate shipments.

# GENERAL INSTALLATION INFORMATION

## COUPLINGS / ATTACHING BED SECTIONS



NOTE: It is critical for bed sections to be field assembled in proper sequence following bed section labels.

When preparing to install conveyor, first locate all component sections in the actual installation area. After uncrating, place unit bed sections conveying side up. Each bed section is marked to indicate proper sequence for mating (see illustration above for typical bed section labels).

It is critical for bed sections to be field

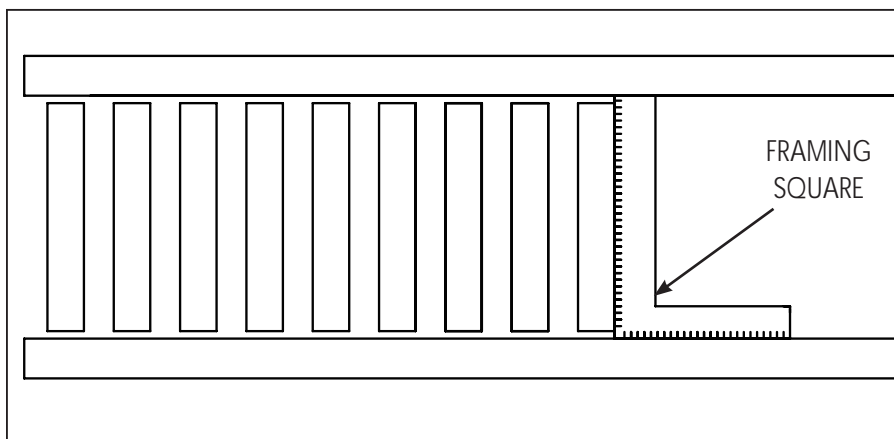
assembled in proper sequence following bed section labels. Refer to bed section drawing for location of supports and assemble as shown.

Conveyors are set up at the factory, bed section labels are applied, unit is test run and receives rigorous quality assurance inspection. At this time unit becomes field-ready. Therefore, it is critical that

field installation personnel re-assemble unit by mating beds in accordance with bed section labels (and bed section drawing).

Create a reference base line on floor by marking a chalk line along the centerline of conveyor. Follow base line when installing unit.

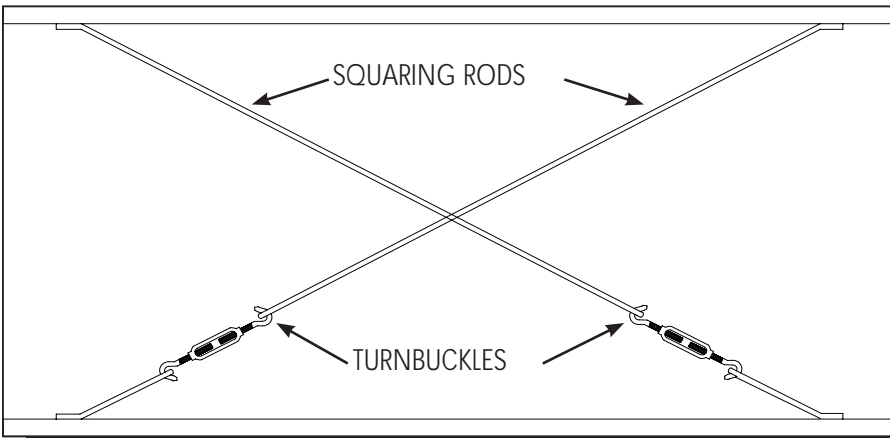
## UNIT SQUARENESS



NOTE: One of the most critical elements of proper installation is unit squareness. Check pulleys, snub and return rollers and square each with unit bed.

# GENERAL INSTALLATION INFORMATION

## SQUARING BED SECTIONS



NOTE: Squaring rods are supplied on the underneath side of bed sections and feature a turnbuckle assembly which is used to square accompanying bed sections. Adjust the turnbuckle until the frame is squared.

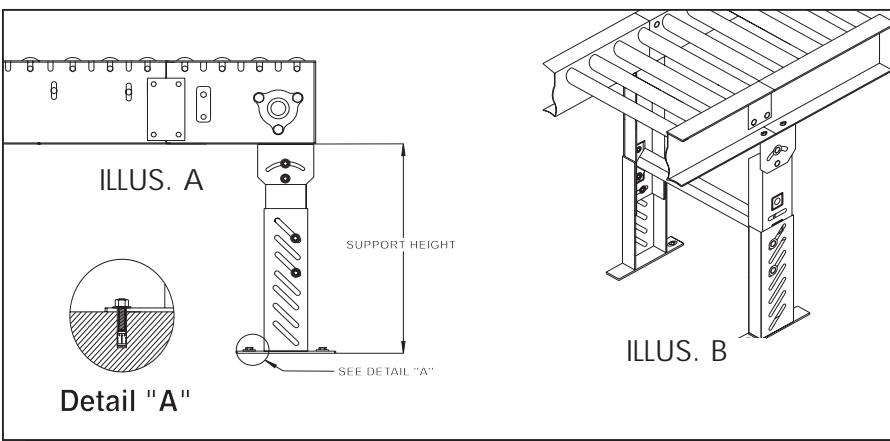
When conveyor section is determined to be out of square, adjustments must be made before proceeding to next section.

In illustration above, "x-bracing" or "squaring rods", are used to square a frame that has become "racked" or is otherwise out of square. It is common for bed sections to become racked during transit, thus requiring adjustment during

field assembly. Squaring rods are supplied on the underneath side of bed sections and feature a turnbuckle assembly which is used to square accompanying bed sections. Adjust the turnbuckle until the frame is squared. Confirm by again taking a diagonal measurement. The frame is then square when diagonal measurements from opposite sides are equal in measurement.

Next, tighten bolts in splice plates when frame is square. Finally, conveyor must be installed at level elevation across the width to prevent erratic belt tracking or to prevent package from travelling to one side of conveyor (which is especially possible on long conveyor lines when unit is not installed level across the width).

## IDENTIFYING/INSTALLING PERMANENT FLOOR SUPPORTS



**CAUTION:** Always anchor permanent supports to floor (or mounting surface). Use 3/8" x 2-1/2" (or longer) wedge anchors for permanent installation in concrete flooring.

*MINIMUM SUPPORT HEIGHT							
MEDIUM DUTY			HEAVY DUTY				
SM-1	7-1/4"	SM-7	36-1/4"	SH-1	6-1/4"	SH-7	25-3/4"
SM-2	10-1/4"	SM-8	46-1/4"	SH-2	7-3/4"	SH-8	31-3/4"
SM-3	13-1/4"	SM-9	58-1/4"	SH-3	10-3/4"	SH-9	43-3/4"
SM-4	16-1/4"	SM-10	70-1/4"	SH-4	13-3/4"	SH-10	55-3/4"
SM-5	20-1/4"	SM-11	80-1/4"	SH-5	16-3/4"	SH-11	67-3/4"
SM-6	24-1/4"	SM-12	92-1/4"	SH-6	19-3/4"	SH-12	79-3/4"

Permanent supports may be installed on conveyors at various locations. However, it is most common to use single tier permanent floor supports at each end of a powered section (see illustration A above) and where intermediate bed sections are adjoined (see illustration B above). Notice intermediate supports have two lag bolts in a diagonal pattern while end (terminal) supports have four lag bolts, one in each of the

four foot plate mounting holes. When two (or more) powered conveyors are placed end-to-end, a single tier permanent support may be used at the end junction commonly supporting both units. Check load rating of support before using this method of installation.

Adjust elevation to top of conveyor by loosening bolts in support uprights, raising

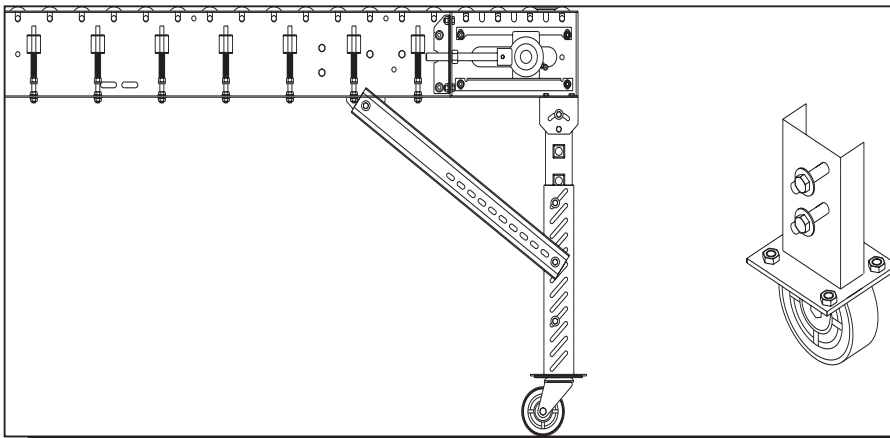
or lowering conveyor and fully tightening bolts at desired elevation. Tighten all bolts in supports before unit operation. Complete support installation by lagging support attachment plates to floor. Confirm that unit is level across width of conveyor before completing final support height adj.

\*Supports are normally shipped at minimum support height. See chart above.



# KNEE BRACES, CASTERS AND CEILING HANGERS

## INSTALLING KNEE BRACES AND CASTERS



NOTE: Install knee brace (when supplied) after final permanent support installation and elevation adjustment.

Knee braces add strength to permanent supports and stability to units in portable applications. Install knee brace (when supplied) after final permanent support installation and elevation adjustment. Its pivot bracket is bolted to underneath side of lower conveyor flange and slotted end is attached to outer side of support.

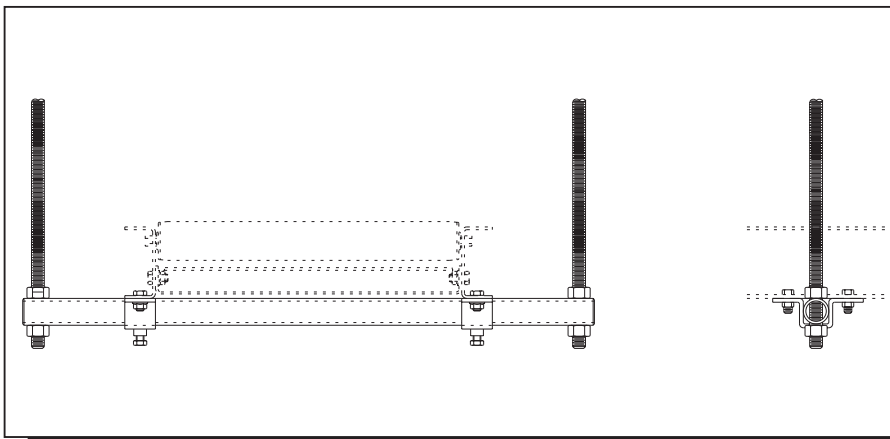
installed at the factory. However, when receiving casters direct from their supplier, final attachment to support is necessary.

A special slotted pre-punched castor attachment plate is supplied on supports designed for casters.

A standard support is not designed for attachment to casters. Field modification or replacement of outside support assemblies is required.

Castors (when supplied) are generally

## INSTALLATION OF CEILING HANGERS



**WARNING:** It is the responsibility of the customer and installation personnel to supply and install net or mesh guarding on conveyors mounted overhead to prevent product and/or debris from falling to floor in areas where required.

Ceiling hangers are frequently used in high-elevation applications for suspension from ceiling. The 5/8" diameter (#11 UNC) all threaded rod is supplied to allow infinite vertical adjustment along the length of the suspension rod (see illustration above).

Attach and firmly tighten U-shaped retainer ("hat") bracket to underneath side

of lower conveyor flange with hardware provided to hold cross pipe (1" inside diameter) against underneath side of conveyor.

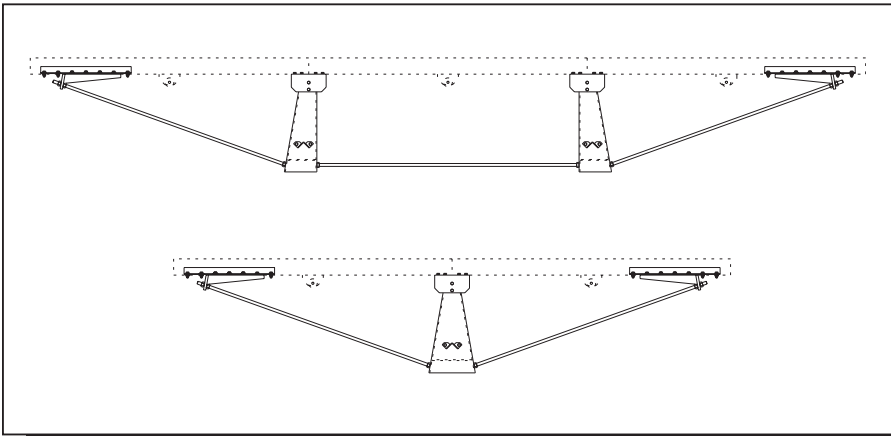
Do not tighten cross pipe locking bolts (these attach in the bottom of the U-shaped retainer bracket) until threaded suspension rods have been firmly secured to ceiling structure.

To adjust conveyor elevation, tighten or loosen lower nut and jam nut on threaded suspension rods to desired elevation. A lock washer must be used on suspension rods to maintain unit at desired elevation.

When unit is at operating elevation and unit has been levelled across bed width, tighten locking bolts in U-shaped bracket to secure position of cross pipe.

# UNDERTRUSSING AND POLYTIER SUPPORTS

## INSTALLATION OF UNDERTRUSSING



When installing some conveyors, using a permanent support or ceiling hanger is simply not practical. In this situation, three bed sections (maximum) may be joined together utilizing truss assembly, mounted underneath conveyor (see illustration above).

Adjoin beds on floor using both connector rod support assemblies and connector

rods (5/8" diameter-11UNC threaded rod). The diagonal connector rod is used not only to support the intermediate bed section joint but it is instrumental for setting and maintaining proper tension across intermediate spanned beds.

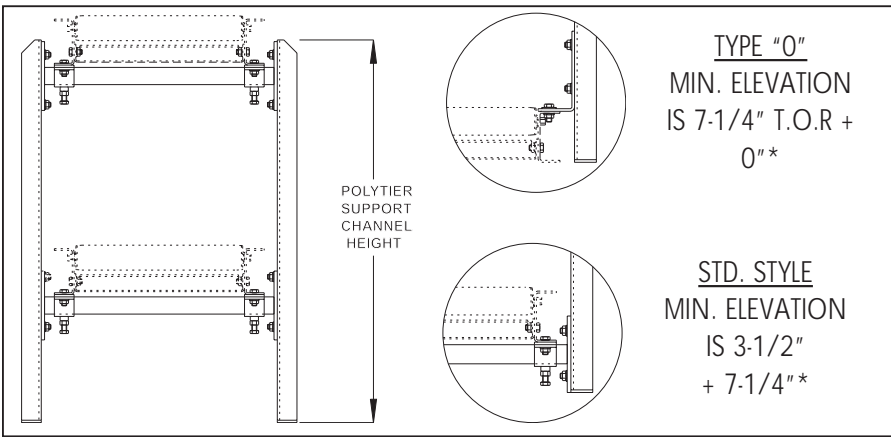
Use mechanical hoist (fork truck or other means) to raise pre-assembled bed sections (with undertrussing) to desired elevation for final installation.

**WARNING:** It is the responsibility of the customer and installation personnel to supply and install net or mesh guarding on conveyors mounted overhead to prevent product and/or debris from falling to floor in areas where required.

tion for final installation.

Use diagonal connector rods to level the undertrussed beds both along and across the conveyor. Remember that the tension must provide adequate for both dead load (conveyor weight) and product load during unit operation.

## INSTALLATION OF POLYTIER SUPPORTS



Polytier supports provide convenient installation method for two or more tiers of conveyor. To install, raise conveyor to desired elevation (approximate). Place 1" inside diameter cross pipe underneath lower conveyor flange. Attach cross pipe to upright legs. Use U-shaped retainer ("hat") bracket to connect cross pipe to lower conveyor flange. Do not tighten fully at this time.

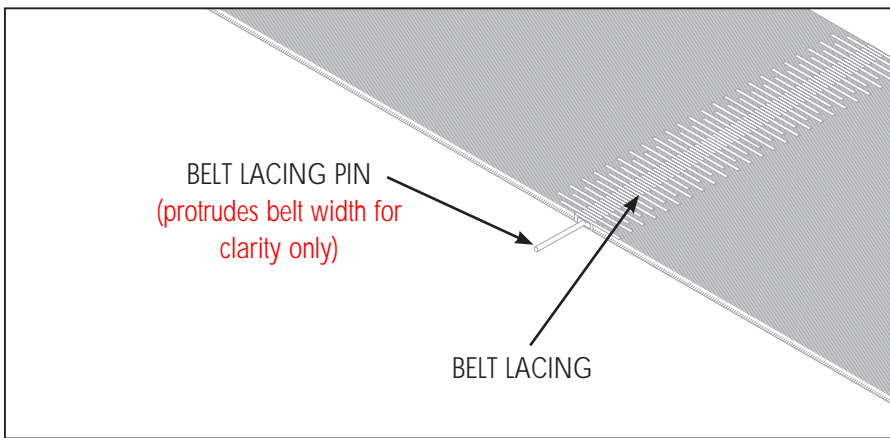
There are two styles of attachment brackets available for use with polytier supports. Minimum elevation style (see TYPE "O", illustration above) offers lowest unit elevation, 0" + frame depth utilizing L-shaped mounting bracket. Standard elevation style offers unit elevation of 3-1/2" + frame depth and includes bracket welded to cross pipe which is bolted to upright legs during installation.

NOTE: To install, raise conveyor to desired elevation, place cross pipe underneath lower conveyor flange, attach cross pipe to upright legs and use U-shaped retainer ("hat") bracket to connect cross pipe to lower conveyor flange.

POLYTIER SUPPORT CHANNEL HEIGHT					
PSM-1	23"	PSM-6	53"	PSM-11	83"
PSM-2	29"	PSM-7	59"	PSM-12	89"
PSM-3	35"	PSM-8	65"	PSM-13	95"
PSM-4	41"	PSM-9	71"	PSM-14	101"
PSM-5	47"	PSM-10	77"	PSM-15	107"

When unit is at operating elevation and unit has been checked across width for level, tighten locking bolts in U-shaped bracket. Add knee braces for unit rigidity.

\*NOTE: Overall conveyor height is dictated by type of drive assembly used-i.e. underneath, center drive, sidemount, etc.



**CAUTION:** Belt lacing must be kept in good condition for safe work environment.

Conveyor belting is cut to proper length, laced and assembled on conveyor at the factory. It is test run and inspected before it is shipped to its final destination.

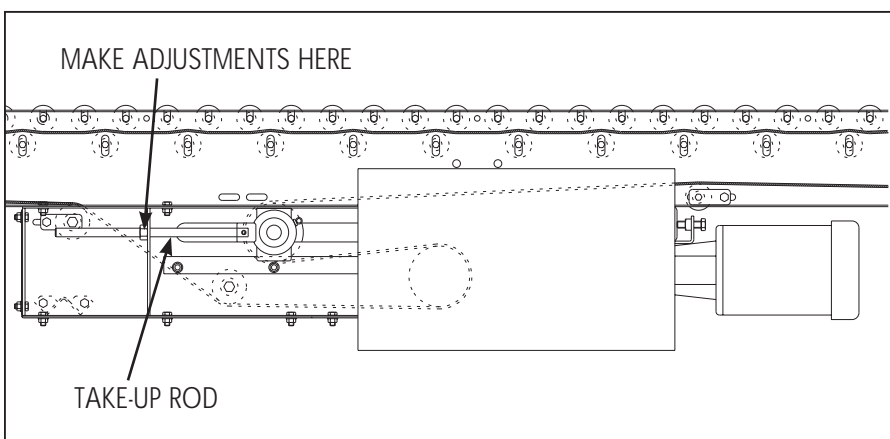
Before field installation of belting, the correct side to be placed down must be determined. VP models may be supplied with either 2-1/4" wide (PVC-150) or 6" wide PVC belting that is supplied as "COS" (cover one side, friction surface

other side). The friction surface offers decreased friction and less driving force. The friction side appears dull and grainy; the cover side darker and shiny. Most commonly on CALR and VP models, the cover side is placed down with the friction surface up which drives the tread rollers. For maximum driving friction, place cover up.

If unit is shipped "knocked down," belt

must be re-threaded on unit during installation (see opposite page). Join ends of belt as shown above with lacing pin. Loosen threaded take-up rods (if necessary) at take-up pulley equal amount on both sides and re-adjust when belt is installed keeping pulley square with conveyor bed. A belt puller can also be used to join belting.

## MAINTAINING PROPER BELT TENSION



**CAUTION:** Belt lacing must be kept in good condition for safe work environment. Also, do not operate unit with improper belt tension. Unit is subject to abnormal wear and maintenance when operated with belt incorrectly adjusted.

Maintaining proper belt tension is vital to unit operation. Enough tension should be maintained so that drive pulley does not slip under fully loaded conditions.

It is perfectly normal for a belt to stretch (in varying climatic conditions) under rated loading. Therefore, a short belt insert or "belt patch" (or patches) is provided for future removal when belting has stretched

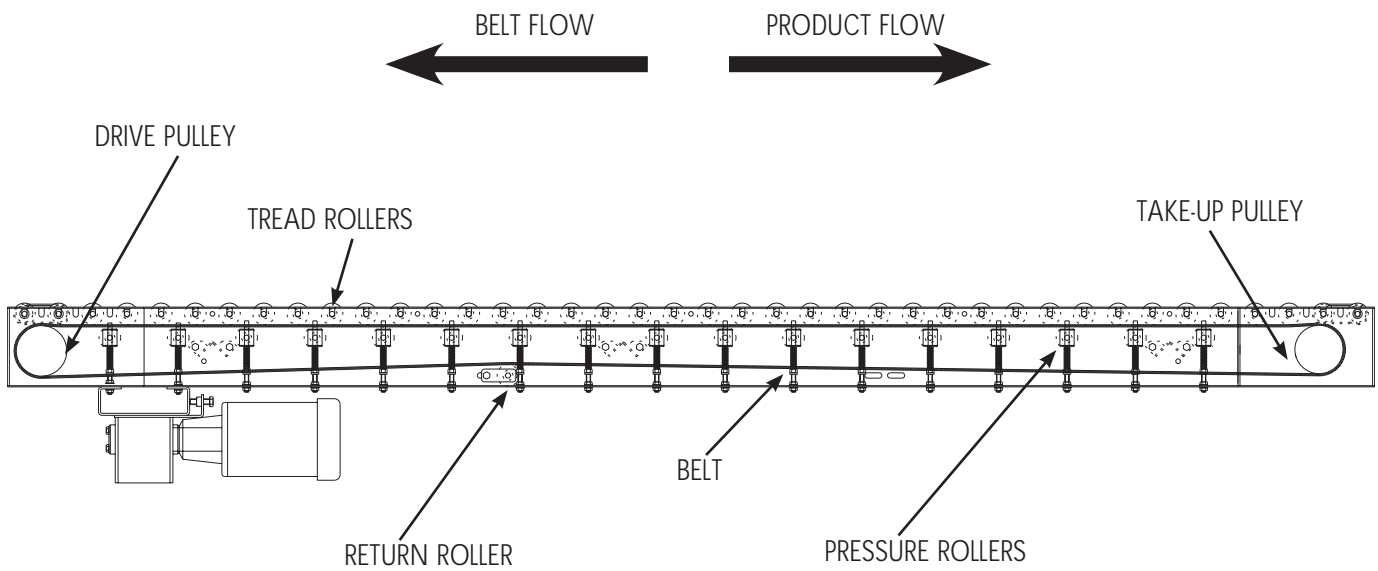
beyond means of conveyor take-up assembly. For yet additional belt take-up, the belt should be cut and re-laced to maintain proper belt tension.

To adjust conveyor take-up, adjust position of take-up rod (see illustration above) as required. Remember to equally adjust both sides to hold take-up pulley square (to maintain unit squareness for belt tracking).

Operating unit with slipping belt will decrease life of both belting and pulley lagging. Also, do not operate unit with too much tension on belt. This will decrease belt life and may harm unit drive and take-up bearings. Over tensioning belt requires additional horsepower from unit drive.

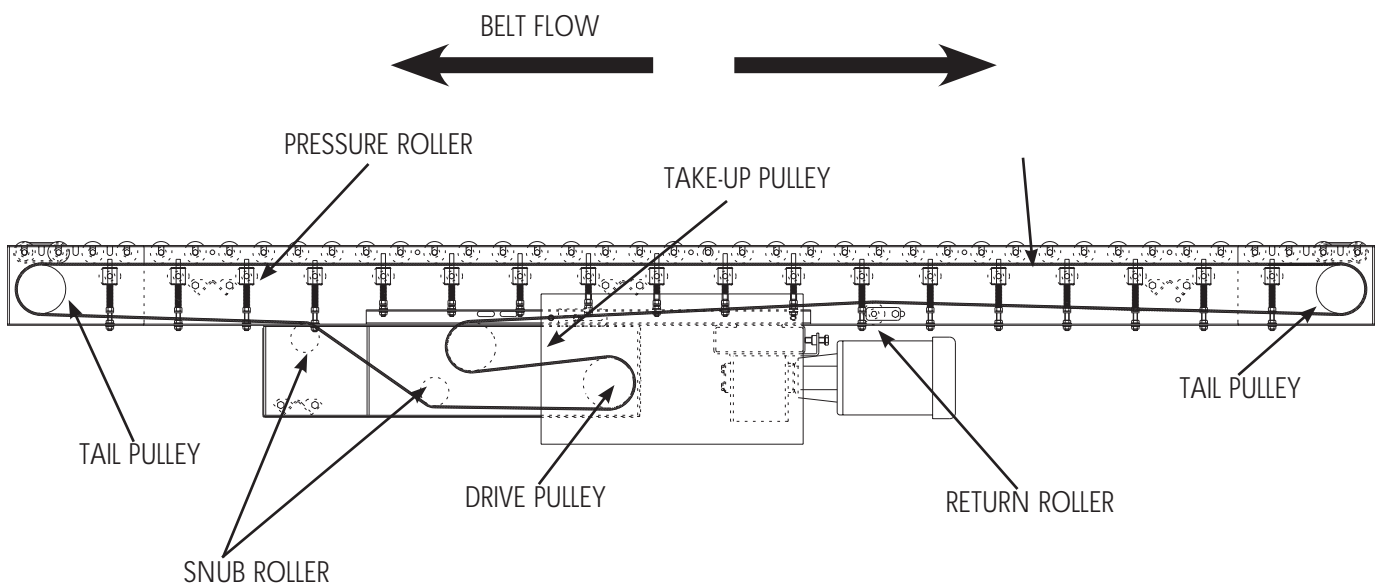


# BELT PATH ILLUSTRATION FOR UNITS WITH END DRIVE



**WARNING:** Belt driven live roller conveyors must have safety pop out tread rollers when installed below 7'-0" elevation. When installed at 7'-0" or higher elevation, tread rollers must NOT be allowed to pop out of frame.

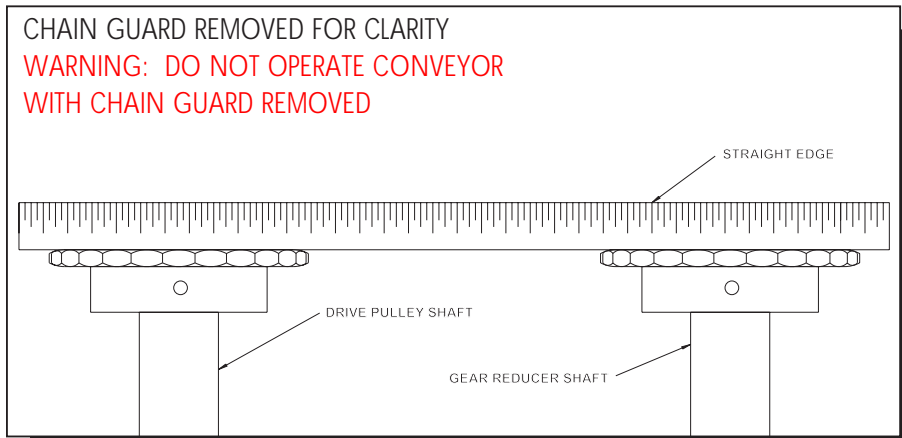
# ILLUSTRATION FOR UNITS WITH CENTER DRIVE



**WARNING:** Belt driven live roller conveyors must have safety pop out tread rollers when installed below 7'-0" elevation. When installed at 7'-0" or higher elevation, tread rollers must NOT be allowed to pop out of frame.

# START-UP PROCEDURES

## DRIVE CHAIN AND SPROCKET ALIGNMENT



**WARNING:** To check drive sprocket alignment, it is imperative that conveyor is shut "OFF" and power source is locked out before any adjustments are attempted.

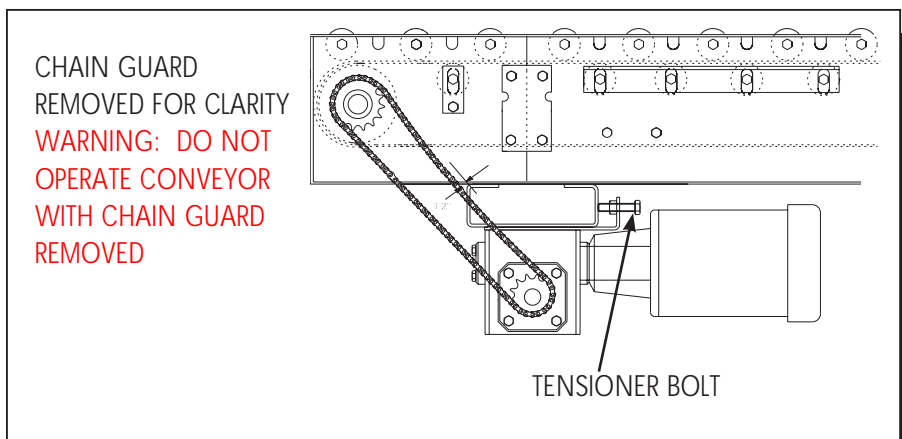
Set up and maintenance of drive sprocket and drive chain alignment is critical. A periodic visual inspection is recommended to confirm alignment of drive components (which includes both drive sprockets and drive chain). Should set screws become loose, drive sprockets are subject to excessive wear and ultimately, to untimely replacement.

To check drive sprocket alignment, it is imperative that conveyor is shut "OFF" and power source is locked out before any adjustments are attempted. Remove chain guard cover and place straight-edge (see illustration above) across face of both drive sprockets. If re-alignment is necessary, loosen set screws and adjust drive

sprockets as required. Remember to securely tighten set screws when alignment is complete.

Before replacing chain guard cover, check drive chain tension as described in following section, "Drive Chain and Sprocket Tension."

## DRIVE CHAIN AND SPROCKET TENSION



**WARNING:** To check drive sprocket tension, shut "OFF" and lock out power source before any adjustments are attempted.

Maintaining proper chain tension is especially important. Again, a periodic visual inspection is recommended to ensure chain tension within a pre-determined operating range.

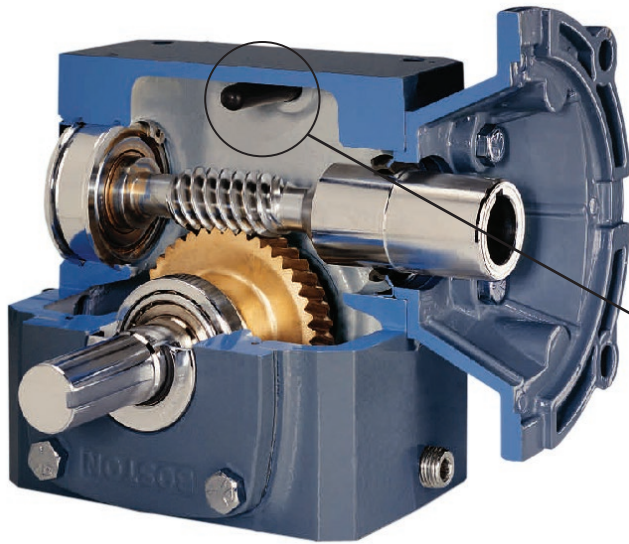
Remember, before any adjustments are attempted, conveyor must be shut "OFF" and power source locked out.

Before replacing chain guard cover, check to see if drive chain is operating within 1/2" range (see above illustration). If unit is out of tolerance, adjustment is necessary.

To adjust drive chain tension, tensioner bolt located on reducer push plate should be tightened (rotate clockwise) if chain tension is loose. Tighten until proper operating range is achieved. If chain tension is too

tight, loosen tensioner bolt (rotate counter-clockwise) as required. When adjustment is complete replace chain guard cover.

**WARNING:** Do not operate unit until chain guard cover is replaced. Serious operator or other personal injury could result if protective guarding is not replaced.



### NOTE

The gear reducer is supplied with a "PosiVent®". No vent plugs are required.

PosiVent Unique design incorporates a single seam construction. Factory filled with synthetic lubrication for universal mounting. Lubed for life, no oil changes are required.

To expedite the installation and start-up process, all gear reducers are shipped filled with oil. The reducers are sealed and lubed for life and require no oil changes.

## PREPARING FOR INITIAL START-UP



### **⚠ DANGER**

WARN ALL PERSONNEL TO KEEP CLEAR OF CONVEYOR DURING UNIT START-UP

Electrical controls must be designed by a qualified electrical engineer to ensure that appropriate safety features (emergency stops, pull cords, switches, etc.) are installed on unit for safe operation. Before conveyor start-up, all operators and other personnel coming in contact with unit must be properly trained and must have read accompanying Tech Handbook.

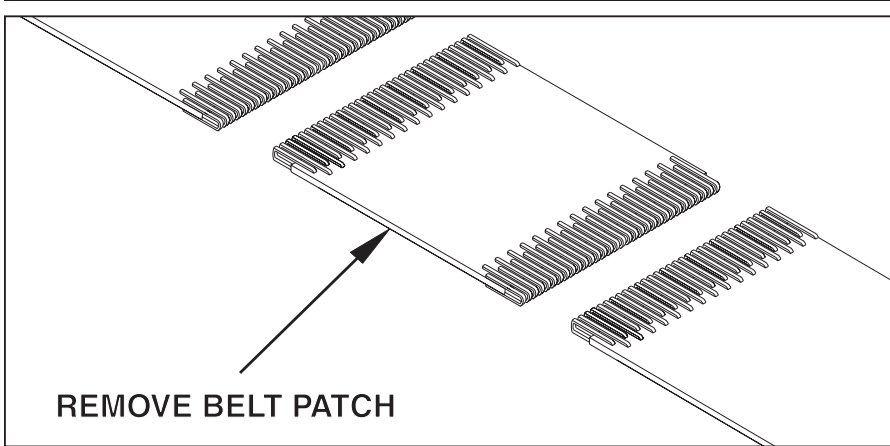
Before conveyor start-up, all operators and other personnel coming in contact with unit must be properly trained and must have read accompanying Tech Handbook.

Provisions must be in order to instruct all personnel coming in contact with conveyor on the location of emergency stops, pull cords, etc.

A routine maintenance program should be implemented before unit is placed into operation so that fundamental unit components are attended to. This maintenance program should include an inspection to ensure that any dangerous or hazardous operating conditions are noted and IMMEDIATELY corrected, as well as including electrical and mechanical unit inspections and corrections.

Finally, when conveyor is initially started, an immediate visual inspection should include motor, gear reducer, belt tracking (discussed in following section under "Belt Tracking") and related adjustments noted in handbook for unit/component corrections.





**CAUTION:** Upon initial operation the belt will stretch. To maintain proper belt tension, adjustment of the take-up pulley or removal of belt patch will be required. **ONLY** trained personnel should make belt tracking adjustments.

Upon initial use belting will stretch after a few days of operation. Remember that maintaining proper belt tension is a crucial element in belt tracking. Therefore, this stretching of a belt when placed into operation may affect its ability to track. Adjustment of the take-up pulley will likely adequately compensate for initial stretch. However, depending on the overall unit

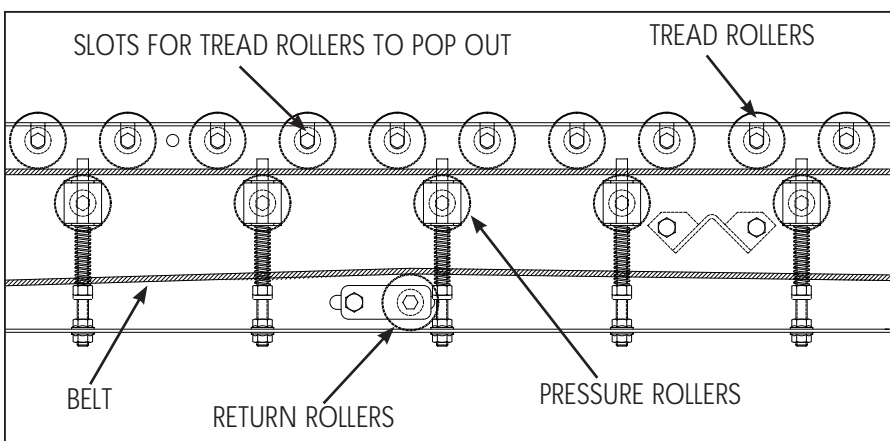
length, removal of a belt patch may be necessary to correct.

The return direction of the belt must clear supports, ceiling hangers, floor openings, etc. Dragging on such components will contribute to belt tracking problems and is certain to damage belting at extended intervals. Also, do not allow belt to rub against conveyor side frame.

In a reversible application, a belt that runs off to one side in one direction will likely run off to the other side when operated in the opposite direction.

Belt must be tracked in both unloaded and loaded situations. See following step for installation of tread rollers to track belt in loaded situation.

## POP OUT ROLLERS & INSTALLATION OF TREAD ROLLERS



**CAUTION:** **ONLY** trained personnel should make belt tracking adjustments. Shut unit "OFF" and lock out power source before attempting adjustments in belt tracking.

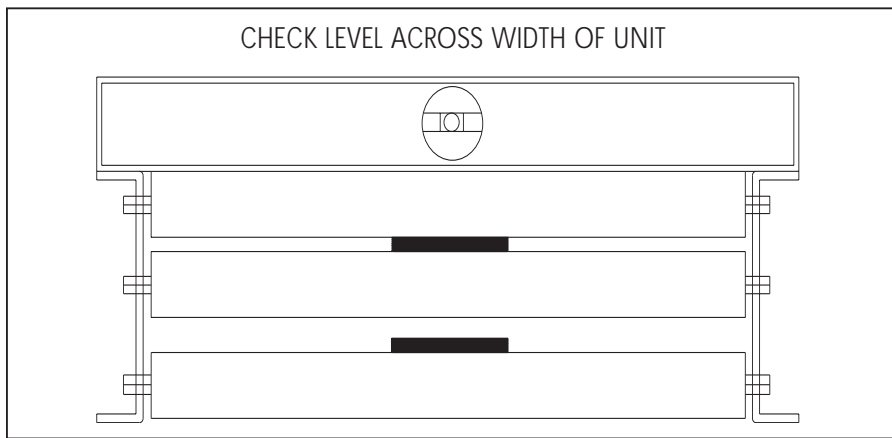
**WARNING:** Belt driven live roller conveyors must have safety pop out tread rollers when installed below 7'-0" elevation. Conversely, when installed at 7'-0" elevation or greater, tread rollers must **NOT** be allowed to pop out of frame.

In most instances, live roller conveyor frames are equipped with slots in the frame for tread rollers. When installed below 7'-0" elevation, tread rollers will pop out of the frame to prevent injury to operator or individuals coming in contact with tread rollers. Live rollers installed at 7'-0" or higher elevations, require tread rollers to be installed in a NON pop out

design to prevent rollers from popping out and causing injury to individuals stationed below the conveyor. Therefore, the frame should be punched rather than slotted OR a hold down angle must be used to eliminate pop out rollers in high elevation applications. (See "UNDERSTANDING POP OUT ROLLERS", page 4).

Remove tread rollers from shipping crate and install in conveyor. Once installed, confirm that belt will track under loaded conditions. If belt does not track after tread rollers are installed, further adjustments will be required. Confirm that return rollers, beds and all pulleys are squared. Skewing of return rollers in small increments may complete belt tracking.

# BELT TRACKING ERRATIC TRACKING AT START-UP



**CAUTION:** Upon start-up, if belt tracks to one side of unit, turn unit "OFF", lock out power source and confirm that conveyor is square and that all prime tracking components are square with bed. Belt tracking adjustments should be performed by trained personnel ONLY.

Improper tracking of conveyor belting should be considered a "systems" problem rather than solely a deficiency in the belt. To explain, a belt is tracked with adjustments made to the conveyor rather than just the belting.

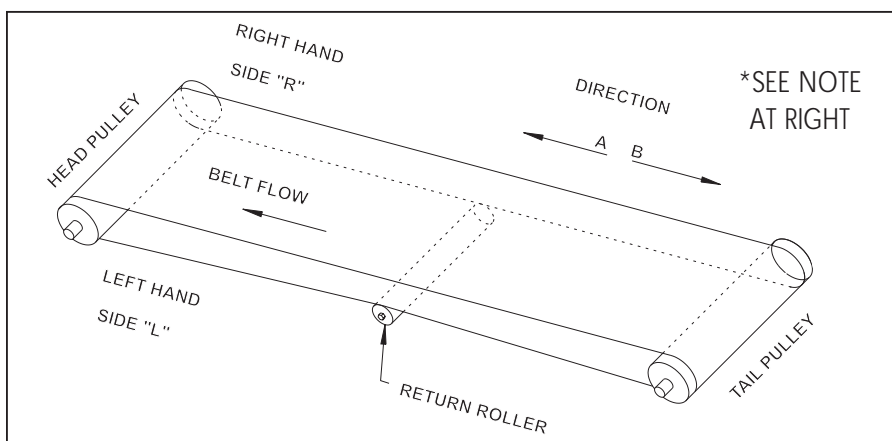
Upon start-up, if belt tracks to one side of unit, turn unit "OFF", lock out power source and confirm that conveyor is

square. All prime tracking components must be square with bed including drive pulley, tail pulley, snub roller and return rollers. Both sides of take-up should be adjusted exactly the same amount. The conveyor should be level across the width of the unit. Confirm that the belt has been properly threaded (see "Belt Path" section) and that belt lacing is square

with the belt edges. Make adjustments as necessary; however, all adjustments should be made in small increments.

Start conveyor again and operate for at least ten minutes once initial phase of adjustments are complete. If belt continues to track erratically, turn unit "OFF" and proceed to following section.

## ADVANCED TRACKING ADJUSTMENTS



**CAUTION:** Belt tracking adjustments should be performed by trained personnel ONLY. Read section on "Belt Tracking" completely before attempting belt tracking adjustments.

\*NOTE: When making adjustments in direction "A" or direction "B", component must pivot from side "L" with actual component movement on side "R".

When adjustments noted in previous sections have been completed and belt continues to track erratically, a final series of tracking adjustments are necessary.

The following adjustments will be made referring to the direction of belt flow and not the product flow of the conveyor.

If belt tracks toward side "R" (see illustration above), skew return rollers in direc-

tion "B" to shift belting toward side "L". If belt tracks toward side "L", skew return rollers in direction "A" to shift belting toward side "R".

Skewing head pulley (pulley at unit discharge) in direction "A" moves belt toward side "L". Skewing head pulley in direction "B" moves belt toward side "R".

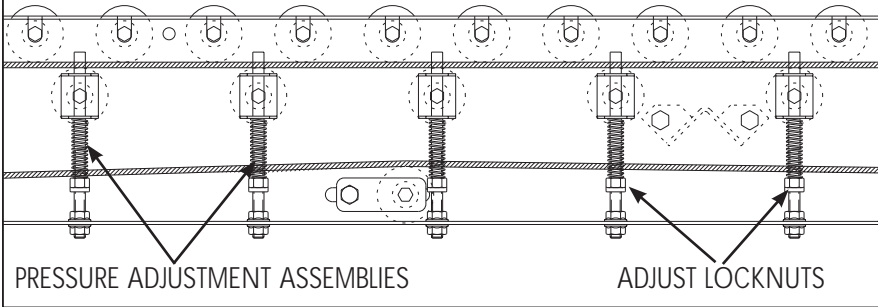
As a rule of thumb, do not use drive and take-up pulley for belt tracking since this will overly increase belt tension. When adjusting take-up pulley, adjust both sides an equal amount.

As a last resort, shift the tail pulley in direction "B" to move belting toward side "L"; shift head pulley in direction "A" to move belting toward side "L".

# SETTING PRESSURE ROLLER TENSION

## MODEL 138VP / 196VP PRESSURE ROLLER ADJUSTMENT

TO ADJUST, LOOSEN LOCKNUTS & MINIMIZE TREAD ROLLER TENSION. PLACE HEAVIEST PACKAGE AT INFEED AND TIGHTEN LOCKNUTS UNTIL PKG. BEGINS TO MOVE.



NOTE: Do not apply too much pressure to tread rollers. If too much tension is applied, tread rollers may have tendency to raise out of slotted frame.

Model VP belt driven live roller conveyors are set up and operational at the factory prior to shipment. The driving friction applied by pressure rollers is pre-set by Roach assembly personnel at the factory. However, depending on the specific application, field readjustment may be required.

The illustration above shows pressure adjustment assemblies which are located on outside of conveyor side frame-one side only on model VP. These pressure adjustment assemblies are used to apply tension to drive belt and ultimately, to tread rollers. To adjust, completely minimize tread roller pressure by loosening locknuts (see above illustration) which decreases drive tension. Place heaviest package conveyed at infeed of conveyor.

Begin adjusting locknuts (turn counter-clockwise) to increase drive tension to drive belt and tread rollers until package begins to move. Continue to discharge end of conveyor, adjusting each pressure roller until package begins to move. Conveyor should be adjusted so that minimum driving force required to convey heaviest package is applied.



# MAINTENANCE SAFETY PRECAUTIONS BEFORE PERFORMING MAINTENANCE

**CAUTION:** Only trained personnel shall perform maintenance functions. Before maintenance operations are performed, conveyor must be shut "OFF" and disconnects locked in the "OFF" position to prevent unit from unauthorized start-up.

One of the most important guidelines for maximizing conveyor operation and personnel safety is to implement a regular maintenance schedule and train personnel on the appropriate needs of the specific unit.

Only trained personnel shall perform maintenance functions. Before maintenance operations are performed, conveyor must be shut "OFF" and disconnects locked in the "OFF" position to prevent unit from unauthorized start-up during maintenance. All personnel should be informed of the safety procedures associated with unit maintenance and performance.

Do not perform any work on conveyors or conveyor system

while in operation unless it is impossible to otherwise conduct adjustment, lubrication or other maintenance function. Only experienced, trained personnel possessing advanced hazards-training should attempt such critical operations.

## MAINTENANCE AND FOLLOW-UP DETAILS

**CAUTION:** Only trained personnel shall perform maintenance functions. When maintenance is completed, only authorized personnel shall be permitted to start conveyor following maintenance or other emergency shut-off.

While performing maintenance do not wear loose clothing. Immediately report any hazardous conditions-sharp edges, pinch (or nip) points or other conditions that may result when several manufacturers supply machinery which may create operating hazards.

When using mechanical aids such as hoists, cables, or cranes exercise extreme caution to prevent damage to conveyors or other integrated machinery which may create a working hazard when maintenance is completed and units are in operation.

Clean up any spilled lubricants or other materials used in the maintenance process or those which may be deposited during unit operation. Eliminating poor housekeeping practices increases unit efficiency while creating safer personnel working conditions.

After maintenance, conduct visual inspection to ensure that all safety devices and guards have been replaced. Confirm that all

units are clear of tools, debris or other items. Before starting conveyor, check condition of unit caution labels (see "CAUTION LABELS" at front of handbook). If labels have been destroyed or are not clearly legible, call 870.483.7631 to receive replacement labels. Placement of caution labels is critical to avoid unauthorized unit operation which may result in hazardous working conditions for all related personnel coming in contact with conveyor.

Warn personnel that conveyor is being prepared for start-up and to stay clear of unit. Do not start conveyor until all personnel are clear. When maintenance is completed, only authorized personnel shall be permitted to start conveyor following maintenance or other emergency shut-off.

# MAINTENANCE AND LUBRICATION

## MAINTENANCE SCHEDULES

MODEL NO. \_\_\_\_\_

WEEKLY RECOMMENDED MAINTENANCE SCHEDULE*	
COMPONENT	DETAIL OF MAINTENANCE
Belting	Inspect belt tracking.
Pillow Block/Flange Bearings	Lubricate in dirty, dusty or moist/wet conditions.
Unit Safety Check	Confirm placement of all guards, pop-out rollers, warning labels & check for loose bolts, nip points & other hazards.

MONTHLY RECOMMENDED MAINTENANCE SCHEDULE*	
COMPONENT	DETAIL OF MAINTENANCE
Gear Reducer	Check for leaks.
Belting	Check for proper operating tension & laced connections
V-Belt Drive Belt	Check for proper operating tension & overall wear.
Drive Sheaves	Check & re-tighten set screws & check for overall wear.
Pillow Block / Flange Bearings	Lubricate (normal conditions).
Drive Chain	Check for proper operating tension & overall wear & lubricate.
Drive Sprockets	Check for overall wear & re-tighten set screws.

PERIODIC RECOMMENDED MAINTENANCE SCHEDULE*	
COMPONENT	DETAIL OF MAINTENANCE
Gear Reducer	Check for leaks.
Drive Chain	Clean (brush in solvent) & re-lubricate by applying lubricant to inside of chain with brush or spout can at 2000 hour intervals.
Motor	Check & clear motor ventilation openings at 500 hour intervals Check miscellaneous operating conditions (normal heat & noise).

\*All charts are for guidelines in normal operating or 'as noted' conditions. Severe applications may warrant additional maintenance.

# MAINTENANCE AND LUBRICATION

## RECOMMENDED LUBRICANTS

MISC. LUBRICANTS	
LUBRICANT	BRAND/DESCRIPTION
General Purpose Grease (For -30°F to 300°F operation)*	Shell Dolium R (Shell Oil Co.) (or Suitable equivalent)
For extreme Temperature Operation (-90°F to 350°F operation)*	Mobiltemp SHC-32 (Mobil Oil Corp.) (or suitable equivalent)
Washdown Application* (-30°F to 225°F operation) (May require special consideration -- consult factory)	Shell Alvania No. 3 (Shell Oil Co.) (or suitable equivalent)
General Purpose Oil	SAE 10; SAE 20 or SAE 30

\*NOTE: Temperatures listed indicate the nominal operational temperature for the specific lubricant listed. This does not imply that the bearing housing, seals or any other conveyor unit component is rated to operate in this specific temperature range or environment. 250°F is the maximum operating temperature for standard bearing lubricants and bearing components. Although various lubricants may enhance bearing operation, special-order bearings may be required to achieve optimal bearing performance. For additional information, consult factory.



# TROUBLE SHOOTING AND REPLACEMENT PARTS

## TROUBLE SHOOTING / SERIAL PLATE

TROUBLE SHOOTING		
TROUBLE	PROBABLE CAUSE	REMEDY
Motor & gear reducer running excessively hot, repeated stalling or hard to start	A. Drag on conveyor B. Frozen sprocket C. Frozen roller D. Overload E. Electrical	A. Inspect entire conveyor for obstruction causing drag on chain. B. Check and inspect all sprockets and bearings. Replace sprockets failing to rotate or that are difficult to rotate. C. Check all rollers for rotation. D. Reduce cause and/or increase motor horsepower. E. Check wiring and circuits, take ampere reading, replace motor if necessary.
Motor & gear reducer makes excessive noise	A. Damaged gears B. Faulty bearing	A. Replace unit. B. Replace bearing.
Drive chain, conveying chain or sprockets experience excessive wear	A. Excessive chain tension B. Sprockets misaligned C. Chain not lubricated D. Damaged sprocket or chain E. Misalignment of chain guard F. Dirty chain	A. Reduce chain tension. B. Realign with straight edge across sprocket faces. C. Lubricate chain with approved lubricant, wipe away excess lubricant. D. Replace damaged component. E. Adjust chain guard assembly as necessary. F. Clean thoroughly and lubricate with approved lubricant.
Drive chain, conveying chain or sprockets make excessive noise	A. Insufficient chain tension B. Chain not adequately lubricated C. Sprockets misaligned	A. Adjust chain tension. B. Lubricate chain with approved lubricant, wipe away excess lubricant. C. Realign sprockets with straight edge across sprocket faces.
Pulsating chain	A. Insufficient chain tension B. Misalignment of chain guard C. Overload	A. Adjust chain tension. B. Adjust chain guard assembly as necessary. C. Inspect for obstruction to or drag on conveyor.
Broken chain	A. Frozen bearing or sprocket shaft B. Worn or damaged chain C. Obstructed or jam	A. Inspect for damaged bearings, replace if necessary. Replace links as required. B. Replace chain as required. C. Remove obstruction to clear jam.
Sprocket loose on shaft	A. Loose set screws B. Worn or damaged key	A. Realign sprockets with straight edge and tighten set screws. B. Replace with new key.
Excessive slack in chain	A. Normal wear	A. Expect rapid chain growth in first two weeks of operation. Adjust chain tension.

### ORDERING REPLACEMENT PARTS



To order any replacement parts or when calling for assistance with any powered conveyor, ALWAYS provide the unit serial number. Shown at actual size, this aluminum plate is placed on the conveyor frame near the location of the drive assembly. To order replacement parts or add-on components, contact the Roach distributor who originally furnished the unit if possible. If this is not possible, contact the National Sales Office at 870-483-7631 for the name of the authorized Roach distributor in your area. Have unit model number and serial number BEFORE calling. Refer to unit drawings (in rear section of handbook) for part numbers if ordering replacement parts.



# MODEL 138VP

## PARTS LIST FOR UNIT WITH 4" AND 8" END DRIVE

ITEM #	DESCRIPTION	ITEM #	DESCRIPTION
1	138VPI Intermediate bed section	20	1/8" dia. 11-1/4" long pyrrathane round belt
2	138 roller adjustment bracket	20	1/8" dia 5-1/4" long pyrrathane round belt
3	Bolt-in coupling	20	1/8" dia. 8-1/4" long pyrrathane round belt
4	Frame cross brace	21	Snub roller adjustment bracket (not shown)
5	Bed spacer rod (not shown)	22	251S roller (not shown)
6	138G roller	23	Snub roller belt guard (not shown)
7	Left hand side channel	24	4" end take-up assembly
8	Right and side channel (not shown)	25	4" take-up pulley
9	Bed jt. carrier channel (1-1/2" RC, not shown)	26	4" take-up plate
10	Carrier channel	27	Take-up bearing slide angle
11	Belt guide (used w/2-1/4" wide belt only)	28	Take-up bearing guide
12	Compression spring	29	Take-up bearing assembly (left hand)
13	3/8" x 6-1/4" long stud bolt	30	Take-up bearing assembly (right hand)
14	4" end drive assembly	31	138G grooved roller
15	4" drive pulley	32	1/8" dia. 11-1/4" long pyrrathane round belt
16	4" end drive plate (left hand)	32	1/8" dia. 5-1/4" long pyrrathane round belt
17	4" end drive plate (right hand)	32	1/8" dia. 8-1/4" long pyrrathane round belt
18	3 hole flange bearing w/1-3/16" bore	33	2-1/4" wide PVC-150 belting
19	138G grooved roller	33	6" wide PVC-120 belting
20	1/8" dia. 11-1/4" long pyrrathane round belt	34	Reducer push plate assembly
20	1/8" dia. 5-1/4" long pyrrathane round belt	35	Underneath motor base plate
20	1/8" dia. 8-1/4" long pyrrathane round belt	36	Chain guard angle mount
14	8" end drive assembly	37	End drive chain guard assembly
15	8" drive pulley	38	#50 (thru 1-1/2 HP) or #60 roller chain
16	8" end drive plate (left hand)	39	Gear reducer drive sprocket
17	8" end drive plate (right hand)	40	Pulley drive sprocket
18	4 hole flange bearing w/1-7/16" bore	41	Gear reducer
19	138G grooved roller	42	Motor

Specify Unit Serial Number when ordering replacement parts to ensure proper allocation of components.

Recommended Spare Parts are shown in red. Charted are item no. and part description

When ordering use example below.

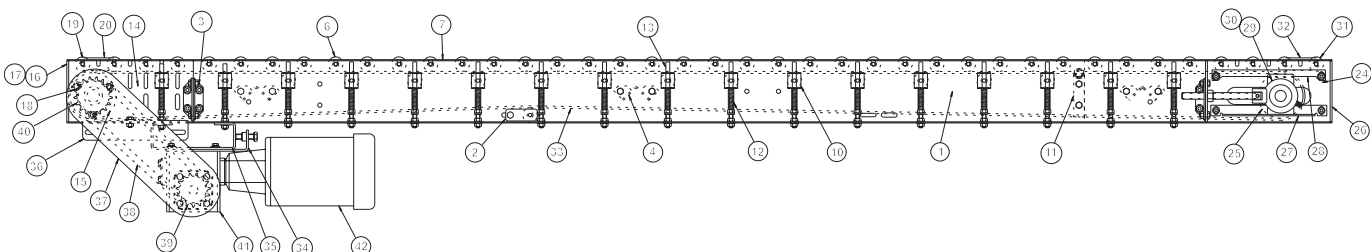
Example: Need a replacement motor for 196VP Center Drive  
 Part No: SN 123456 - 43 - Motor



**ROACH CONVEYORS**  
 808 HIGHWAY 463  
 TRUMANN, AR 72472  
 TEL. 870-483-7631

SERIAL NO.      123456

**WARNING:** When installing below 7'-0" elevation, tread rollers must be designed to pop out.  
 When installing at 7'-0" or higher elevation, tread rollers must NOT be allowed to pop out.



MODEL 138VP WITH 4" END DRIVE SHOWN IN DRAWING

# MODEL 138VP

## PARTS LIST FOR UNIT WITH 4" AND 8" CENTER DRIVE

ITEM #	DESCRIPTION	ITEM #	DESCRIPTION
1	138VPI intermediate bed section	17	8" center drive plate (left hand)
2	138 roller adjustment bracket	18	8" center drive plate (right hand)
3	Bolt-in butt coupling	19	8" center drive belt guard
4	Frame cross brace	20	8" center drive belt guard
5	Bed spacer rob (not shown)	21	Center drive take-up bearing guide
6	138G roller	22	Take-up bearing assembly
7	Left hand side channel	23	4 hole flange bearing w/1-7/16" bore
8	Right hand side channel (not shown)	24	251S roller
9	Bed jt. Carrie channel (1-1/2" RC, not shown)	25	Snub roller adjustment bracket
10	Carrier channel	26	Carrie stud spacer
11	Belt guide (used w/2-1/4" wide belt only)	27	Modified compression spring
12	Compression spring	28	3/8" x 4-1/2" Long stud bolt
13	3/8" x 6-1/4" long stud bolt	29	4" fixed end assembly
14	4" center drive assembly	30	4" fixed end pulley
15	4" drive pulley	31	4" fixed end plate
16	4" take-up pulley	32	138G grooved roller
17	4" center drive plate (left hand)	33	3 hole flange bearing w/1-3/16" bore
18	4" center drive plate (right hand)	34	1/8" dia. 11-1/4" long pyrrathane round belt
19	4" center drive belt guard	34	1/8" dia. 5-1/4" long pyrrathane round belt
20	4" center drive belt guard	34	1/8" dia. 8-1/4" long pyrrathane round belt
21	Center drive take-up bearing guide	35	2-1/4" wide PVC-150 belting
22	Take-up bearing assembly	35	6" wide PVC-120 belting
23	3 hole flange bearing w/1-3/16" bore	36	Reducer push plate assembly
24	251S roller	37	Underneath motor base plate
25	Snub roller adjustment bracket	38	Chain guard angle mount
26	Carrier stud spacer	39	Center drive chain guard assembly
27	Modified compression spring	40	#50 (thru 1-1/2 HP) or #60 roller chain
28	3/8" x 4-1/2" long bolt	41	Gear reducer drive sprocket
14	8" center drive assembly	42	Pulley drive sprocket
15	8" drive pulley	43	Gear reducer
16	4" take-up pulley	44	Motor

Specify Unit Serial Number when ordering replacement parts to ensure proper allocation of components.

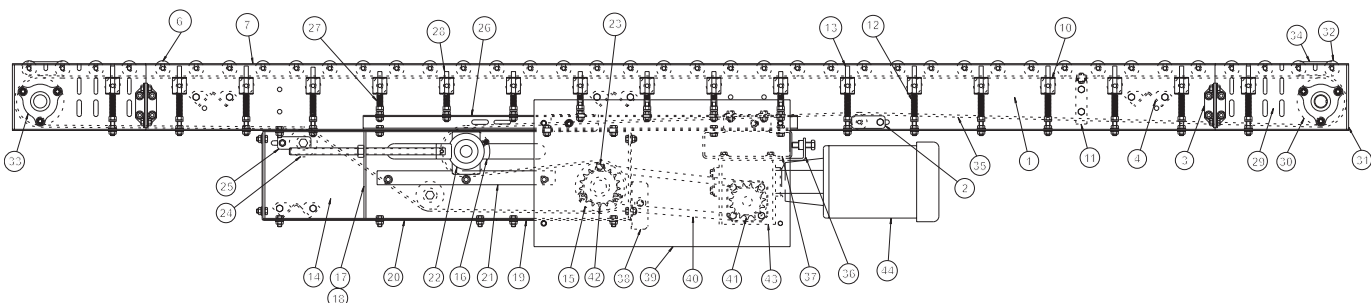
Recommended Spare Parts are shown in red. Charted are item no. and part description

When ordering use example below.

Example: Need a replacement motor for 196VP Center Drive  
 Part No: SN 123456 - 43 - Motor



**WARNING:** When installing below 7'-0" elevation, tread rollers must be designed to pop out.  
 When installing at 7'-0" or higher elevation, tread rollers must NOT be allowed to pop out.



MODEL 138VP WITH 4" CENTER DRIVE SHOWN IN DRAWING

# MODEL 138VP

## PARTS LIST FOR UNIT WITH 4" AND 8" END SIDE MOUNT DRIVE

ITEM #	DESCRIPTION	ITEM #	DESCRIPTION
1	138VPI Intermediate bed section	20	1/8" dia. 11-1/4" long pyrathane round belt
2	138 roller adjustment bracket	20	1/8" dia 5-1/4" long pyrathane round belt
3	Bolt-in coupling	20	1/8" dia. 8-1/4" long pyrathane round belt
4	Frame cross brace	21	Snub roller adjustment bracket (not shown)
5	Bed spacer rod (not shown)	22	251S roller (not shown)
6	138G roller	23	Snub roller belt guard (not shown)
7	Left hand side channel	24	4" end take-up assembly
8	Right and side channel (not shown)	25	4" take-up pulley
9	Bed jt. carrier channel (1-1/2" RC, not shown)	26	4" take-up plate
10	Carrier channel	27	Take-up bearing slide angle
11	Belt guide (used w/2-1/4" wide belt only)	28	Take-up bearing guide
12	Compression spring	29	Take-up bearing assembly (left hand)
13	3/8" x 6-1/4" long stud bolt	30	Take-up bearing assembly (right hand)
14	4" end drive assembly	31	138G grooved roller
15	4" drive pulley	32	1/8" dia. 11-1/4" long pyrathane round belt
16	4" end drive plate (left hand)	32	1/8" dia. 5-1/4" long pyrathane round belt
17	4" end drive plate (right hand)	32	1/8" dia. 8-1/4" long pyrathane round belt
18	3 hole flange bearing w/1-3/16" bore	33	2-1/4" wide PVC-150 belting
19	138G grooved roller	33	6" wide PVC-120 belting
20	1/8" dia. 11-1/4" long pyrathane round belt	34	Reducer push plate assembly
20	1/8" dia. 5-1/4" long pyrathane round belt	35	Side mount motor base plate
20	1/8" dia. 8-1/4" long pyrathane round belt	36	Side mount chaing guard assembly
14	8" end drive assembly	37	#50 (thru 1-1/2 HP) or #60 roller chain
15	8" drive pulley	38	Gear reducer drive sprocket
16	8" end drive plate (left hand)	39	Pulley drive sprocket
17	8" end drive plate (right hand)	40	Gear reducer
18	4 hole flange bearing w/1-7/16" bore	41	Motor
19	138G grooved roller		

Specify Unit Serial Number when ordering replacement parts to ensure proper allocation of components.

Recommended Spare Parts are shown in red. Charted are item no. and part description

When ordering use example below.

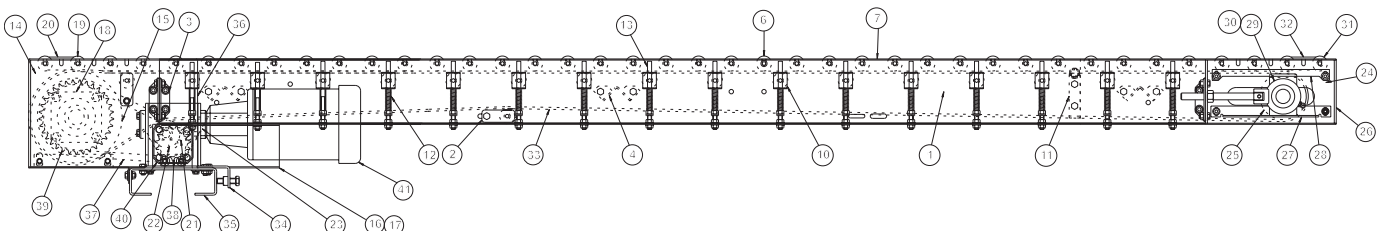


**ROACH CONVEYORS**  
 808 HIGHWAY 463  
 TRUMANN, AR 72472  
 TEL. 870-483-7631

SERIAL NO.      **123456**

Example:    Need a replacement motor for 196VP Center Drive  
 Part No:    SN 123456 - 43 - Motor

**WARNING:** When installing below 7'-0" elevation, tread rollers must be designed to pop out.  
 When installing at 7'-0" or higher elevation, tread rollers must NOT be allowed to pop out.



MODEL 138VP WITH 8" END SIDE MOUNT DRIVE SHOWN IN DRAWING

# MODEL 196VP

## PARTS LIST FOR UNIT WITH 4" AND 8" END DRIVE

ITEM #	DESCRIPTION	ITEM #	DESCRIPTION
1	196VPI Intermediate bed section	19	1/8" dia. 14-1/2" long pyrrathane round belt
2	1.9 roller adjustment bracket	19	1/8" dia. 11-1/4" long pyrrathane round belt
3	Splice plate	20	Snub roller adjustment bracket (not shown)
4	Frame cross brace	21	251S roller (not shown)
5	Bed spacer rod (not shown)	22	Snub roller belt guard (not shown)
6	196S roller	23	4" end take-up assembly
7	Left hand side channel	24	4" take-up pulley
8	Right and side channel (not shown)	25	4" take-up plate
9	Carrier channel	26	Take-up bearing slide angle
10	Belt guide (used w/2-1/4" wide belt only)	27	Take-up bearing guide
11	Compression spring	28	Take-up bearing assembly (left hand)
12	3/8" x 6-1/4" long stud bolt	29	Take-up bearing assembly (right hand)
13	4" end drive assembly	30	196S grooved roller
14	4" drive pulley	31	1/8" dia. 9-1/2" long pyrrathane round belt
15	4" end drive plate (left hand)	31	1/8" dia. 12" long pyrrathane round belt
16	4" end drive plate (right hand)	31	1/8" dia. 14-1/2" long pyrrathane round belt
17	3 hole flange bearing w/1-3/16" bore	31	1/8" dia. 11-1/4" long pyrrathane round belt
18	196S grooved roller	32	Take-up butt coupling
19	1/8" dia. 9-1/2" long pyrrathane round belt	33	2-1/4" wide PVC-150 belting
19	1/8" dia. 12" long pyrrathane round belt	33	6" wide PVC-120 belting
19	1/8" dia. 14-1/2" long pyrrathane round belt	34	Reducer push plate assembly
19	1/8" dia. 11-1/4" long pyrrathane round belt	35	Underneath motor base plate
13	8" end drive assembly	36	Chain guard angle mount
14	8" drive pulley	37	End drive chain guard assembly
15	8" end drive plate (left hand)	38	#50 (thru 1-1/2 HP) or #60 roller chain
16	8" end drive plate (right hand)	39	Gear reducer drive sprocket
17	4 hole flange bearing w/1-7/16" bore	40	Pulley drive sprocket
18	196S grooved roller	41	Gear reducer
19	1/8" dia. 9-1/2" long pyrrathane round belt	42	Motor
19	1/8" dia. 12" long pyrrathane round belt		



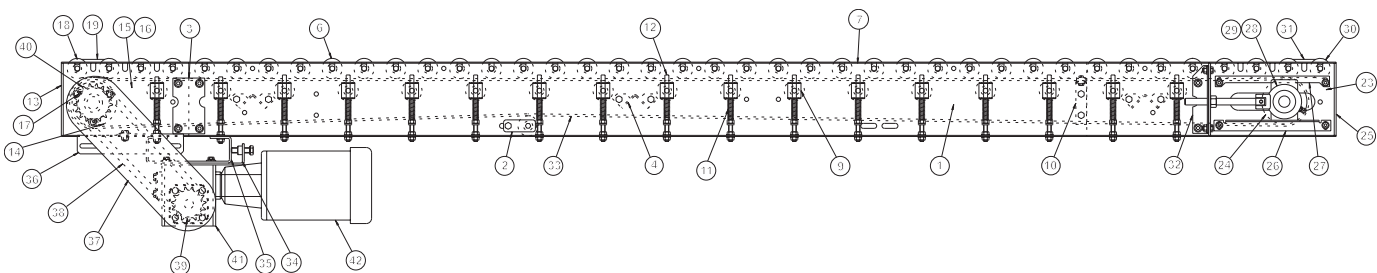
**ROACH CONVEYORS**  
 808 HIGHWAY 463  
 TRUMANN, AR 72472  
 TEL. 870-483-7631

SERIAL NO. 123456

Specify Unit Serial Number when ordering replacement parts to ensure proper allocation of components. **Recommended Spare Parts** are shown in red. **Charted** are **item no. and part description**. When ordering use example below.

Example: Need a replacement motor for 196VP End Drive  
 Part No: SN 123456 - 42 - Motor

**WARNING:** When installing below 7'-0" elevation, tread rollers must be designed to pop out.  
 When installing at 7'-0" or higher elevation, tread rollers must NOT be allowed to pop out.



MODEL 196VP WITH 4" END DRIVE SHOWN IN DRAWING

# MODEL 196VP

## PARTS LIST FOR UNIT WITH 4" AND 8" CENTER DRIVE

ITEM #	DESCRIPTION	ITEM #	DESCRIPTION
1	196VPI Intermediate bed section	17	8" center drive plate (right hand)
2	1.9 roller adjustment bracket	18	8" center drive belt guard
3	Splice plate	19	8" center drive belt guard
4	Frame cross brace	20	Center drive take-up bearing guide
5	Bed spacer rod (not shown)	21	Take-up bearing assembly
6	196S roller	22	4 hole flange bearing w/1-7/16" bore
7	Left hand side channel	23	251S roller
8	Right and side channel (not shown)	24	Snub roller adjustment bracket
9	Carrier channel	25	Carrier stud spacer
10	Belt guide (used w/2-1/4" wide belt only)	26	Modified compression spring
11	Compression spring	27	3/8" x 4-1/2" long stud bolt
12	3/8" x 6-1/4" long stud bolt	28	4" fixed end assembly
13	4" end drive assembly	29	4" fixed end pulley
14	4" drive pulley	30	4" fixed end plate
15	4" take-up pulley	31	196S grooved roller
16	4" center drive plate (left hand)	32	3 hole flange bearing w/1-3/16" bore
17	4" center drive plate (right hand)	33	1/8" dia. 9-1/2" long pyrrathane round belt
18	4" center drive belt guard	33	1/8" dia. 12" long pyrrathane round belt
19	4" center drive belt guard	33	1/8" dia. 14-1/2" long pyrrathane round belt
20	Center drive take-up bearing guide	33	1/8" dia. 11-1/4" long pyrrathane round belt
21	Take-up bearing assembly	34	2-1/4" wide PVC-150 belting
22	3 hole flange bearing w/1-3/16" bore	34	6" wide PVC-20 belting
23	251S roller	35	Reducer push plate assembly
24	Snub roller adjustment bracket	36	Underneath motor base plate
25	Carrier stud spacer	37	Chain guard angle mount
26	Modified compression spring	38	Center drive chain guard assembly
27	3/8" x 5-1/2" long stud bolt	39	#50 (thru1-1/2 HP) or #60 roller chain
13	8" center drive assembly	40	Gear reducer drive sprocket
14	8" drive pulley	41	Pulley drive sprocket
15	4" take-up pulley	42	Gear reducer
16	8" center drive plate (left hand)	43	Motor

Specify Unit Serial Number when ordering replacement parts to ensure proper allocation of components.

Recommended Spare Parts are shown in red. Charted are item no. and part description

When ordering use example below.

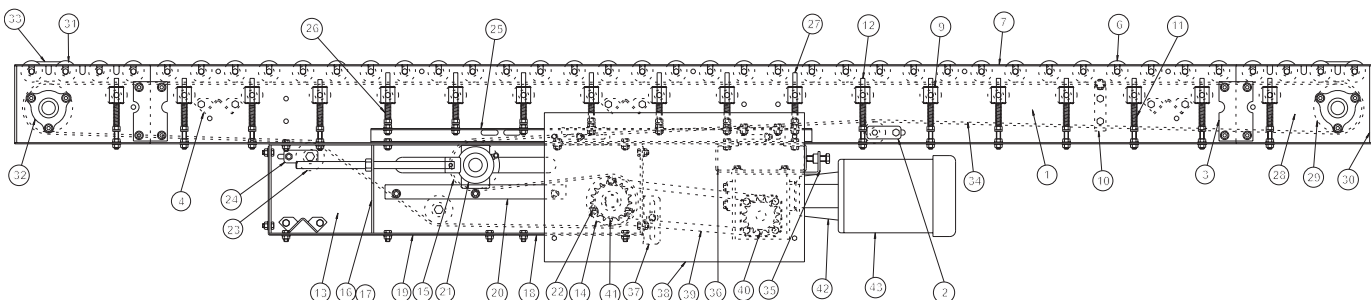
Example: Need a replacement motor for 196VP Center Drive  
 Part No: SN 123456 - 43 - Motor



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 TEL 870-483-7631

SERIAL NO.      **123456**

**WARNING:** When installing below 7'-0" elevation, tread rollers must be designed to pop out.  
 When installing at 7'-0" or higher elevation, tread rollers must NOT be allowed to pop out.



MODEL 196VP WITH 4" CENTER DRIVE SHOWN IN DRAWING



# MODEL 196VP

## PARTS LIST FOR UNIT WITH 4" AND 8" END SIDE MOUNT DRIVE

ITEM #	DESCRIPTION	ITEM #	DESCRIPTION
1	196VPI Intermediate bed section	19	1/8" dia. 12" long pyrrathane round belt
2	1.9 roller adjustment bracket	19	1/8" dia. 14-1/2" long pyrrathane round belt
3	Splice plate	19	1/8" dia. 11-1/4" long pyrrathane round belt
4	Frame cross brace	20	Snub roller adjustment bracket
5	Bed spacer rod (not shown)	21	251S roller
6	196S roller	22	Snub roller belt guard
7	Left hand side channel	23	4" end take-up assembly
8	Right and side channel (not shown)	24	4" take-up pulley
9	Carrier channel	25	4" take-up plate
10	Belt guide (used w/2-1/4" wide belt only)	26	Take-up bearing slide angle
11	Compression spring	27	Take-up bearing guide
12	3/8" x 6-1/4" long stud bolt	28	Take-up bearing assembly (left hand)
13	4" end drive assembly	29	Take-up bearing assembly (right hand)
14	4" drive pulley	30	196S grooved roller
15	4" end drive plate (left hand)	31	1/8" dia. 9-1/2" long pyrrathane round belt
16	4" end drive plate (right hand)	31	1/8" dia. 12" long pyrrathane round belt
17	3 hole flange bearing w/1-3/16" bore	31	1/8" dia. 14-1/2" long pyrrathane round belt
18	196S grooved roller	31	1/8" dia. 11-1/4" long pyrrathane round belt
19	1/8" dia. 9-1/2" long pyrrathane round belt	32	Take-up butt coupling
19	1/8" dia. 12" long pyrrathane round belt	33	2-1/4" wide PVC-150 belting
19	1/8" dia. 14-1/2" long pyrrathane round belt	33	6" wide PVC-120 belting
19	1/8" dia. 11-1/4" long pyrrathane round belt	34	Reducer push plate assembly
13	8" end drive assembly	35	Side mount motor base plate
14	8" drive pulley	36	Side mount chain guard assembly
15	8" end drive plate (left hand)	37	#50 (thru 1-1/2 HP) or #60 roller chain
16	8" end drive plate (right hand)	38	Gear reducer drive sprocket
17	4 hole flange bearing w/1-7/16" bore	39	Pulley drive sprocket
18	196S grooved roller	40	Gear reducer
19	1/8" dia. 9-1/2" long pyrrathane round belt	41	Motor

Specify Unit Serial Number when ordering replacement parts to ensure proper allocation of components.

Recommended Spare Parts are shown in red. Charted are item no. and part description

When ordering use example below.

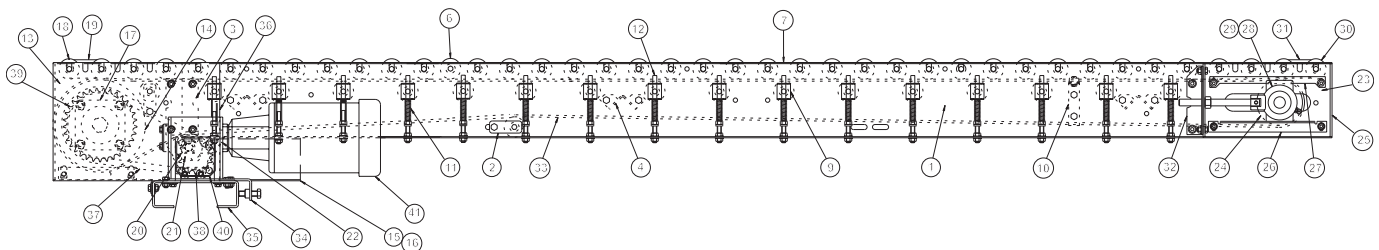


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 TRUMANN, AR 72472  
 TEL. 870-483-7631

SERIAL NO.      **123456**

Example:    Need a replacement motor for 196VP Side Mount Drive  
 Part No:    SN 123456 - 41 - Motor

**WARNING:** When installing below 7'-0" elevation, tread rollers must be designed to pop out.  
 When installing at 7'-0" or higher elevation, tread rollers must NOT be allowed to pop out.



MODEL 196VP WITH 8" END SIDE MOUNT DRIVE SHOWN IN DRAWING









# ROACH CONVEYORS

## WARRANTY

- Materials used by Roach Conveyors are of good quality.
- Any part proving to be defective in materials or workmanship upon Roach inspection, will be replaced at NO cost, FOB, Trumann, Arkansas, for one year. Installation expense will be paid by others.
- Roach liability includes furnishing said part or parts; Roach is not liable for consequential damages, such as loss of profit, delays or expenses incurred by failure of said part or parts.
- Failure due to abuse, incorrect adjustments, exposure to corrosive or abrasive environment or operation under damp conditions does not constitute failure due to defects in workmanship or materials.
- Component parts not manufactured by Roach (motors, gear reducers, etc.) will be repaired or replaced at the option of their manufacturer. Contact nearest authorized service center for all warranty claims.

NOTE: Motors or gear reducers tampered with before inspection shall be considered free of ALL Warranty Claims.

--All specifications are subject to change without notice--  
--Drawings are intended for illustration ONLY and are not to scale--

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