

OWNER'S MANUAL

A REAL

PC/PCF Parts Conveyor

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

TECH HANDBOOK FOR PC/PCF TABLE OF CONTENTS

TECH HANDBOOK FOR PC/PCF
CAUTIONS, WARNINGS AND HAZARDS
SAFETY INFORMATION
RECEIVING AND INSPECTION
GENERAL INSTALLATION INFORMATION
INSTALLATION OF SUPPORTS
INSTALLATION OF BELTING
BELT PATH
START-UP PROCEDURES 10 Drive Chain & Sprocket Alignment. 10 Drive Chain & Sprocket Tension. 10 -Gear Reducer Vent Plug. 11 -Preparing for Initial Start-up. 11
BELT TRACKING 12 -General Information 12 -Erratic Tracking at Start-up 12 -Advanced Tracking Adjustments 12

MAINTENANCE SAFETY PRECAUTIONS Before Performing Maintenance -Maintenance & Follow-up Details	13
MAINTENANCE & LUBRICATION	14 15
TROUBLE SHOOTING & REPLACEMENT PARTS -Trouble Shooting/Serial Plate	
PARTS LISTS FOR PC -Model PC Parts List. -Model PC Drawing	18
PARTS LISTS FOR PCF	20
NOTES	22
WARRANTY	23

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)



CAUTIONS, WARNINGS AND HAZARDS INTRODUCTION

This manual was prepared as a "how-toguide" 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 compared 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.

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

CAUTIONS, WARNINGS AND HAZARDS

WARNING

NEVER connect belt conveyors directly to gravity conveyors, A machinery or fixtures without using connector brackets & pop out roller.



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 reauired.

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.

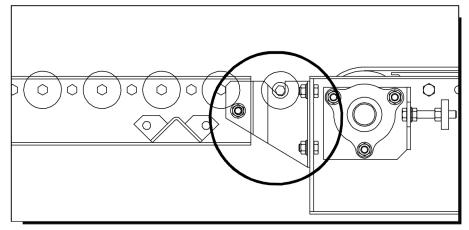
Safety pop out rollers in conveyors installed above 7'-0" elevation must be retained by guard rail, clips, etc. Safety pop out rollers must be allowed to pop out

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®.

SAFETY CONNECTOR BRACKETS



CAUTION: Never connect belt conveyors directly to gravity conveyors, mgachinery or fixtures without using connector brackets with pop out roller.

Always use gravity connector bracket with pop out roller (see illustration above) to permanently attach any gravity conveyor to power conveyor. Never connect powered conveyors directly to gravity conveyors without using connector brackets with pop out roller.

This simple connection eliminates hazard-

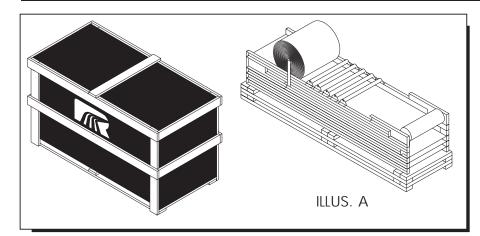
ous pinch points that would otherwise exist by attaching a gravity conveyor directly to a powered belt unit.

Connector Brackets are supplied as an optional component and are featured in our Roach Conveyors General Products catalog.

Although these units may not have been

originally required for unit application, they are readily available. Contact any Roach Conveyors distributor or contact us at 870-483-7049 to find the nearest distibutor. Present unit serial number and gravity model number (including width) when calling to order safety connector brackets, model CB.

RECEIVING AND INSPECTION SHORTAGES, DAMAGES AND RETURN AUTHORIZATIONS



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.

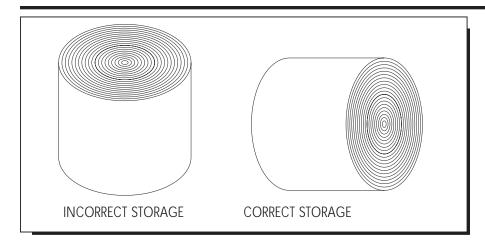
Also, it is possible that some items may become separated from the original shipment. Therefore, when receiving goods, it is imperative that the bill of lading (or, accompanying freight documentation) be checked to ensure receipt of ALL units ordered including ALL accessories.

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

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.

UNCRATING AND STORAGE



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. Safety pop out rollers, guard rails and hardware are often packaged

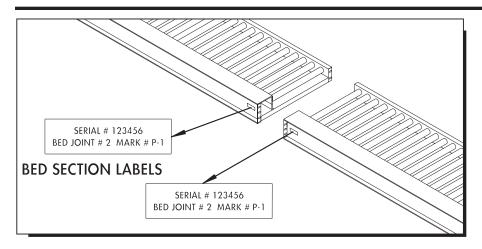
and shipped in this manner. Save all hardware for subsequent use by installation personnel.

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

vent 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 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.

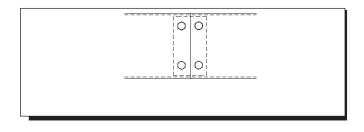
Conveyors are set up at the factory, bed section labels are applied, unit is test run and receives rigorous quality assurance inspection. At this time unit becomes field-ready. Therefore, it is critical that field installation personnel re-assemble unit by mating beds in accordance with bed section labels (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.

COUPLINGS AND UNIT SQUARENESS

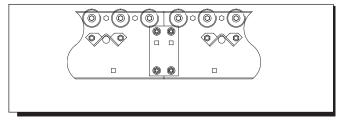
• Use mechanical hoist (fork truck or other available means) to raise bed sections to approximate installed elevation. Mate intermediate sections with either butt couplings or splice plates to join bed sections (see illustration).

• One of the most critical elements of proper installation is unit squareness. Check drive pulley, tail pulley, snub roller (if used in

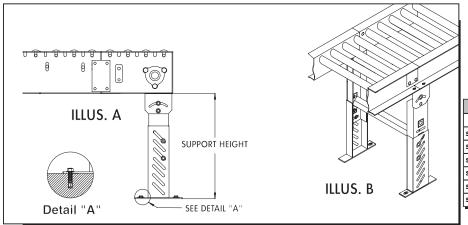


drive assembly) and return roller assemblies to ensure these components are square with unit bed (see 'Belt Tracking' section later in handbook for detailed information).

• The unit must be installed at level elevation across the width to prevent erratic belt tracking.



INSTALLATION OF SUPPORTS IDENTIFYING/INSTALLING PERMANENT FLOOR SUPPORTS



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.

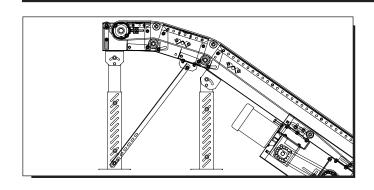
Adjust elevation to top of conveyor by loosening bolts in support uprights, raising or **CAUTION:** Always anchor permanent supports to floor (or mounting surface). Use 3/8" x 2-1/2" (or longer) wedge anchors for permanent installation in concrete flooring.

*MINIMUM SUPPORT CHANNEL HEIGHT								
MEDIUM DUTY				HEAVY DUTY				
SM-1	7-1/4″	SM-7	34-1/4″	" SM-1 6.1/4" SM-7 25.3/4				
SM-2	10-1/4″	SM-8	46-1/4″	SM-2	7-3/4″	SM-8	31-3/4″	
SM-3	13-1/4″	SM-9	58-1/4″	SM-3	10-3/4"	SM-9	43-3/4"	
SM-4	16-1/4″	SM-10	70-1/4″	SM-4	13-3/4"	SM-10	55-3/4″	
SM-5	20.1/4″	SM-11	80.1/4″	SM-5	16-3/4"	SM-11	67-3/4″	
SM-6	24-1/4″	SM-12	92-1/4″	SM-6	19-3/4"	SM-12	79-3/4″	

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.

INSTALLING KNEE BRACES



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

Knee braces are most commonly used at the terminal ends of long runs of conveyor lines and are recommended on inclined (or declined) floor-to-floor belt conveyors for added stability. • 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.

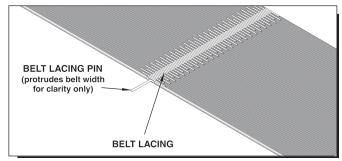
• Before field installation of belting, it is critical to determine the correct side to be placed down. One of the most common problems associated with belt installation involves placing the incorrect side down.

• PVC belting is most commonly supplied as "COS" (cover one side). The opposite side, or side to be placed down, is a friction surface for decreased friction and improved conveyability. The friction side appears dull and grainy. ALWAYS place this side down against the conveyor bed. The cover side is darker and shiny.

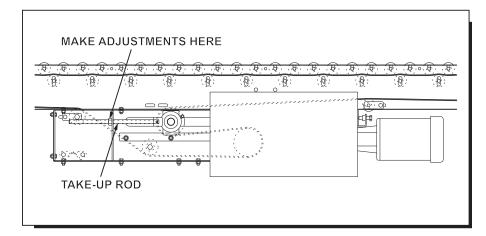
• If unit is shipped "knocked down," belt must be re-threaded on unit during installation. (See page 13-14 for proper belt paths.)

• Join ends of belt as shown with lacing pin. Loosen threaded takeup 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.

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



MAINTAINING PROPER BELT TENSION

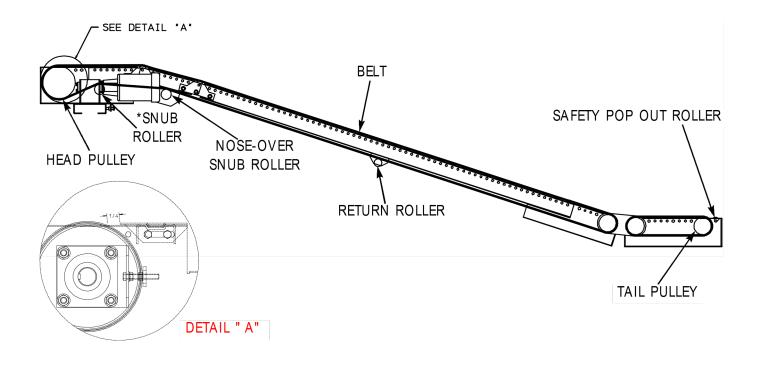


Maintaining proper belt tension is vital to unit operation. Enough tension should be maintained so that drive pulley does not slip under fully loaded conditions.

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 takeup assembly. For yet additional belt takeup, the belt should be cut and re-laced to maintain proper belt tension.

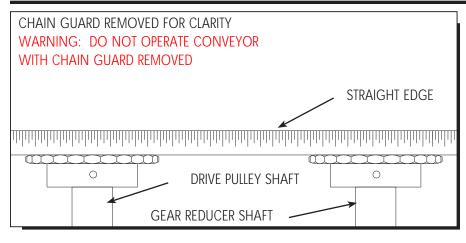
To adjust conveyor take-up, adjust position of take-up rod (see illustration above) as required. Remember to equally adjust both sides to hold take-up pulley square (to maintain unit squareness for belt tracking). **CAUTION:** Belt lacing must be kept in good condition for safe work environment. Also, do not operate unit with improper belt tension. Unit is subject to abnormal wear and maintenance when operated with belt incorrectly adjusted.

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.



CAUTION: If pulleys are adjusted during installation or maintenance, it is crucial that nip point guards (at both ends of conveyor) are readjusted. See DETAIL"A" at left. Center drive guards MUST be replaced after installation or maintenance. If optional feeder is used, nip point guards in end assemblies (including drive or fixed end pulley) must be adjusted when feeder pulleys are adjusted.

START-UP PROCEDURES DRIVE CHAIN AND SPROCKET ALIGNMENT



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.

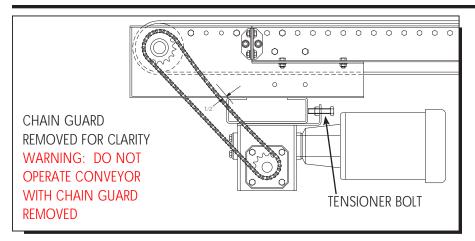
To check drive sprocket alignment, it is imperative that conveyor is shut "OFF" and power source is locked out before any adjustments are attempted. Remove chain guard cover and place straightedge (see illustration above) across face of both drive sprockets. If re-alignment is necessary, loosen set screws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

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



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

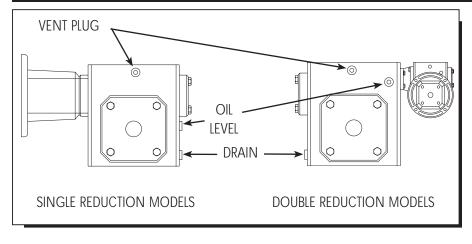
is loose. Tighten until proper operating

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

range is achieved. If chain tension is too tight, loosen tensioner bolt (rotate counterclockwise) 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.

START-UP PROCEDURES GEAR REDUCER VENT PLUG



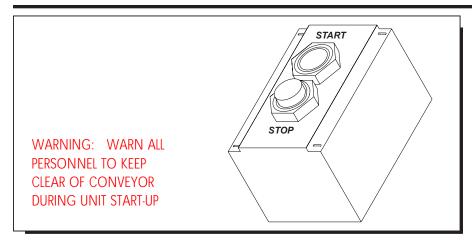
To expedite installation and start-up process, all gear reducers are shipped filled with oil. Initially, levels are checked at factory before unit is set up and test run.

Upon field installation and before operating, again check oil level. See "Recommended Lubricants" section later in handbook for appropriate lubricants if gear reducer oil level is low. Gear reducer is shipped from the factory with a steel plug placed in gear reducer to prevent oil from spilling during shipment. Before conveyor is operated, replace steel plug with vent plug (or "breather plug")

supplied. The small hole in the end of the vent plug must be placed "up" to prevent oil from escaping unit. Do not CAUTION: Before conveyor is operated, replace steel plug with vent plug (or "breather plug") supplied. Do not operate conveyor until vent plug has been installed.

operate conveyor until vent plug has been installed. Failure to replace steel plug with vent plug will void gear reducer manufacturer warranty. Install vent plug in uppermost hole in gear box upon unit installation when motor is in working position.

PREPARING FOR INITIAL START-UP



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 WARNING: 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.

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.

BELT TRACKING GENERAL INFORMATION

Upon initial use the 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. ONLY trained personnel should make belt tracking adjustments.



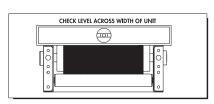
Belt must be tracked in both unloaded and loaded situations. The return direction of the belt must clear supports, ceiling hangers, floor openings, etc. Dragging on such components will contribute to belt tracking problems and is certain to damage belting at extended intervals.

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. Do not allow belt to rub against side of conveyor frame, which will surely damage belt.

ERRATIC TRACKING AT START-UP

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 in the system or entire 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.

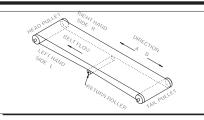
Start conveyor again and operate for at least ten minutes once initial phase of adjustments are complete. If belt continues to track erratically, turn unit "OFF" before belt is allowed to run so far off center that it rubs side of conveyor.

ADVANCED TRACKING ADJUSTMENTS

When adjustments noted in section above have been completed and belt continues to track erratically, a second series of tracking adjustments are necessary.

First, determine the infeed and discharge ends of the conveyor. The following adjustments will be made with the infeed end as the reference point.

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

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 hazardstraining 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.

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	Inspect belt tracking			
PILLOW BLOCK / FLANGE BEARINGS	Lubricate in dirty, dusty, or moist/wet 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 warrant additional maintenance. 14

MAINTENANCE AND LUBRICATION RECOMMENDED LUBRICANTS

GEARMOTOR LUBRICANTS						
MANUFACTURER	15-60°F Ambient temperature Agma compounded No. 7	50-125°F Ambient temperature Agma compounded No. 8				
Amoco Oil Company	Worm Gear Oil	Cylinder Oil #680				
Chevron USA, Inc.	Cylinder Oil #460X	Cylinder Oil #680X				
Exxon Co. USA	Cylesstic TK-460	Cylesstic TK-680				
Gulf Oil Co.	Senate 460	Senate 680D				
Mobil Oil Corp.	600W Super	Extra Hecla Super or Mobilgear 636				
Shell Oil Co.	Valvata Oil J460	Valvata Oil J680				
Sun Oil Co.	Gear Oil 7C	Gear Oil 8C				
Texaco	Meropa 460	Meropa 680				
Union Oil Co. of California	Steaval A	Worm Gear Lube 140				

NOTE: Frequently check gearbox oil level. Add oil to gearbox through filler plug (or, vent plug, see page 13) until oil comes out the oil level plug. Inspect vent plug often to ensure it is clean and that vented holes are open for continued unit operation. Also, some gear lubricants contain E.P. additives that can be corrosive to gear bronze. Avoid lubricants that are compounded with sulphur and/or chlorine. For temperature ranges not shown, consult factory.

CAUTION: Do not mix types and/or brands of oil. Thoroughly drain gearbox while unit is warm prior to changing lubricant.

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 considerationconsult 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.

MAINTENANCE AND LUBRICATION REPORT ON MISCELLANEOUS MAINTENANCE PERFORMED

	REPORT ON MAINTENANCE						
Conveyor Mark No.	REPAIRED BY	INSPECTION DATE	DETAIL OF MAINTENANCE COMPLETED (OR INSPECTION) LIST PARTS REPLACED OR REPAIRS				

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, convey- ing 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, convey- ing 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

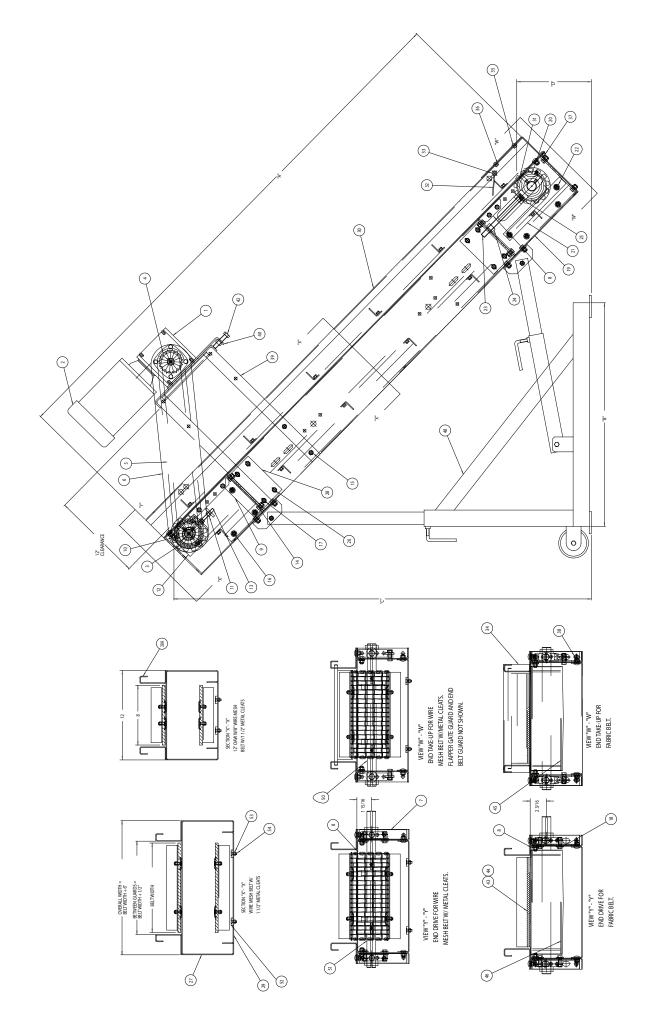


To order any replacement parts or when calling for assistance with any powered conveyor, **ALWAYS** provide conveyor serial number. This aluminum plate (shown at left) is placed on the conveyor frame near the location of the drive assembly.

To order replacement parts or add-on components, contact the Roach distributor who originally furnished conveyor 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 conveyor serial number **BEFORE** calling. Refer to unit drawings (in rear section of handbook) for part numbers if ordering replacement parts.

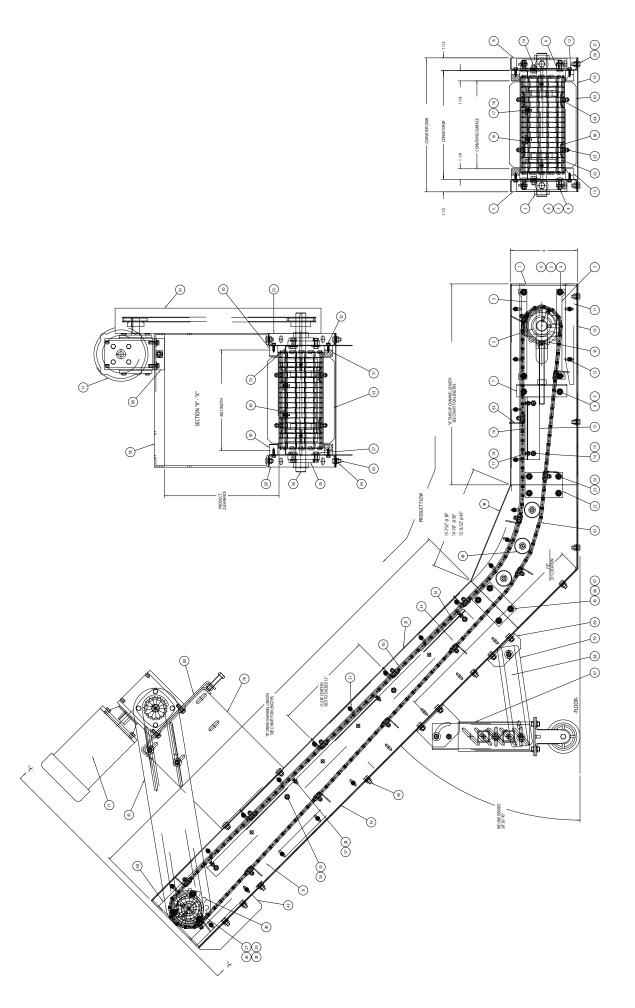
MODEL PC PARTS LIST

ITEM NO.	DESCRIPTION	PART NO.	ITEM NO.	DESCRIPTION	PART NO.
1	REDUCER		44	6" WIDE BELT LACING KIT (NITRILE)	BLW00206-LK
2	MOTOR			6" WIDE BELT LACING KIT (PVC)	BLW01206-LK
3	DRIVE SPROCKET			8" WIDE BELT LACING KIT (NITRILE)	BLW00208-LK
4	REDUCER SPROCKET			8" WIDE BELT LACING KIT (PVC)	BLW01208-LK
5	#50 DRIVE CHAIN (1 1/2 HP OR LESS)	SPW00500		12" WIDE BELT LACING KIT (NITRILE)	BLW00212-LK
,	#60 DRIVE CHAIN (OVER 1 1/2 HP)	SPW00600		12" WIDE BELT LACING KIT (PVC)	BLW01212-LK
6 7	CHAIN GUARD ASSEMBLY	A37913-528 A22965*		18" wide belt lacing kit (Nitrile) 18" wide belt lacing kit (PVC)	BLW00218-LK BLW01218-LK
8	end drive plate weld assembly Filler PAN (9" & 15"BF ONLY)	A22900		24" WIDE BELT LACING KIT (PVC)	BLW00224-LK
0	PC FILLER PAN ASS'Y (21" & 27"BF)			24" WIDE BELT LACING KIT (NTRILE)	BLW01224-LK
9	BUTT COUPLING	M00650*	45	4" IDLER PULLEY ASSEMBLY	4IB-BF-CA
10	3-HOLE FLANGE BRG. 1 3/16" BORE	BRW04040	46	4" DRIVE PULLEY ASSEMBLY	4DB-BF-CA
11	3/8" HEX NUT	FSW09300	47	SLIDER PAN SPLICE PLATE (11' ONLY)	M09190
12	PUSH PLATE	M04060*		5/16" X 1" HHCS	FSW00257
13	3/8" - 16 X 2 1/2" LG HHTB	FSW00364		5/16" FLAT WASHER	FSW09205
14	3/8" - 16 UNC X 3/4" HHCS	FSW00355		5/16" LOCK WASHER	FSW09207
15	3/8" - 16 UNC X 1" HHCS	FSW00357	40	5/16" SPRING NUT	FSW09714
16	3/8" - 16 UNC X 3/4" CARRIAGE BOLT	FSW04355 FSW09304-02	48	Portable base assembly Floor leveling tab sub assembly	PCPB-OAW-OAL A20725-OAW-OAL
17 18	3/8" NYLON INSERT FLANGE NUT 3/8" FLAT WASHER	FSVV09304-02 FSW09305		FRONT STATIONARY SUPPORT ASSEMBLY	A20725-OAW-OAL A25792-OAW-HT
18	END TAKE-UP PLATE WELD ASSEMBLY	A22969*		FRONT TELESCOPIC SUPPORT	S10959-LG
20	TAKE-UP BRG. 1 3/16"BORE	BRW04415		REAR TELESCOPIC SUPPORT	S10969-LG
21	TAKE-UP BRG. GUIDE	M00649		SMALL PIVOT PLATES	M00131
22	BEARING GUIDE SPACER (BLACK NYLON)	MCW06725		LOCKING BOLT	S10007
23	TAKE-UP ROD	S10001		4" RUBBER WHEEL	MCW06066
24	5/8" HEX NUT	FSW09600		3/8"-16 X 2 3/4" HHCS	FSW00364-01
25	1/4" X 1 1/2" LONG ROLL PIN	MCW06280		3/8"-16 X 1 1/4" HHCS	FSW00358
26	3/8" - 16 X 1 1/4" LG BOLT	FSW00358		3/8"-16 X 2 1/2" HHCS	FSW00363
27	PC SLIDER BED	M01112-OAW-LG		3/8"-16 X 3" HHCS	FSW00365
28 29		M01164		3/8"-16 NYLON INSERT FLANGE NUT 3/8"-16 HEX NUTS	FSW09304-02 FSW09300
29 30	SLIDER PAN (4'-10' QTY) PC GUARD RAIL (4'-10' QTY)	M01088-BF-LG M00353-LG	49	BELT ASSEMBLY (1/2" X 1" WIRE MESH)	A38204-BW-BLG
30A	PC GUARD RAIL (12" OAW W/8"BELT)	M01026-LG	50	END TAKE-UP PULLEY (WIRE MESH BELT)	A25780-OAW-BW
31	GUARD RAIL SPACER	M04468	51	END DRIVE PULLEY (WIRE MESH BELT)	A25785-OAW-BW
32	FLAPPER GATE WELD ASSEMBLY	A22979-BW	52	RETURN PAN WEARSTRIP (4'-10' QTY)	S10974-LG
33	7/16" HEX ADAPTOR	BRW04630	53	1/4"-20 NYLON HEX NUT (4'-6' QTY)	FSW09900-05
34	FLAPPER GATE GUARD	M02077-LG	54	1/4" 20 X 3/4" FHNS (4'-6' QTY)	FSW09955-01
35	1/4" X 3/4" ROUND HEAD MS	FSW09155			
36	1/4" LOCKWASHER	FSW09107			
37	1/4" NUT	FSW09100			
38	END BELT GUARD MOTOR BASE WELD ASSEMBLY (718 REDUCER)	M02073-LG			
39	MOTOR BASE WELD ASSEMBLY (718 REDUCER) MOTOR BASE WELD ASSEMBLY (721 REDUCER)	A21974-BEDW A21975-BEDW			
40	REDUCER PUSH PLATE WELD ASSEMBLY	A21975-BEDW A25660-RED			
40	1/2" X 2 1/4" HHTB	FSW02558			
43	FABRIC BELT W/ 1 1/2" HIGH MOLDED CLEATS				
	ON 12" CENTERS A/R				
	6" WIDE 3-PLY BLACK NITRILE				
		BLW00206			
	6" WIDE TM#533 BLACK PVC	DUM/0120/			
	(12"OAW CONV.)	BLW01206			
	8" WIDE 3-PLY BLACK NITRILE (12"OAW CONV.)	BLW00208			
	8" WIDE TM#533 BLACK PVC				
	(12"OAW CONV.)	BLW01208			
	12" WIDE 3-PLY BLACK NITRILE				
	(18"OAW CONV.)	BLW00212			
	12" WIDE TM#533 BLACK PVC				
	(18" OAW CONV.)	BLW01212			
	18" WIDE 3-PLY BLACK NITRILE	DUA (00010			
		BLW00218			
	18" WIDE TM#533 BLACK PVC	RI\N/01210			
	(24"OAW CONV.) 24" WIDE 3-PLY BLACK NITRILE	BLW01218			
	(30"OAW CONV.)	BLW00224			
	24" WIDE TM#533 BLACK PVC				
	(30" OAW CONV.)	BLW01224			
				I	



MODEL PCF PARTS LIST

ITEM NO.	DESCRIPTION	PART NO.	ITEM NO.	DESCRIPTION	PART NO.
1	TAKE-UP CHANNEL WELD ASSY. (24")	A20704*-24	33	FILLER PAN (FOR 45")	M01305-BF-34.5
	TAKE-UP CHANNEL WELD ASSY. (30")	A20704*-30		FILLER PAN (FOR 54")	M01305-BF-43.5
	TAKE-UP CHANNEL WELD ASSY. (42")	A20704*-42		FILLER PAN (FOR 66")	M01305-BF-55.5
	WELD-IN BUTT COUPLING	M00197	34	3/8"-16 X 3/4" HHCS	FSW00355
	TAKE-UP CHANNEL	M01307*-LG	35	3/8"-16 FLANGE NUT NYLON INSER	FSW09304-02
2	TAKE-UP BEARING ASSEMBLY	A26252	36	FILLER PAN WEARSTRIP (FOR 45")	S10076-34.5
	TAKE-UP ROD (7 1/2" LG.)	S10001		FILLER PAN WEARSTRIP (FOR 54")	S10076-43.5
	3/16" BORE TAKE-UP BEARING	BRW04415	07	FILLER PAN WEARSTRIP (FOR 66")	S10076-55.5
	1/4" X 1 1/2"LG. ROLL PIN	MCW06280	37	#10-24 X 3/4"LG. FHSMS	FSW09055
2	5/8" HEX NUT	FSW09600	38 39	#10-24 HEX FLANGE NUT	FSW09304-01
3 4	TAKE-UP BEARING GUIDE 3/8"-16 X 1 1/4" CARRIAGE BOLT	M00699	39	BOTTOM COVER PLATE (FOR 45")	M01306-BF-46
4 5	3/8 -16 X T T/4 CARRIAGE BOLI 3/8"-16 FLANGE NUT NYLON INSER	FSW04358-01 FSW09304-02		BOTTOM COVER PLATE (FOR 54") BOTTOM COVER PLATE (FOR 66")	M01306-BF-55 M01306-BF-67
6	BEARING GUIDE SPACER (NYLON)	MCW06725	40	3/8"-16 X 3/4" HHCS	FSW00355
7	TAKE-UP ROD SUPPORT ANGLE	M01298	40	3/8"-16 FLANGE NUT NYLON INSER	FSW09304-02
8	3/8"-16 X 3/4" CARRIAGE BOLT	FSW04355	42	CAUTION GUARD	M01301*
9	3/8"-16 FLANGE NUT NYLON INSER	FSW09304-02	43	3/8"-16 X 3/4" HHCS	FSW00355
10	4" IDLER PULLEY ASSY(3-PLY BELT)	4IP-BF-FA	44	3/8"-16 FLANGE NUT NYLON INSER	FSW09304-02
10	ROACH ULTRA LAGGING	A38231-4-LG	45	SPLICE PLATE	M01295
	3/4" PULLEY WASHER	M00285	46	3/8"-16 X 3/4" CARRIAGE BOLT	FSW04355
	3/16"DIA.TAKE-UP PULLEY SHFT	S10227-BF	47	3/8"-16 FLANGE NUT NYLON INSER	FSW09304-02
	4" O.D. PULLEY TUBE	S12805-BF	48	TRANSITION PLATE 45°	M01302
	TAKE-UP PULLEY ASSY. (MESH BELT)	A25780-OAW-BW		TRANSITION PLATE 36°	M01303
	4" DIA. KEYSTONE SPROCKET	SPW09913		TRANSITION PLATE 30°	M01304
	3/16" DIA.TAKE-UP PULLEY SHFT	S10037-OAW	49	196G ROLLER ASSEMBLY	196G-BF-A
	1/4" KEYSTOCK X 1 1/2"LG.	S12397	50	TOP BELT GUIDE WEARSTRIP	S10077-LG
	4" O.D. PULLEY TUBE	S12579-BW	50A	TOP BELT GUIDE EXT.W/STRIP 24"	S10161
11	TAKE-UP RETURN WEARSTRIP	S10486*	51	#14 X 3/4"LG.SHEET METAL SCREW	FSW07956
12	#14 X 3/4"LG.SHEET METAL SCREW	FSW07956	52	BELT ASSEMBLY(3PLY BLK NITRILE)	A38202-BW-LG
13	FILLER PAN (FOR 24")	M01305-BF-7.5	53	12" WIDE 3 PLY BLK NITRILE BELT	BLW00612
	FILLER PAN (FOR 30")	M01305-BF-13.5		12" WIDE TM#533 BLACK PVC BELT	BLW01012
	FILLER PAN (FOR 42")	M01305-BF-25.5		18" WIDE 3 PLY BLK NITRILE BELT	BLW00618
14	3/8"-16 X 3/4" HHCS	FSW00355		18" WIDE TM#533 BLACK PVC BELT	BLW01018
15	3/8"-16 FLANGE NUT NYLON INSER	FSW09304-02		24" WIDE 3 PLY BLK NITRILE BELT	BLW00624
16	FILLER PAN WEARSTRIP (FOR 24")	S10076-7.5	F.4	24" WIDE TM#533 BLACK PVC BELT	BLW01024
	FILLER PAN WEARSTRIP (FOR 30")	S10076-13.5	54	GALVANIZED METAL CLEAT 12"LG.	M01299-12
17	Filler PAN Wearstrip (for 42") #10-24 X 3/4"Lg. FhSMS	S10076-25.5 FSW09055		GALVANIZED METAL CLEAT 18"LG. GALVANIZED METAL CLEAT 24"LG.	M01299-18 M01299-24
17	#10-24 K 374 LG. FHSINS #10-24 HEX FLANGE NUT	FSW09055 FSW09304-01	55	#10-24 NYLON INSERT JAM LCK NUT	FSW09002-01
10	BOTTOM COVER PLATE (FOR 24")	M01306-BF-34	56	#10-24 X 1/2"LG. FHSMS	FSW04002-01
17	BOTTOM COVER PLATE (FOR 30")	M01306-BF-40	57	3/16" COUNTERSUNK WASHER	FSW09058
	BOTTOM COVER PLATE (FOR 42")	M01306-BF-52	58	12"WD BELT LACING KIT (NITRILE)	BLW00612-LK
20	3/8"-16 X 3/4" HHCS	FSW00355	50	12"WD BELT LACING KIT (PVC)	BLW01012-LK
21	3/8"-16 FLANGE NUT NYLON INSER	FSW09304-02		18"WD BELT LACING KIT (NITRILE)	BLW00618-LK
22	SPLICE PLATE	M01295		18"WD BELT LACING KIT (PVC)	BLW01018-LK
23	3/8"-16 X 3/4" CARRIAGE BOLT	FSW04355		24"WD BELT LACING KIT (NITRILE)	BLW00624-LK
24	3/8"-16 FLANGE NUT NYLON INSER	FSW09304-02		24"WD BELT LACING KIT (PVC)	BLW01024-LK
25	DRIVE CHANNEL WELD ASSY. (45")	A20705*-45	61	BELT ASSEMBLY(1/2"X1" WIRE MESH)	A38203-BW-LG
	DRIVE CHANNEL WELD ASSY. (54")	A20705*-54	62	12"WIDE WIRE MESH BELT(CLNCHD)	BLW00312
	DRIVE CHANNEL WELD ASSY. (66")	A20705*-66		18"WIDE WIRE MESH BELT(CLNCHD)	BLW00318
	WELD-IN BUTT COUPLING	M00197		24" WIDE WIRE MESH BELT(CLNCHD)	BLW00324
	DRIVE CHANNEL	M01308*-LG	63	GALV. METAL CLEAT 11 3/8"LG.	M01300-12
26	HOLE FLANGE BRG 1 3/16" BORE	BRW04040		GALV. METAL CLEAT 17 3/8"LG.	M01300-18
27	3/8"-16 X 1" HHCS	FSW00357		GALV. METAL CLEAT 23 3/8"LG.	M01300-24
28	3/8"-16 FLANGE NUT NYLON INSER	FSW09304-02	64	1/4"-20 X 1"LG. FHSMS	FSW01157
29	3/8" FLAT WASHER	FSW09305	65	1/4"-20 NYLON INSERT LOCK NUT	FSW09103
30	4" DRV. PULLEY ASSY.(3-PLY BELT)	4DP-BF-FA	66 47		MCW06325
		A38231-4-LG	67 68	4" RIGID CASTER SUPPRT ASSEMBLY	KB-2
	3/4" Pulley Washer 3/16"dia. Drive Pulley Shaft	M00285 S10240-BF	68 69	KB-2 KNEE BRACE ASSEMBLY SMALL PIVOT PLATE	кв-2 М00131
	4" O.D. PULLEY TUBE	S10240-BF S12805-BF	69 70	KNEE BRACE	M02298-2
	DRIVE PULLEY ASSY. (MESH BELT)	A25785-OAW-BW	70	OVERHEAD MOUNT DRIVE KIT	WIUZZ 70'Z
	4" DIA. KEYSTONE SPROCKET 13S	SPW09913	72	OVERHEAD MOTORBASE ASSEMBLY	A21976-BF
	3/16"DIA. DRIVE PULLEY SHAFT	S10032-OAW	72	MOTORBASE STIFFENER ASSY	A37014-RED.
	1/4" KEYSTOCK X 1 1/2"LG.	S12397	74	REDUCER PUSH PLATE ASSY	A25660-718
	4" O.D. PULLEY TUBE	S12578-BW	75	CHAIN GUARD ASSEMBLY	A37913-529
31	DRIVE RETURN WEARSTRIP	S10485		CHAIN GUARD FILLER	M01294-529
32	#14 X 3/4"LG.SHEET METAL SCREW	FSW07956		CHAIN GUARD COVER ASSEMBLY	A25803-529



NOTES

22



Roach Conveyors

- 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--

> 808 HIGHWAY 463 TRUMANN, ARKANSAS 72472-0589 Tel 870-483-7631 Fax 870-483-7049 roachconveyors.com



808 HIGHWAY 463 TRUMANN, ARKANSAS 72472-0589 Tel 870-483-7631 Fax 870-483-7049 sales@roachconveyors.com www.roachconveyors.com