



# OWNER'S MANUAL



## Chain Transfers and Chain Drags

Models CT and CD

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

# CHAIN TRANSFERS & CHAIN DRAG CONV. TECH HANDBOOK

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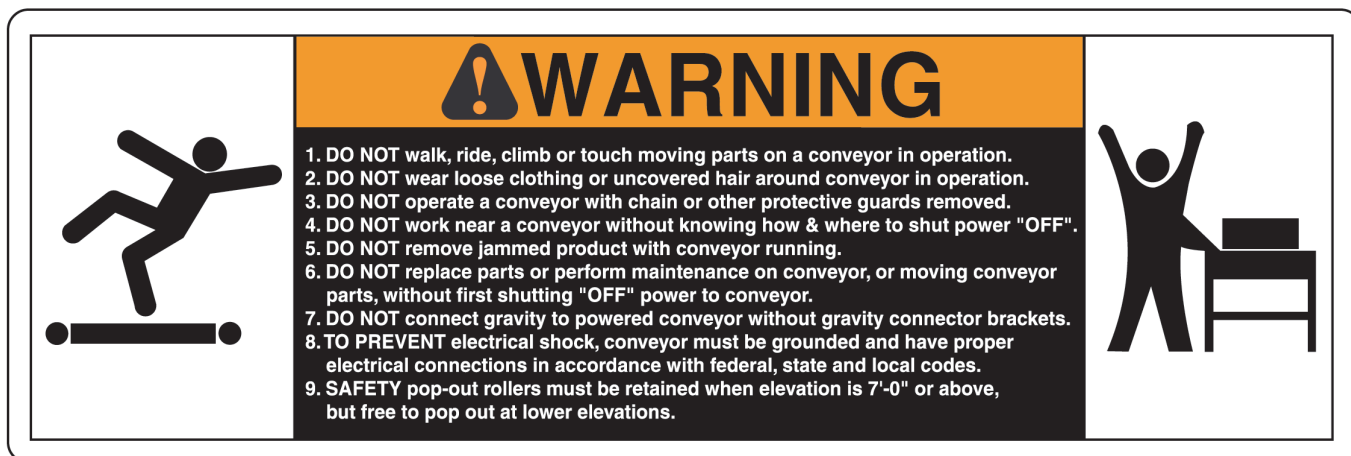
## WARNING LABELS



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

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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 auto-

mobiles!) 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.

## WARNING

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, 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 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

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### **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.

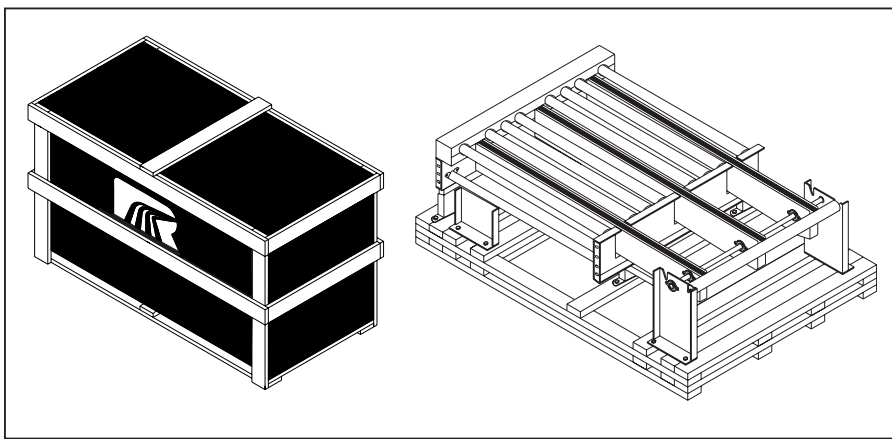
 Safety pop out rollers in conveyors installed above 7'-0" elevation must be retained by guard rail, clips, etc. Safety pop out rollers must be allowed to pop out when

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®.

## SHORTAGES, DAMAGES AND RETURN AUTHORIZATIONS



Before uncrating, check quantity of items received against bill of lading to confirm that all equipment has been received. Next, determine if any damage has occurred. Damage and/or shortage in shipment should be reported immediately to both Roach and carrier. Obtain signed damage report from carrier agent and send copy to Roach. Do not repair any damage before obtaining this

report. Finally, consult factory to determine if entire shipment must be returned to factory for repair or if a replacement order should be entered for replacement equipment.

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

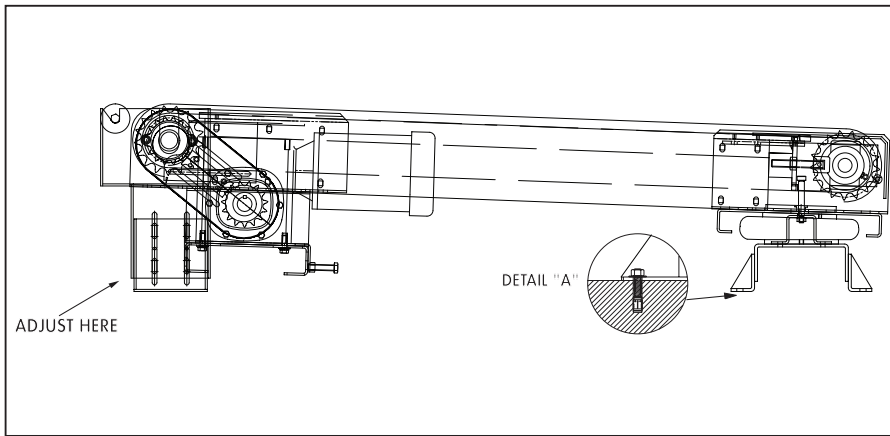
**NOTE:** Do not return goods to factory without prior, written return authorization. Unauthorized returns are subject to refusal at factory. Also, some items (electric motors, gearbox, etc.) may be shipped direct from their manufacturer. Thus, two or more separate shipments may be required to receive all equipment.

After receipt and initial inspection, carefully remove crating and look for essential components and specific accessories that may have been boxed and attached (or 'banded') to crating material such as guard rails and hardware which may be packaged and shipped in this manner. Save all hardware for subsequent use by installation personnel.

# GENERAL INSTALLATION INFORMATION

## CHAIN TRANSFER SET-UP

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**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 (see detail "A").

Once transfer is uncrated, installation of transfer may begin. Locate unit in the actual installation area. Use mechanical hoist (fork truck or other available means) to raise transfer and accompanying conveyor bed sections to approximate installed elevation. Locate supports and mate bed sections of conveyor transfer mounts in, with butt couplings (or splice plates). Adjust elevation to top of convey-

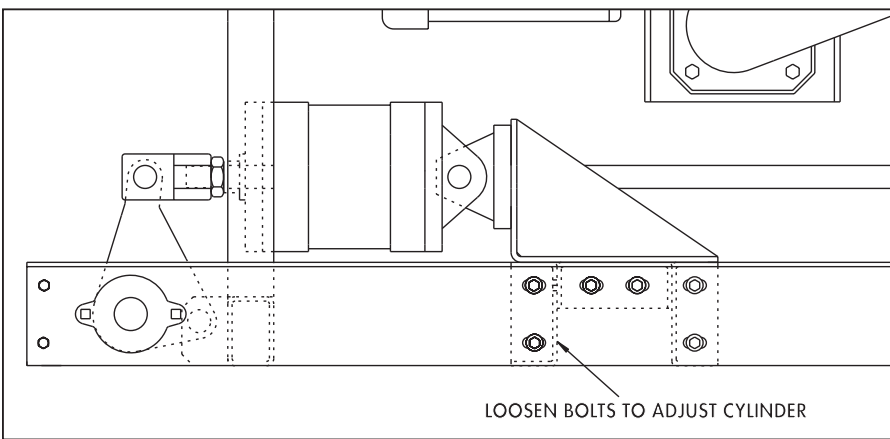
or transfer mounts in by loosening bolts in support uprights, raising or lowering conveyor and fully tightening bolts at desired elevation.

Next, level transfer both across strands and lengthwise for proper unit operation. To level transfer, loosen bolts in upright floor supports and level as required. Adjustments may be required at both

sides of transfer supports and at each end of transfer.

Complete support installation by tightening bolts in ALL supports before unit operation and lag support attachment plates to floor with lag bolts in support foot plate mounting holes (see detail "A").

## ADJUSTMENTS TO POSITIVE LIFT CHAIN



**WARNING:** Before any adjustments are attempted it is imperative that conveyor is shut "OFF" and power source is locked out.

When operating a chain or V-belt transfer, the carrying strands of the transfer must raise high enough to transfer product off of transfer. When product is clear, transfer is lowered below top of rollers on conveyor that transfer is mounted in. Transfer strands must be lowered so that product does not contact strands while in lowered position.

Should carrying strands need adjustment, loosen attachment bolts in air cylinder mounting bracket (see illustration above) and adjust as required. Remember to fully tighten bolts once adjustments are completed.

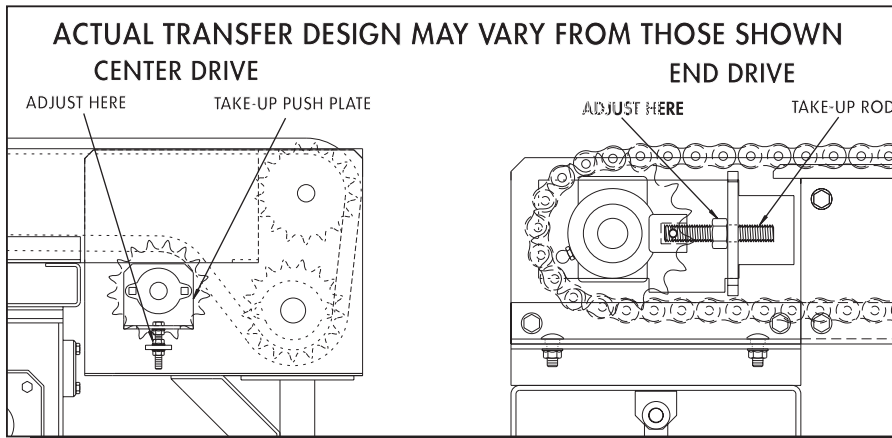
Although transfers may be specially designed to meet the needs of a specific product or application, most positive lift

transfers are mounted so that carrying strands have 1" net lift as stationed nominal 1/2" below top of roller in lowered position and nominal 1/2" above top of roller in raised position.

# TECHNICAL

## MAINTAINING PROPER CARRIER CHAIN TENSION

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**WARNING:** Before any adjustments are attempted it is imperative that conveyor is shut "OFF" and power source is locked out.

Maintaining proper carrier chain tension is vital to transfer operation. Enough tension should be maintained so that drive sprocket does not slip under fully loaded conditions.

Tension on chain transfer has been set at factory prior to inspection and shipping.

It is perfectly normal for chain to stretch

in varying operating conditions under rated loading. Therefore, tension on carrier chain strands must be monitored and adjusted as necessary.

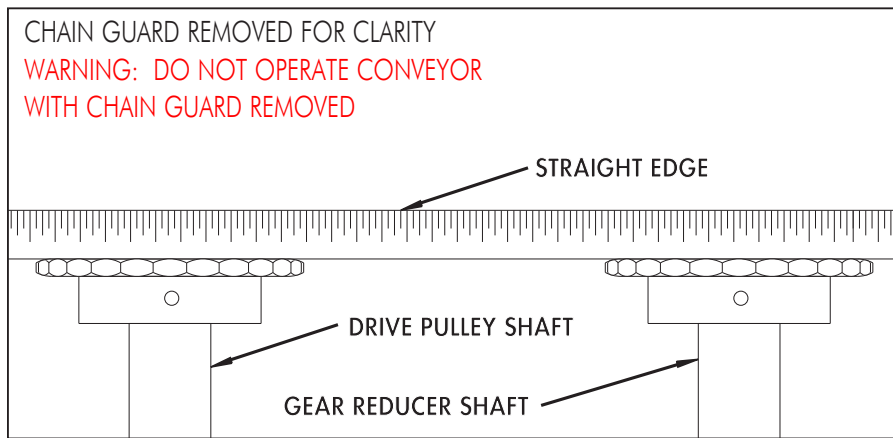
To adjust chain transfer take-up, adjust position of take-up rod as required. Remember to adjust each strand of chain as required.

Do not operate with too much tension on chain strands, however. When using extended pitch chain, over-tensioning may increase operating noise to unacceptable levels. Adjust to decrease tension on chain strands.

# START-UP PROCEDURES

## DRIVE CHAIN AND SPROCKET ALIGNMENT

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**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.

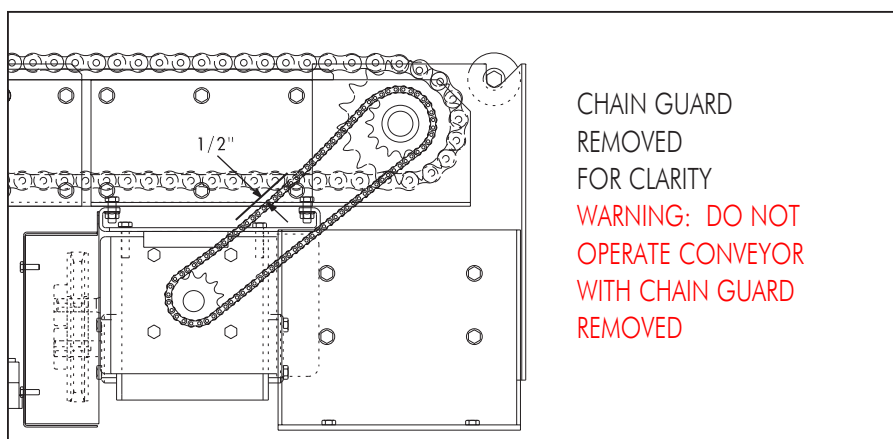
To check drive sprocket alignment, it is imperative that conveyor is shut "OFF" and power source is locked out before any adjustments are attempted. Remove chain guard cover and place straight-edge (see illustration above) across face of both drive sprockets. If re-alignment is necessary, loosen set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

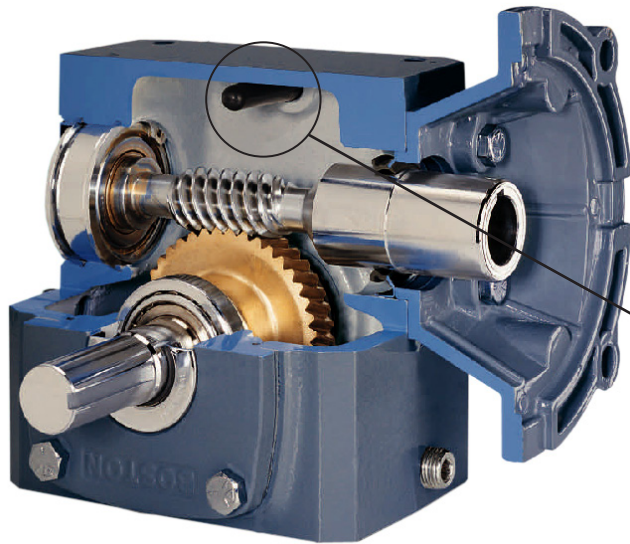
range is achieved. If chain tension is too tight, loosen tensioner bolt (rotate counter-clockwise) as required. When adjustment is complete replace chain guard cover.

**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.

# START-UP PROCEDURES

## GEAR REDUCER WITH POSIVENT<sup>®</sup>

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### NOTE

The gear reducer is supplied with a "PosiVent<sup>®</sup>". 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



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

**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.

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, drive chain tension, carrying chain tension and related adjustments noted in handbook for unit/component corrections.



# 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

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

| WEEKLY RECOMMENDED MAINTENANCE SCHEDULE* |                                                                                                                      |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| COMPONENT                                | DETAIL OF MAINTENANCE                                                                                                |
| PILLOW BLOCK /<br>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 |

| WEEKLY RECOMMENDED MAINTENANCE SCHEDULE* |                                                                     |
|------------------------------------------|---------------------------------------------------------------------|
| COMPONENT                                | DETAIL OF MAINTENANCE                                               |
| GEAR REDUCER                             | Check for leaks                                                     |
| DRIVE SHEAVES                            | Check & re-tighten set screws & check for overall wear              |
| PILLOW BLOCK/<br>FLANGE BEARINGS         | Lubricate (normal conditions)                                       |
| DRIVE CHAIN                              | Check for proper operating tension & for overall wear & lubrication |
| DRIVE SPROCKETS                          | Check for overall wear & re-tighten set screws                      |

| WEEKLY 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 |
| UNIT SAFETY CHECK                        | Confirm placement of all guards, pop out rollers, warning labels & check for loose bolts, nip points & other hazards            |

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

## MAINTENANCE AND LUBRICATION

### RECOMMENDED LUBRICANTS

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| MISCELLANEOUS LUBRICANTS                                                                                   |                                                                 |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| General Purpose Grease<br>(-30°F to 300°F operation)*                                                      | Shell Dolium R (Shell Oil Co.)<br>(or suitable equivalent)      |
| Extreme Temperature Operation<br>(-90°F to 350°F operation)*                                               | Mobiltemp SHC-32 (Mobil Oil Corp.)<br>(or suitable equivalent)  |
| Washdown Application<br>(-30°F to 225°F operation)*<br>(May require special consideration—consult factory) | Shell Alvania No. 3 (Shell Oil Co.)<br>(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

12

[illegible]

## NOTES

### CHAIN TRANSFERS & CHAIN DRAG CONVEYORS

[illegible]



# TROUBLE SHOOTING AND REPLACEMENT PARTS

## TROUBLE SHOOTING / SERIAL PLATE

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| TROUBLE SHOOTING                                                              |                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TROUBLE                                                                       | PROBABLE CAUSE                                                                                                                                                    | REMEDY                                                                                                                                                                                                                                                                                                                                                                                         |
| Motor & gear reducer runs excessively hot, repeated stalling or hard to start | A. Drag on conveyor<br>B. Lack of lubricant<br>C. Frozen Sprocket<br><br>D. Frozen Roller<br>E. Overload<br>F. Electrical                                         | A. Inspect entire conveyor for obstruction causing drag on chain.<br>B. Check for leaks.<br>C. Check and inspect all sprockets and bearings. Replace sprockets failing to rotate or that are difficult to rotate.<br>D. Check all rollers for rotation.<br>E. Reduce cause and/or increase motor horsepower.<br>F. Check wiring and circuits, take ampere reading, replace motor if necessary. |
| Motor & gear reducer makes excessive noise                                    | A. Lack of lubrication<br>B. Damaged gears<br>C. Faulty bearing                                                                                                   | A. Check for leaks.<br>B. Replace unit.<br>C. Replace bearing.                                                                                                                                                                                                                                                                                                                                 |
| Drive chain, conveying chain or sprockets have excessive wear                 | A. Excessive tension<br>B. Sprockets misaligned<br>C. Chain not lubricated<br>D. Damaged sprocket or chain<br>E. Misalignment of chain guard(s)<br>F. Dirty chain | A. Reduce chain tension.<br>B. Realign with straight edge across sprocket faces.<br>C. Lubricate chain with approved lubricant, wipe away excess lube.<br>D. Replace damaged components.<br><br>E. Adjust chain guard(s) assembly as necessary.<br>F. Clean thoroughly and lubricate with approved lubricant.                                                                                  |
| Drive chain, conveying chain or sprockets have excessive wear                 | A. Insufficient chain tension<br>B. Chain not adequately lubricated<br>C. Sprockets misaligned                                                                    | A. Adjust chain tension.<br>B. Lubricate chain with approved lubricant, wipe away excess lube.<br>C. Realign sprockets with straight edge across sprocket faces.                                                                                                                                                                                                                               |
| Pulsating chain                                                               | A. Insufficient chain tension<br>B. Misalignment of chain guard(s)<br>C. Overload                                                                                 | A. Adjust chain tension.<br>B. Adjust chain guard(s) assembly as necessary.<br>C. Inspect for obstruction or drag on conveyor.                                                                                                                                                                                                                                                                 |
| Broken chain                                                                  | A. Frozen bearing or sprocket shaft<br>B. Worn or damaged chain.<br>C. Obstructed or jammed                                                                       | A. Inspect for damaged bearings, replace if necessary. Replace links as required.<br>B. Replace chain as required.<br>C. Remove obstruction to clear jam.                                                                                                                                                                                                                                      |
| Sprocket loose on shaft                                                       | A. Loose set screws<br>B. Worn or damaged key                                                                                                                     | A. Realign sprockets with straight edge and tighten set screws<br>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 as required.                                                                                                                                                                                                                                                                                                |



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

SERIAL NO. **123456**

### ORDERING REPLACEMENT PARTS

To order any replacement parts or when calling for assistance with any powered conveyor, ALWAYS provide 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 CT360

## PARTS LIST FOR TRANSFER WITH PIVOT LIFT & END DRIVE

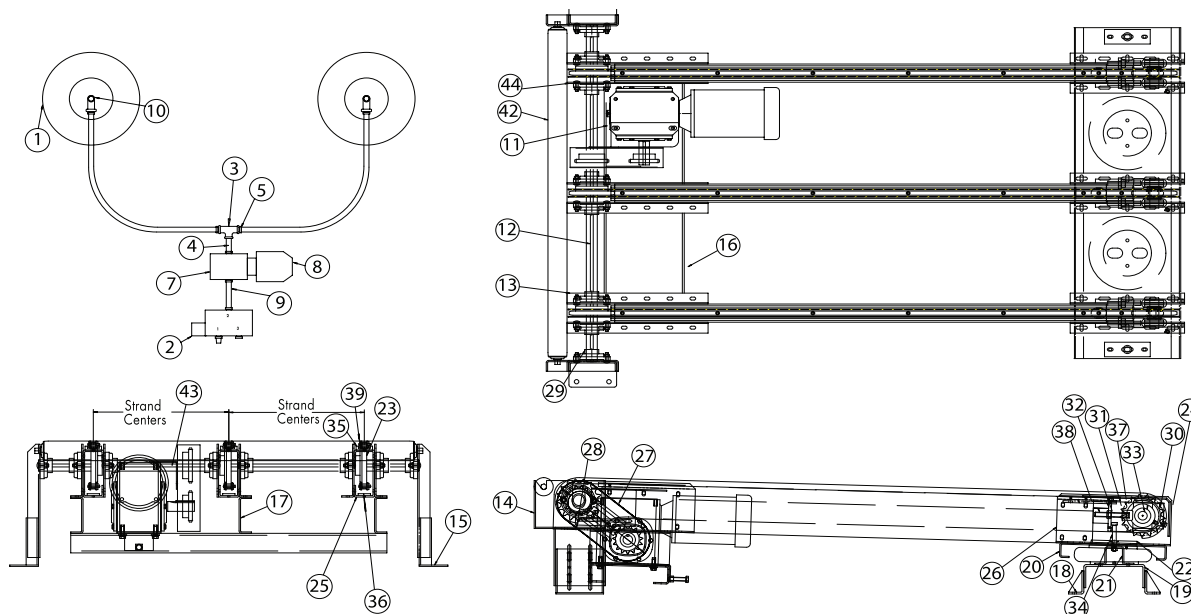
14

| ITEM | DESCRIPTION                     | ITEM | DESCRIPTION                           |
|------|---------------------------------|------|---------------------------------------|
| 1    | Airbag                          | 23   | 60B-17 w/1-7/16" Bore                 |
| 2    | MAC-225B-111CA-1/4" 3-Way Valve | 24   | 60A-17 t/Up Weld Assembly             |
| 3    | 1/4" x 1/4" x 1/4" Galv. Tee    | 25   | Transfer Arm Channel (RH/LH)          |
| 4    | 1/4" Close Nipple               | 26   | T/Up Plate Weld Assembly (RH/LS)      |
| 5    | 1/4" NPT x 1/4" B.B.F.          | 27   | Chain Guard Top Assembly              |
| 7    | 1/4" Quick Exhaust              | 28   | Chain Guard Bottom Assembly           |
| 8    | 1/4" NPT Exhaust Muffler        | 29   | FB160 Brg. w/1-7/16" Bore             |
| 9    | 1/4" Self-Locking Air Hose      | 30   | 1-3/16" Bore T/Up Brg.                |
| 10   | 1/4" Street Elbow               | 31   | Take-Up Push Plate                    |
| 11   | Motor Drive Kit                 | 32   | Take-Up Rod                           |
| 12   | Drive Shaft                     | 33   | Take-Up Shaft                         |
| 13   | Drive Plate (RH/LH)             | 34   | Shoulder Bolt - 1/2" ID Rubber Washer |
| 14   | Support Channel (RH/LH)         | 35   | Chain Guide Wear Strip                |
| 15   | Outside Pivot Channel Assembly  | 36   | Bottom Wearstrip                      |
| 16   | Reducer base channel            | 37   | Support Plate Space                   |
| 17   | Reducer Base Spacer Ch.         | 38   | Support Plate                         |
| 18   | Base Adjustment Angle Assembly  | 39   | #60 Chain and Connection Link         |
| 19   | Air Bag Mount Channel           | 42   | 251S Roller Assembly                  |
| 20   | Air Bag Lift Channel            | 43   | Chain Guard Mtg. Angle                |
| 21   | Rest Channel Weld Assembly      | 44   | Flat Drive Plate                      |
| 22   | Guide Block Assembly            |      |                                       |

Specify Unit Serial Number when ordering replacement parts to ensure proper allocation of components (See Ordering Replacement Parts on page 13).

Recommended Spare Parts are shown in red. Charted are item no. and part description  
When ordering use example below.

Example: Need a replacement Gear Reducer for CT360.  
Part No: SN 123456 - 39 - #60 Chain & Connection Link



ACTUAL TRANSFER DESIGN MAY VARY FROM MODEL SHOWN ABOVE

# MODEL CT380

## PARTS LIST FOR TRANSFER WITH PIVOT LIFT & END DRIVE

15

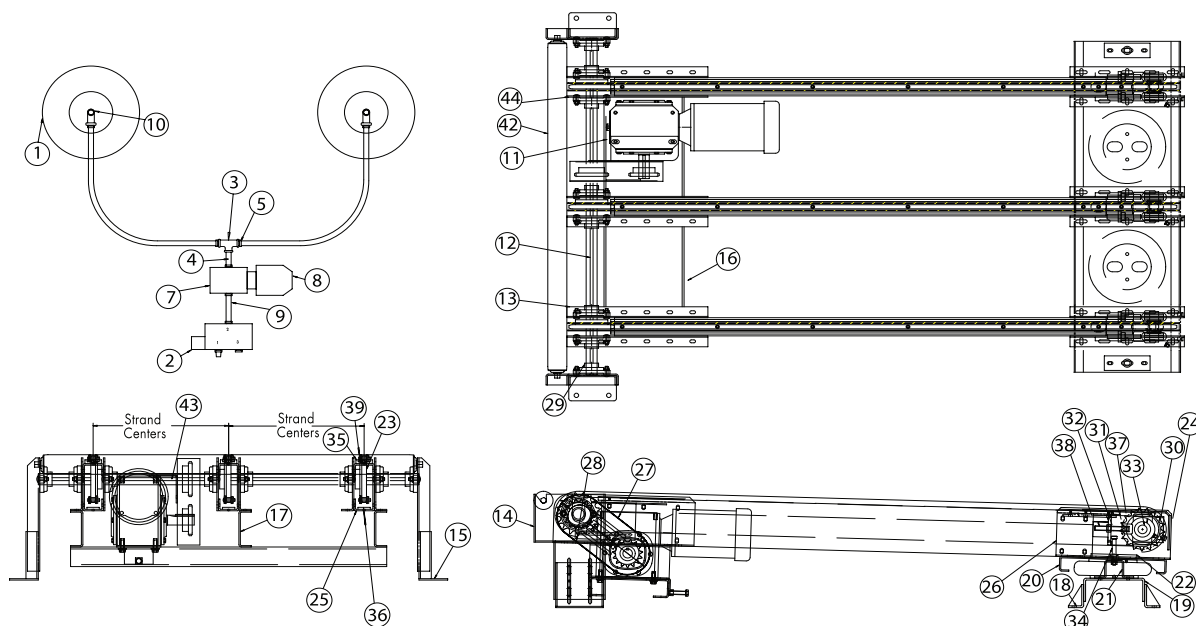
| ITEM | DESCRIPTION                     | ITEM | DESCRIPTION                           |
|------|---------------------------------|------|---------------------------------------|
| 1    | Airbag                          | 23   | 80B-17 w/1-7/16" Bore                 |
| 2    | MAC-225B-111CA-1/4" 3-Way Valve | 24   | 80A-17 t/Up Weld Assembly             |
| 3    | 1/4" x 1/4" x 1/4" Galv. Tee    | 25   | Transfer Arm Channel (RH/LH)          |
| 4    | 1/4" Close Nipple               | 26   | T/Up Plate Weld Assembly (RH/LS)      |
| 5    | 1/4" NPT x 1/4" B.B.F.          | 27   | Chain Guard Top Assembly              |
| 7    | 1/4" Quick Exhaust              | 28   | Chain Guard Bottom Assembly           |
| 8    | 1/4" NPT Exhaust Muffler        | 29   | FB160 Brg. w/1-7/16" Bore             |
| 9    | 1/4" Self-Locking Air Hose      | 30   | 1-3/16" Bore T/Up Brg.                |
| 10   | 1/4" Street Elbow               | 31   | Take-Up Push Plate                    |
| 11   | Motor Drive Kit                 | 32   | Take-Up Rod                           |
| 12   | Drive Shaft                     | 33   | Take-Up Shaft                         |
| 13   | Drive Plate (RH/LH)             | 34   | Shoulder Bolt - 1/2" ID Rubber Washer |
| 14   | Support Channel (RH/LH)         | 35   | Chain Guide Wear Strip                |
| 15   | Outside Pivot Channel Assembly  | 36   | Bottom Wearstrip                      |
| 16   | Reducer base channel            | 37   | Support Plate Space                   |
| 17   | Reducer Base Spacer Ch.         | 38   | Support Plate                         |
| 18   | Base Adjustment Angle Assembly  | 39   | #80 Chain and Connection Link         |
| 19   | Air Bag Mount Channel           | 42   | 251S Roller Assembly                  |
| 20   | Air Bag Lift Channel            | 43   | Chain Guard Mtg. Angle                |
| 21   | Rest Channel Weld Assembly      | 44   | Flat Drive Plate                      |
| 22   | Guide Block Assembly            |      |                                       |

Specify Unit Serial Number when ordering replacement parts to ensure proper allocation of components (See Ordering Replacement Parts on page 13).

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

When ordering use example below.

Example: Need a replacement Gear Reducer for CT380.  
Part No: SN 123456 - 39- #80 Chain & Connection Link



ACTUAL TRANSFER DESIGN MAY VARY FROM MODEL SHOWN ABOVE

# MODEL CT360

## PARTS LIST FOR TRANSFER W/ POSITIVE LIFT & CENTER DRIVE

16

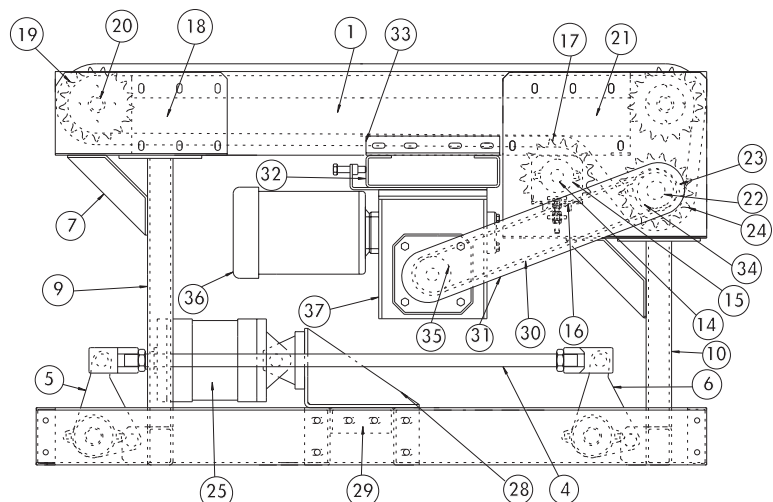
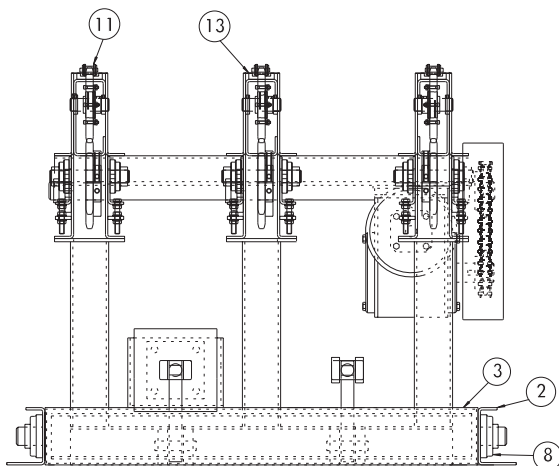
| ITEM | DESCRIPTION                                   | ITEM | DESCRIPTION                                  |
|------|-----------------------------------------------|------|----------------------------------------------|
| 1    | Transfer Arm (Specify Length, LH or RH)       | 24   | Center Drive Sprocket w/1-7/16" Bore         |
| 2    | Transfer Base Side Channel (Specify LH or RH) | 25   | Air Cylinder w/Mounting Hardware             |
| 3    | Transfer End Channel Assembly                 | 26   | Single Solenoid Valve (Not Shown)            |
| 4    | Transfer Connecting Rod                       | 27   | Universal Valve Mount (Not Shown)            |
| 5    | Transfer Front Pivot Roller Assembly          | 28   | Air Cylinder Mounting Channel                |
| 6    | Transfer Rear Pivot Roller Assembly           | 29   | Cylinder Brace Channel Assembly              |
| 7    | Lift Tube Support Assembly                    | 30   | #50 Drive Chain (1-1/2" HP or Less)          |
| 8    | 2 Hole Flange Bearing w/1-7/16" Bore          | 30   | #60 Drive Chain (2 HP or More)               |
| 9    | Front Support Channel                         | 31   | Chain Guard (For Chain Drive)                |
| 10   | Rear Support Channel                          | 32   | Motor Base w/Push Plate (Specify Horsepower) |
| 11   | No. 60 Flat Bar Carrier Chain                 | 33   | Motor Base Mounting Angle                    |
| 12   | No. 60 Flat Bar CHain Master Link (Not Shown) | 34   | Drive Shaft Drive Sprocket                   |
| 13   | Chain Guide                                   | 35   | Gear Reducer Drive Sprocket                  |
| 14   | 1" Dia. Take-Up Shaft                         | 36   | Motor                                        |
| 15   | Take-Up Bearing 1/1" Bore                     | 37   | Gear Reducer                                 |
| 16   | Bearing Push Plate                            |      |                                              |
| 17   | Modified Take-Up Shaft Sprocket               |      |                                              |
| 18   | Fixed End Plate (Specify LH or RH)            |      |                                              |
| 19   | Idler Sprocket w/1" Bore                      |      |                                              |
| 20   | 1" Dia. Idler Shaft                           |      |                                              |
| 21   | Drive/Fixed End Plate                         |      |                                              |
| 22   | 1-7/16" Dia. Drive Shaft                      |      |                                              |
| 23   | 2 Hole Flange Bearing w/1-7/16" Bore          |      |                                              |

Specify Unit Serial Number when ordering replacement parts to ensure proper allocation of components (See Ordering Replacement Parts on page 13).

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

When ordering use example below.

Example: Need a replacement Gear Reducer for CT360.  
Part No: SN 123456 - 37 - Gear Reducer



ACTUAL TRANSFER DESIGN MAY VARY FROM MODEL SHOWN ABOVE

# MODEL CT380

## PARTS LIST FOR TRANSFER W/ POSITIVE LIFT & CENTER DRIVE

17

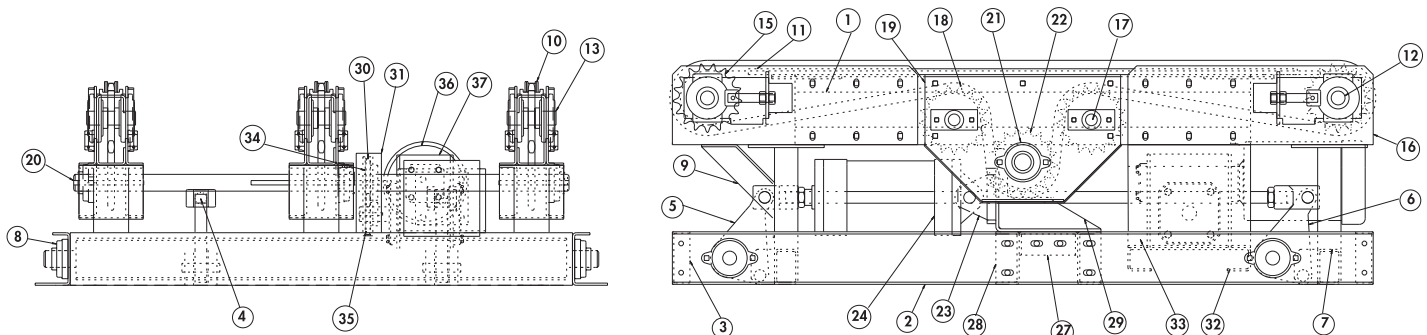
| ITEM | DESCRIPTION                                   | ITEM | DESCRIPTION                          |
|------|-----------------------------------------------|------|--------------------------------------|
| 1    | Transfer Arm (Specify Length, LH or RH)       | 24   | Center Drive Sprocket w/1-7/16" Bore |
| 2    | Transfer Base Side Channel (Specify LH or RH) | 25   | Air Cylinder w/Mounting Hardware     |
| 3    | Transfer end Channel Assembly                 | 26   | Single Solenoid Valve (Not Shown)    |
| 4    | Transfer Connecting Rod                       | 27   | Universal Valve Mount (Not Shown)    |
| 5    | Transfer Front Pivot Roller Assembly          | 28   | Air Cylinder Mounting Channel        |
| 6    | Transfer Rear Pivot Roller Assembly           | 29   | Cylinder Brace Channel Assembly      |
| 7    | Lift Tube support Assembly                    | 30   | #50 Drive Chain (1-1/2 HP or Less)   |
| 8    | 2 Hole Flange Bearing w/1-7/16" Bore          | 30   | #60 Drive Chain (2 HP or More)       |
| 9    | Front Support Channel                         | 31   | Chain Guard (For Chain Drive)        |
| 10   | Rear Support Channel                          | 32   | Motor Base w/Push Plate (Specify HP) |
| 11   | No. 60 Flat Bar Carrier Chain                 | 33   | Motor Base Mounting Angle            |
| 12   | No. 60 Flat Bar Chain Master Link (Not Shown) | 34   | Drive Shaft Drive Sprocket           |
| 13   | Chain Guide                                   | 35   | Gear Reducer Drive Sprocket          |
| 14   | 1" Dia. Take-Up Shaft                         | 36   | Motor                                |
| 15   | Take-Up Bearing w/1" Bore                     | 37   | Gear Reducer                         |
| 16   | Bearing Push Plate                            |      |                                      |
| 17   | Modified Take-Up Shaft Sprocket               |      |                                      |
| 18   | Fixed End Plate (Specify LH or RH)            |      |                                      |
| 19   | Idler Sprocket w/1" Bore                      |      |                                      |
| 20   | 1" dia. Idler Shaft                           |      |                                      |
| 21   | Drive/Fixed End Plate (Specify LH or RH)      |      |                                      |
| 22   | 1-7/16" dia. Drive Shaft                      |      |                                      |
| 23   | 2 Hole Flange Bearing w/1-7/16" Bore          |      |                                      |

Specify Unit Serial Number when ordering replacement parts to ensure proper allocation of components (See Ordering Replacement Parts on page 13).

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

When ordering use example below.

Example: Need a replacement Gear Reducer for CT380.  
Part No: SN 123456 - 37 - Gear Reducer



ACTUAL TRANSFER DESIGN MAY VARY FROM MODEL SHOWN ABOVE



# MODEL CD260

## PARTS LIST FOR UNIT W/ END DRIVE

18

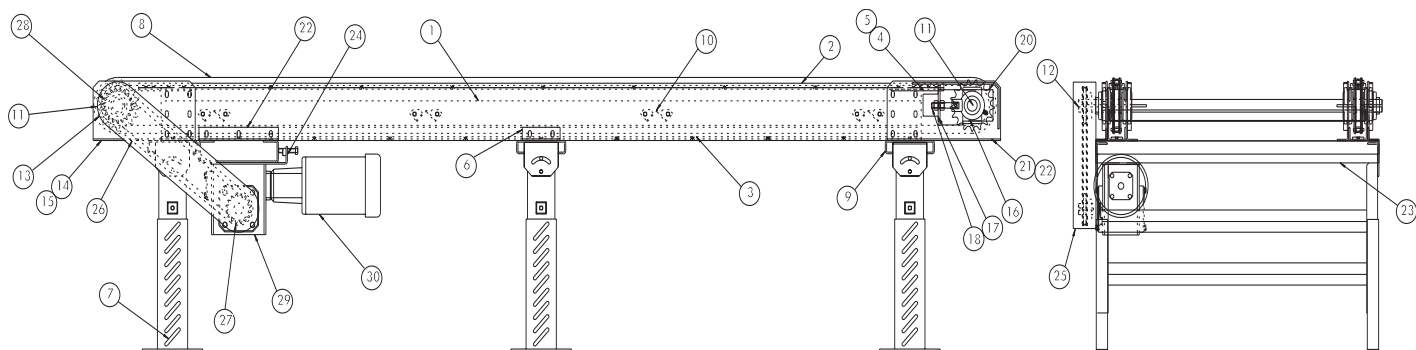
| ITEM | DESCRIPTION                                        | ITEM | DESCRIPTION                       |
|------|----------------------------------------------------|------|-----------------------------------|
| 1    | Chain Drag Side Channel                            | 24   | Reducer Push Plate Assembly       |
| 2    | Chain Wear Strip (As Required for Load)            | 25   | Chain Guard (for Motor Drive)     |
| 3    | Chain Wear Strip (Return Chain)                    | 26   | #50 Roller Chain (thru 1-1/2 HP)  |
| 4    | Wear Strip Support Plate                           | 26   | #60 Roller Chain (2 HP and Above) |
| 5    | Wear Strip Spacer Plate                            | 27   | Gear Reducer drive Sprocket       |
| 6    | Chain Drag Support Bracket                         | 28   | Drive Shaft Sprocket              |
| 7    | Adjustable Floor Supports, Model SH                | 29   | Gear Reducer                      |
| 8    | No. 80 Flat bar Carrier Chain                      | 30   | Motor                             |
| 9    | Channel Cross Member                               |      |                                   |
| 10   | Frame Cross Brace                                  |      |                                   |
| 11   | 2 Hole Flange Bearing w/1-7/16" Bore (BRW04020-SN) |      |                                   |
| 12   | Drive Shaft                                        |      |                                   |
| 13   | No. 80 Drive Sprocket w/1-7/16" Bore               |      |                                   |
| 14   | Left Hand Drive Plate                              |      |                                   |
| 15   | Right Hand Drive Plate                             |      |                                   |
| 16   | Take-Up bearing w/1-3/16" Bore                     |      |                                   |
| 17   | Bearing Push Plate                                 |      |                                   |
| 18   | Take-Up Rod                                        |      |                                   |
| 19   | Take-Up Shaft                                      |      |                                   |
| 20   | No. 80 take-Up Sprocket w/1-3/16" Bore             |      |                                   |
| 21   | Left Hand Take-Up Plate                            |      |                                   |
| 22   | Right Hand Take-Up Plate                           |      |                                   |
| 23   | Motor Base Plate                                   |      |                                   |

Specify Unit Serial Number when ordering replacement parts to ensure proper allocation of components (See Ordering Replacement Parts on page 13).

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

When ordering use example below.

Example: Need a replacement Gear Reducer for CD260.  
Part No: SN 123456 - 29 - Gear Reducer



ACTUAL DESIGN MAY VARY FROM MODEL SHOWN ABOVE

# MODEL CD280

## PARTS LIST FOR UNIT W/ END DRIVE

19

| ITEM | DESCRIPTION                                               | ITEM | DESCRIPTION                       |
|------|-----------------------------------------------------------|------|-----------------------------------|
| 1    | Chain Drag Side Channel                                   | 24   | Reducer Push Plate Assembly       |
| 2    | Chain Wear Strip (As Required for Load)                   | 25   | Chain Guard (For Motor Drive)     |
| 3    | Chain Wear Strip (Return Chain)                           | 26   | #50 Roller Chain (thru 1-1/2 HP)  |
| 4    | Wear Strip Support Plate                                  | 26   | #60 Roller Chain (2 HP and Above) |
| 5    | Wear Strip Space Plate                                    | 27   | Gear Reducer Drive Sprocket       |
| 6    | Chain Drag Support Bracket                                | 28   | Drive Shaft Sprocket              |
| 7    | Adjustable Floor Supports, Model SH                       | 29   | <b>Gear Reducer</b>               |
| 8    | No. 80 Flat Bar Carrier Chain                             | 30   | <b>Motor</b>                      |
| 9    | Channel Cross Member                                      |      |                                   |
| 10   | Frame Cross Brace                                         |      |                                   |
| 11   | <b>2 Hole Flange Bearing w/1-7/16" Bore (BWR04020-SN)</b> |      |                                   |
| 12   | Drive Shaft                                               |      |                                   |
| 13   | No. 80 Drive Sprocket w/1-7/16" Bore                      |      |                                   |
| 14   | Left Hand Drive Plate                                     |      |                                   |
| 15   | Right Hand Drive Plate                                    |      |                                   |
| 16   | <b>Take-Up Bearing w/1-3/16" Bore</b>                     |      |                                   |
| 17   | Bearing Push Plate                                        |      |                                   |
| 18   | Take-Up Rod                                               |      |                                   |
| 19   | Take-Up Shaft                                             |      |                                   |
| 20   | No. 80 Take-Up Sprocket w/1-3/16" Bore                    |      |                                   |
| 21   | Left Hand Take-Up Plate                                   |      |                                   |
| 22   | Right Hand Take-Up Plate                                  |      |                                   |
| 23   | Motor Base Plate                                          |      |                                   |

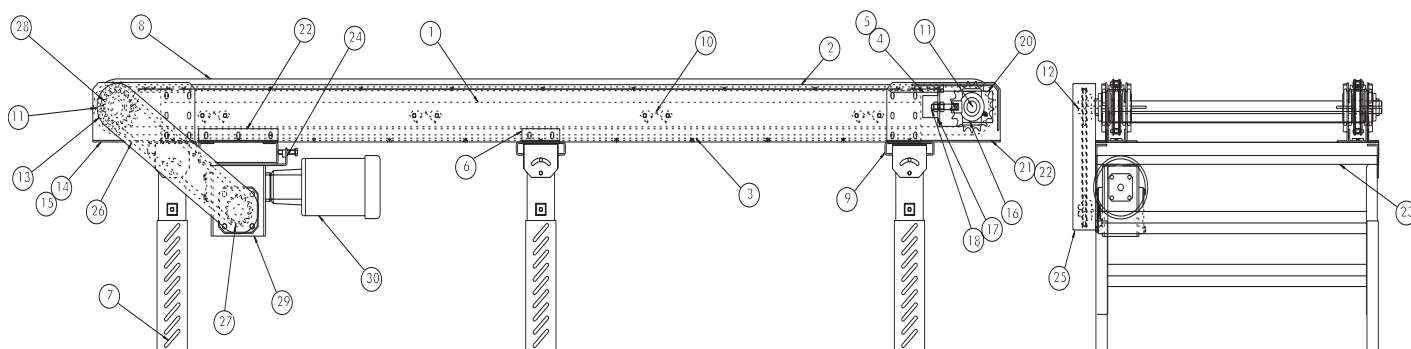
Specify Unit Serial Number when ordering replacement parts to ensure proper allocation of components (See Ordering Replacement Parts on page 13).

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

When ordering use example below.

Example: Need a replacement Gear Reducer for CD280.

Part No: SN 123456 - 29 - Gear Reducer



ACTUAL DESIGN MAY VARY FROM MODEL SHOWN ABOVE



# 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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