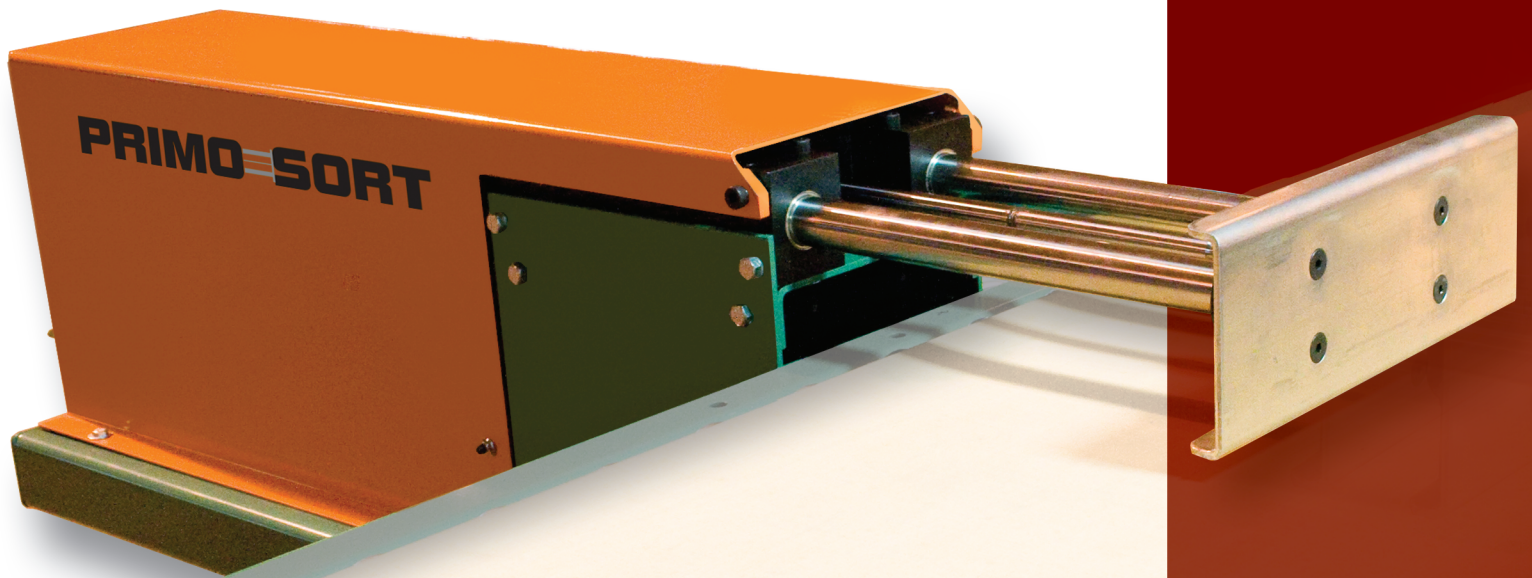




OWNER'S MANUAL



Primo Sort

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

MODEL PRIMO SORT TABLE OF CONTENTS

TECH HANDBOOK FOR HSS & OHP	2
-Warning Labels	2
CAUTIONS, WARNINGS AND HAZARDS	3
-Introduction	3
-Cautions, Warnings and Hazards	3
SAFETY INFORMATION	4
-Important Safety Guidelines	4
RECEIVING AND INSPECTION	4
-Shortages, Damages and Return Authorizations	4
GENERAL INSTALLATION INFORMATION	5
-Lagging Overhead Sorter to Floor	5
START-UP PROCEDURES	5
-Preparing for Initial Start-Up	5
MAINTENANCE SAFETY PRECAUTIONS	6
-Before Performing Maintenance	6
-Maintenance and Follow-Up Details	6
MAINTENANCE AND LUBRICATION	7
-Maintenance Schedules	7
-Report on Miscellaneous Maintenance Performed	7
PARTS LISTS FOR PRIMO SORT	8
-Primo Sort Parts List	8
-Primo Sort Assembly Drawing	9
TROUBLE SHOOTING AND REPLACEMENT PARTS	10
-Trouble Shooting / Serial Plate	10
WARRANTY	11

WARNING LABELS



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



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

CAUTIONS, WARNINGS AND HAZARDS

INTRODUCTION

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

With proper installation and maintenance, sorters 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 sorter (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 sorter 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.**

Sorters contain many moving: therefore, it is imperative to become familiar with basic unit operation and know all points of potential hazards.

Remember, when working around or near Sorters (and any industrial machinery)

it is **your** responsibility to become familiar with the unit, to know potential hazards (many are noted with caution labels) and to operate unit in strict accordance with the safety guidelines in this manual.

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

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

⚠ WARNING

DO NOT OPERATE BEFORE READING THIS MANUAL!

KEEP IN SAFE PLACE--DO NOT DISCARD!

CAUTIONS, WARNINGS AND HAZARDS

⚠ WARNING

- ⚠ Always anchor permanent supports to floor (or mounting surface). Use 3/8" x 2-1/2" (or longer) wedge anchors for permanent installation in concrete flooring.**
- ⚠ It is the responsibility of the customer and installation personnel to supply and install net or mesh guarding on overhead mounted conveyors to prevent product and/or debris from falling to floor in areas where required.**
- ⚠ 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.**
- ⚠ 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/RECEIVING AND INSPECTION IMPORTANT SAFETY GUIDELINES

⚠️ WARNING

WARNING: All personnel coming in contact with this sorter should be aware of the following safety guidelines **BEFORE USING OR WORKING AROUND SORTER.** **NOTE:** ALWAYS notify Roach Manufacturing® whenever any sorter 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

⚠️ Do not operate sorter 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 sorter in operation.

⚠️ Do not wear loose clothing or uncovered hair around sorter.

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

⚠️ Do not remove jammed product with sorter running.

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

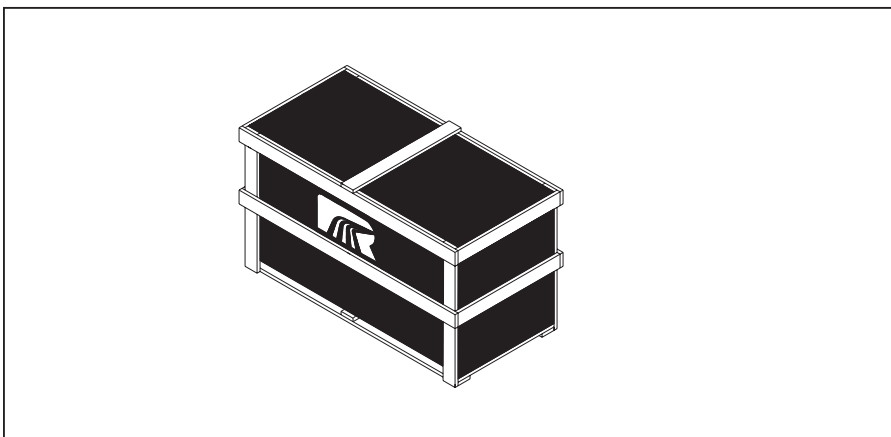
⚠️ To prevent electrical shock, sorter must be grounded, and have proper electrical connections in accordance with federal, state, and local codes.

⚠️ It is the responsibility of sorter 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 material has been received. Examine the condition of the equipment to determine if any damage has occurred. Also, it is possible that some items may become separated from the original shipment. Therefore, when receiving goods, it is imperative that the bill of lading (or,

accompanying freight documentation) be checked to ensure receipt of ALL units ordered including ALL accessories.

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

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

report.

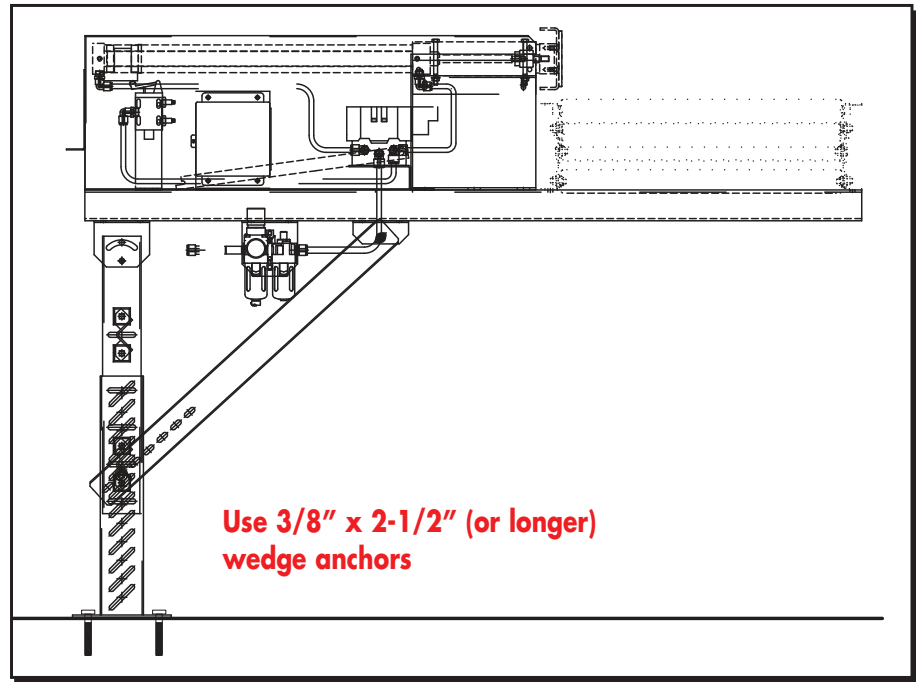
For damaged shipments, consult factory to determine if entire shipment must be returned to factory for repair **or** if an immediate order should enter production to produce a new, replacement shipment.

GENERAL INSTALLATION INFORMATION

LAGGING OVERHEAD SORTER TO FLOOR

When preparing to install overhead mounted pusher, locate area in which unit will be installed. Determine that surface is level and locate pusher assembly in position where it will be installed. Pusher must be lagged to floor before installation is completed.

As shown in illustration above, overhead mounted pusher is designed with support plates which are designed to be attached to--or lagged--to floor. ALWAYS anchor sorter support plates to floor (or mounting surface). Use 3/8" x 2-1/2" (or longer) wedge anchors for permanent, durable installation in concrete flooring. Finally, fully tighten all bolts in support plates **before** unit operation.



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.

START-UP PROCEDURES

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

Before sorter 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 sorter 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 sorter is initially started, an immediate visual inspection should include motor, gear reducer 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, sorter 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 sorter 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, sorter must be shut "OFF" and disconnects locked in the "OFF" position to prevent unit from unauthorized start-up during maintenance. Make sure

air flow to unit is turned "OFF". All personnel should be informed of the safety procedures associated with unit maintenance and performance.

Do not perform any work on sorters or sorter 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 SAFETY PRECAUTIONS 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 sorter 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 sorters 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.

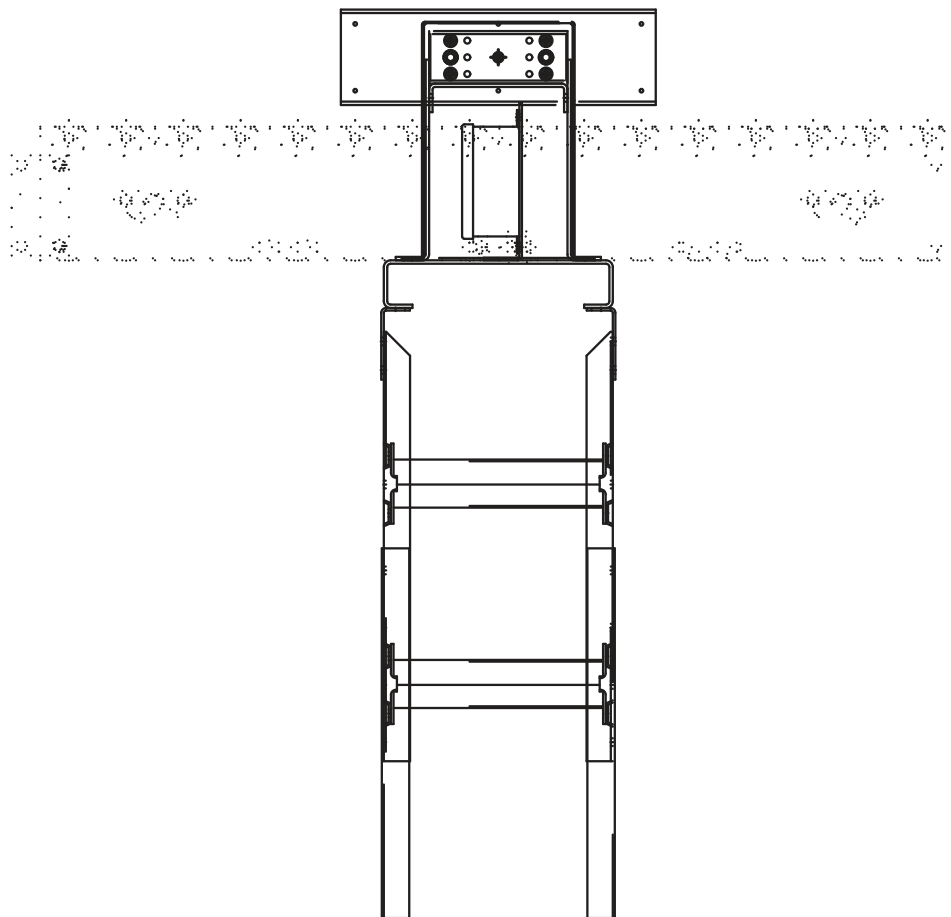
After maintenance, conduct visual inspection to ensure that all safety devices and guards have been replaced. Confirm that all units are clear of tools, debris or other items. Before starting conveyor, check condition of unit caution labels (see "WARNING LABELS" at front of handbook). If labels have been destroyed or are not clearly legible, call 870.483.7631 to receive replacement labels. Placement of warning labels is critical to avoid unauthorized unit operation which may result in hazardous working conditions for all related personnel coming in contact with sorter.

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

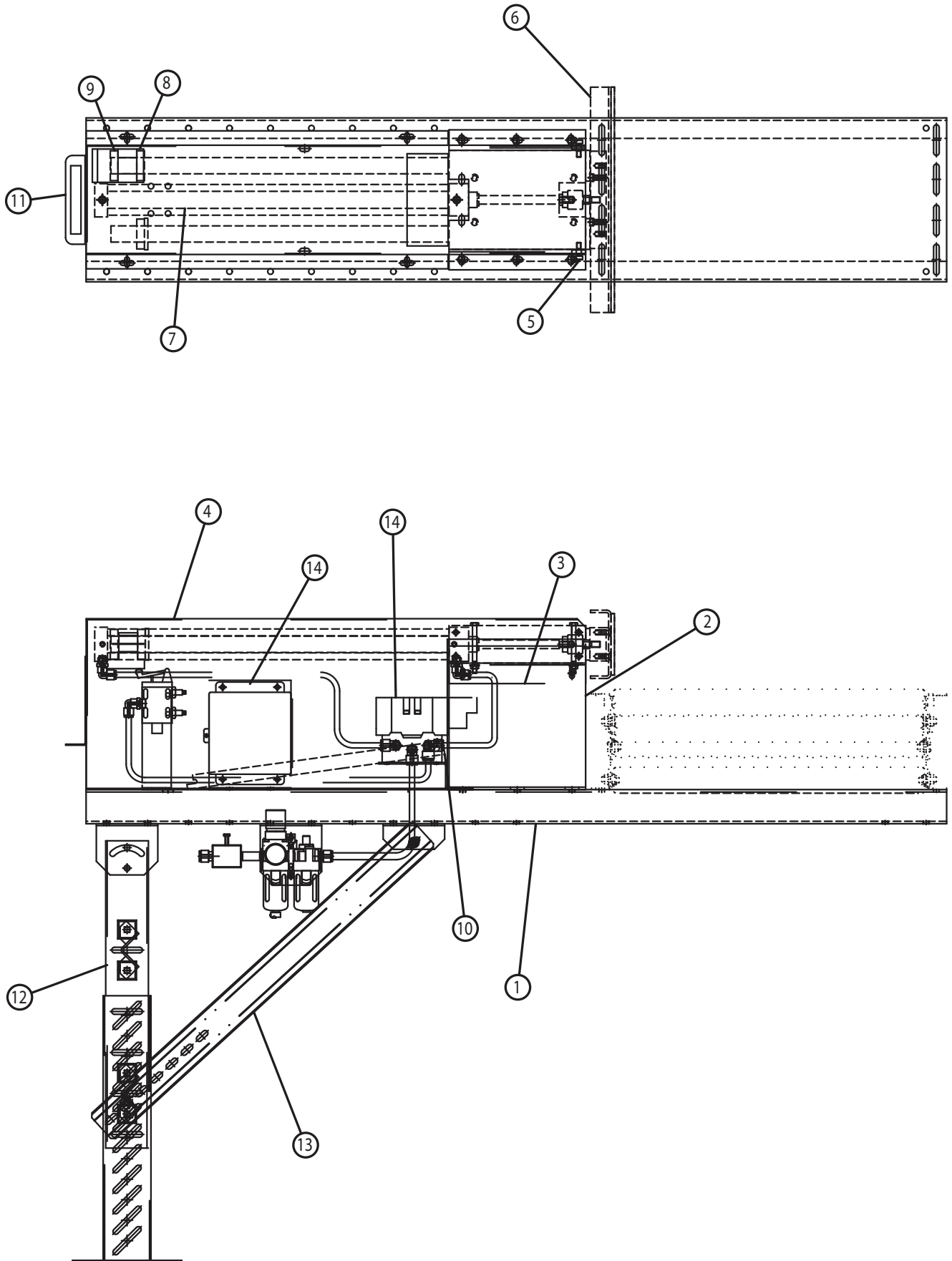
MODEL PRIMO SORT PARTS LIST

ITEM #	DESCRIPTION
1	1 PUSHER CROSSMEMBER
2	2 CYLINDER MOUNTING ANGLE
3	1 CYLINDER SUPPORT CHANNEL
4	1 PUSHER COVER ASSEMBLY
5	2 3/8" x 1/2"L x 5/16"-18 S.B.
6	1 PUSHER CHANNEL
7	1 GUIDE ROD CYLINDER

ITEM #	DESCRIPTION
8	1 UHMW STRIKER BLOCK
9	1 1-3/16" I.D. LOCKING COLLAR
10	1 GUARD SUPPORT STRAP
11	1 HANDLE
12	1 SUPPORT ASSEMBLY
13	2 KNEEBRACE ASSEMBLY
14	1 MOUNTING ANGLE



MODEL PRIMO SORT ASSEMBLY DRAWING



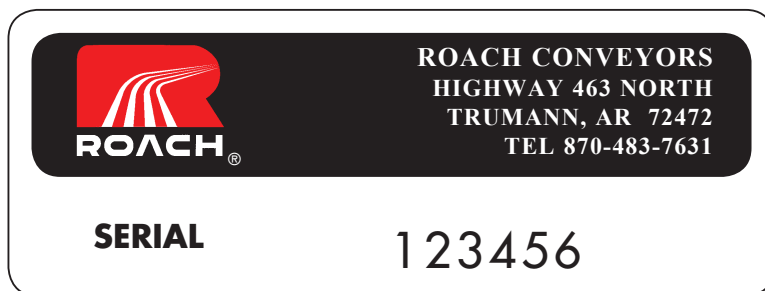
TROUBLE SHOOTING AND REPLACEMENT PARTS

TROUBLE SHOOTING

TROUBLE SHOOTING		
TROUBLE	PROBABLE CAUSE	REMEDY
Pusher will not activate.	A. No power to pusher B. Air loss to pusher C. No activation signal to pusher D. Home position proximity switch out of adjustment	A. Check power source. B. Check air supply. C. Check signal source. D. Adjust proximity switch
Ram bounces at end of retract stroke or remains partially extended.	A. Cushion regulator pressure too high B. Cushion "bleed-off" needs adjustment.	A. Adjust cushion regulator. B. Adjust cushion "bleed-off".
Pusher stroke too long or hits hard on extend stroke	A. Extend proximity switch too close to front of pusher B. Activation signal too long	A. Adjust proximity switch.. B. Decrease activation signal time.
Pusher stroke too short.	A. Extend proximity switch too close to rear of pusher	A. Adjust proximity switch..
Little or no cushion on retract stroke.	A. Cushion regulator pressure too low B. Cushion "bleed-off" needs adjustment C. Cushion proximity switch out of adjustment.	A. Adjust cushion regulator. B. Adjust cushion "bleed-off". C. Adjust proximity switch.
Pusher is sluggish or may not push product	A. Main regulator pressure too low	A. Adjust main regulator.
Pusher hits too hard in both directions, may hit package too hard.	A. Main regulator pressure too high	A. Adjust main regulator.
Ram extends completely, hit hard, and remains extended	A. Extend proximity switch out of vertical adjustment	A. Adjust proximity switch.

REPLACEMENT PARTS

SERIAL PLATE



ORDERING REPLACEMENT PARTS

To order any replacement parts or when calling for assistance with any powered conveyor, **ALWAYS** provide the unit serial number. Shown at actual size, this aluminum plate is placed on the sorter frame.

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.



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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