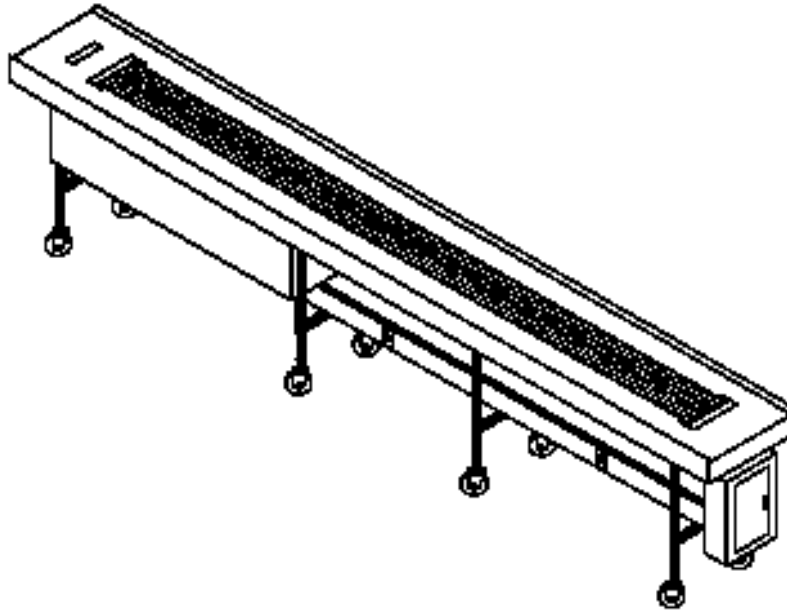


# Conveyor Operating Manual

**Models:** IESB  
IESFB  
IESSB



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**For Service Information call 1.888.673.4639**

*Please provide following information:*

- Model Number
- Serial Number
- Part description and number as shown in parts list.

Please confirm that you have the most current specification sheet by visiting [www.carlislefsp.com](http://www.carlislefsp.com).  
Dinex reserves the right to change specifications and product design without notice.  
Such revisions do not entitle the buyer to corresponding changes, improvements, additions or replacements for previously purchased equipment.

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Manual No. CONVEYOROPS Rev-06/13

**DO NOT DISCARD**

## Introduction

Congratulations! You have just purchased one of the finest pieces of equipment on the market today. Before installing or operating your new Dinex® Products equipment you should read through this material. This manual should be retained for further reference as it contains installation and operating instructions, service tips, part list and warranty information. Should you have any questions concerning the Equipment, please call the Dinex® Hotline at 1-888-673-4639 (Monday through Friday from 8 am to 5 pm, Eastern Standard Time).

**IMPORTANT:** For your safety, read and follow all cautions, information and warnings.

### FREIGHT DAMAGE CLAIMS

Your Dinex® Products equipment was carefully inspected and packed before leaving our factory. The transportation company assumes full responsibility for safe delivery of this equipment. Dinex® Products cannot assume responsibility for damage or loss incurred in transit. Visible damage or loss should be noted on freight bill and signed by person making delivery.

A freight claim should be filed immediately with the transportation company. If damage is unnoticed or concealed until equipment is unpacked, notify the transportation company immediately and tell them you want to file a concealed damage claim. This must be done within fifteen (15) days after delivery was made. Be sure to retain all packing material and cartons.

**WARNING:** Installation of this equipment should be performed only by persons qualified or licensed to install electrical equipment.

- Adjustments and service work should be performed only by a qualified service technician. Service is available through Authorized Dinex Products Parts & Service Distributors throughout the United States. For a complete listing of these consult your distributor listing or write Dinex Products for the name of the nearest distributor.
- This equipment is intended for commercial use only. Not for household use.
- Use of other than genuine Dinex® Products replacements parts or service work performed by other than authorized Dinex® Products service agents will void the warranty.
- Do not use any corrosive cleaners. Use only cleaners approved for stainless steel.

This manual is designed to provide basic information and instructions for the proper operation and cleaning of your conveyor. To avoid publication of countless individual manuals, to include the many commonly specified combined features:

- 1) **Belt or Conveyor Type** – Fabric or Slatted
- 2) **Conveyor Use** – Tray Make-Up or Soiled Dish, Bussing, Scrapping, Sorting, etc.,
- 3) **Cleaning Features** – “Dry Belt” - Flush clean, “Wash Belt” - having wash and lubricating belt spray system, - with NEMA-4 electrical parts, wiring, etc.

Information and instructions for all these conveyor features are presented collectively. Disregard any information or instruction which does not relate or apply to your particular combination of conveyor features and use only that information which does apply to your use.

## Operation

### ELECTRICAL

**Master Switches** are generally located near the operator's station. They are marked with identification plates. They usually control the operation of a mechanical motor starter, which operates the conveyor system.

**Mechanical Motor Starters** control conveyor motor(s) on AC motor drives. They are turned on by the master and limit switches on single conveyors or by the mechanical starters of the preceding conveyors in a multi-conveyor system.

**Best Wash Systems** A continuous wash cycle (RW-Wash System) is available on all “Wash Belt” conveyors. It operates automatically whenever the conveyor belt is in motion and does not require a manual switch to turn it on. A conveyor may (by specification) be provided with a timed wash or shut down auto wash so that the conveyor may be washed down periodically, i.e. after each period of use or intermittently during the operation.

**TW (Timed Wash) Systems** are controlled by timers located within the master control panel. These are factory set to allow automatic on off cycling of the belt wash system when the conveyor is in operation. If your conveyor requires additional cycle adjusting, this can be accomplished by adjusting the marked knobs on the timers, one for on-cycle duration and one for off-cycle duration. In-house maintenance personnel should make this adjustment.

**SDAW (Shot Down Auto Wash) Systems** are controlled by a timer located within the master control panel. This timer is factory set to allow selective automatic belt washing at the end of the conveyor service period. Conveyors with this feature are provided with two (2) “Stop” or “Off” Switches. The normal “Off switch, when activated, simply turns the conveyor drive system off. The “Stop Wash” switch, if depressed, automatically puts the conveyor into a timed wash cycle, which will shut down the conveyor drive, system and simultaneously wash the system. If the wash cycle duration requires adjustment, adjust the marked knob on the timer. In-house maintenance personnel should make this adjustment.

## LIMIT SWITCHES, ACTUATOR ARMS & PLATES

**Silver Guard Switches** are used and located at the head pulleys of most "Fabric Belt" conveyors. They are designed to prevent damage to the belts when loose items such as forks, spoons, etc., are placed directly on the conveyors (which are designed to carry only contained loads). When such items are on or under the silver guard plate, the limit switch is actuated, causing the mechanical starter to de-energize and stop the conveyor.

**Slatted Belts** are often provided with similar devices (Sensor Bar Switches) to resist damage caused by loose items (cups, saucers, silver, etc.) that are placed directly on the belts. Use extra care, especially, on slatted belts to avoid loose silver damage.

**Tray Accumulator** limit switches are commonly used on soiled dish "Scrapping" conveyors. The belt continues to move when a tray passes through the first limit arm but stops after it deflects the wheel or second arm. When the next tray arrives, both arms are deflected, making the conveyor stop.

**Tray Stack Accumulator** systems consist of three (3) limit switches when specified. The Sweeper Switch stops the conveyor, preventing loaded trays from dumping. Unloaded trays pass under the arm onto the lowerator. When loaded with trays, the lowerator shelf depresses the Accumulator Switch, making the conveyor stop. The cart position switch will not allow the conveyor to start until the empty cart is in the correct location.

**Chain Guard Limit Switches** are mounted and concealed behind the power transmission chain cover. Removal of these covers will stop the conveyor drive system.

**NOTE:** Activation of the sensor bar safety switch or the chain guard limit switch will automatically stop the conveyor drive and WILL NOT ALLOW AUTOMATIC RESTART. The conveyor must be manually restarted from the master control panel or the remote start-stop station. Any attempts by the user/owner to bypass, override or otherwise defeat the function of these safety devices, will totally void all warranty responsibilities of Gates Manufacturing Co. In addition, all claims for damage or injury arising as a result of the afore stated action will not be the responsibility of Dinex® International.

**Landing Plate Limit Switches** are used primarily on fabric belt, soiled dish and bussing conveyors. A tray or a stack of soiled dishes actuates the switch at the landing plate and stops the conveyor (through the mechanical starter) before subsequent loads can collide; causing dumping, spillage and dish breakage.

## Maintenance

### ELECTRICAL CARE

Remember, properly functioning limit switches are necessary for the correct and dependable operation of your conveyor. Instruct operating personnel to check all electrical switches (manual and limit) daily and immediately report any malfunction or disorder for prompt maintenance and repair. Your Unit switches are insurance and protection against untimely and unwanted breakdowns.

## BELT SPEEDS

Conveyors are specified or furnished with "Constant Speed" or "Variable Speed" belt drives, depending on their use.

**Electronically Adjustable Variable Speed Drivers** are furnished to allow time adjustment for variance in load delivery. These belt speeds are easily reduced to almost "0" feet per minute, by turning a knob or dial. (See Fig. 1)

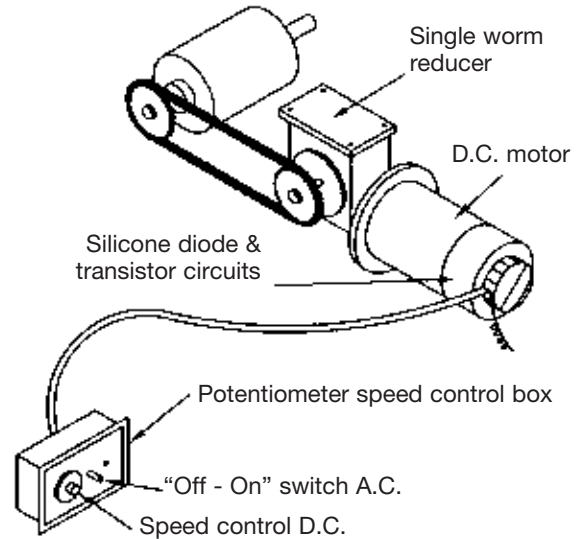


Figure 1

**Constant Speed Drives** are usually specified to insure correct "tamp proof" belt speeds (especially for Tray Separation and Indexing) and to reduce unexpected "down time" for maintenance and repairs caused by improperly regulated belt speeds. Constant drive speeds can only be increased or decreased by changing sprocket sizes.

The chart (page 4) lists a few of the more commonly used speed ranges and may be used as a guide for those conveyors having variable speed drives.

When considering changes in belt speeds, it is wise to consider the following simple rules:

### Trays Per Hour

Regardless of Belt Speed, trays will be delivered to the unloading area at the same rate at which they were placed on the loading area.

### Travel Time

A change in Belt Speed only changes the figures listed in Columns 3, 6, and 7 and the distance in traveled time, i.e. one minute is required for a section of the belt to travel 40 feet from loading to unloading of conveyor or 1/2 minute for the same belt operating at 80 feet per minute.

The actual belt speed is determined by the number of operators, their efficiency and use of the limit switches.

## BELT SPEED AND OPERATOR TIME

TYPE OF OPERATION	FEET PER MINUTE	INCHES		NUMBER OF TRAYS		TIME IN SECONDS		
	BELT SPEEDS	TRAY SIZES	SPACED APART	PER MINUTE	PER HOUR	ADVANCE 3 FT.	IN 3 FT. SPAM	PER TRAY
Food serving on trays (lengthwise) hospital patients	16 F.P.M.	16 x 22	35.6	3-1/3	200	11-1/4	4-3/8	18.0
	16 F.P.M.	16 x 22	16.4	5	300	11-1/4	4-3/8	12.0
	22 F.P.M.	16 x 22	23-1/4	5-3/4	350	8-2/9	3-2/11	10.2
	22 F.P.M.	16 x 22	9-5/8	8-1/3	500	8-2/9	3-2/11	7.2
Serving Food on trays in schools	22 F.P.M.	14 x 18	4-5/8	11-2/3	700	8-2/9	4-1/11	5-1/7
	32 F.P.M.	14 x 18	7-3/4	15.0	900	5-5/8	2-3/4	4.0
Tray bussing & scrapping	25 F.P.M.	14 x 18	Butted	16-2/3	1000	7.2	3.6	3.6
	40 F.P.M.		10-3/4			4.5	2-1/4	3.6

Substituting 15" x 20" trays and maintaining the same hourly rates as in Column 5 changes the figures in Columns 3 and 7 as follows:

For Food Serving of Hospital Patients increase spacing between trays (Column 4) by 2" and seconds within a 3'- 0" span (Column 7) by 1/7 or approximately 14-1/4% (Multiply by 1.1425).

For Tray Bussing operations, decrease spacing (Column 3) by 2" and seconds within a 3'- 0" span (Column 7) by 1/9 or approximately 11% (Multiply by .89).

### TURN AND TRANSFER BELTS

Trays negotiating turns require extra space between them, because they fan out as they turn. If they are placed side to side on the belt, they may overlap or spill on the turns, creating soiled or unsanitary conditions.

Fabric transfer belts driven by "constant speed" automatically provide the proper tray separation at the turns themselves by an approximate 60% increase in the leading belt speed. This speed increase allows butted trays to separate and negotiate these turns smoothly, without dumping or spilling.

When "variable speed" drives have been specified, only authorized personnel should be allowed to regulate and reset belt speeds. Improperly adjusted speeds can cause overlapping trays and possible dumping and spillage, leading to unsanitary conditions and possible damage to belts and conveyors. If problems develop in maintaining properly related belt speeds, locks may be used after the speeds are properly set.

### BELT LOADING

Remember, **all** slatted or fabric conveyor belts, were specified to handle contained loads only.

Carelessly loaded, overlapped or double stacked trays or loose items, which are placed directly on belts or on exposed pans, may cause damage and spillage on belts and conveyors. It is vitally important to prevent jamming, etc., if turn or transfer belts are involved. Use carts, lowerators, shelves or "Empty Tray Storage Platforms" at the conveyor tails for loose items. Post signs with proper use and loading instructions at the beginning of the conveyor.

### BELT CARE

All Fabric Belts

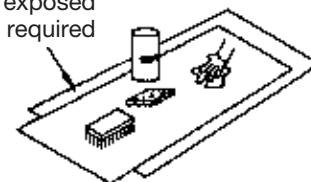
Spillage is easily cleaned both manually and automatically. Gates fabric belts are faced with polyvinyl chloride plastic.

A non-staining, combination germicidal and detergent liquid, "MICRO BAC" as manufactured by Economic Laboratories, is recommended for cleaning. Mild abrasives, similar to BON AMI or SOF SCRUB may be used to remove marks. Use a brush, sponge or cloth for cleaning. MICRO BAC is the recommended product for belt washing systems on Gates fabric belt conveyors. If other detergent products are employed and damage to the conveyor or detergent system results, those components so affected will not be covered under warranty.

#### Fabric Dry Belt

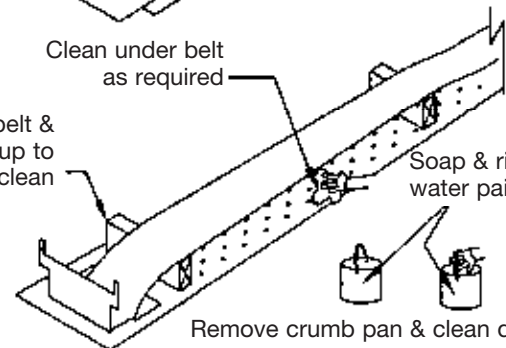
"D" BELT CLEANING SYSTEM is commonly specified for operations where accidental spillage is considered an occasional exception because of careful operation, i.e. Tray Make-Up Operations. Dry belt conveyors must be cleaned manually as shown, with the conveyor shut off and the belt shimmed above the top. Remove the crumb pan to clean them. Wipe down the crumb chute and pulleys when required, (See Fig. 2). Do not use hoses to clean conveyors with "D" dry belt system, since there is no wash tank to contain the flow. Regulate cleaning frequency, effort and time according to the demands of your particular operation.

Wipe exposed pan as required



Clean under belt as required

Lift belt & shim up to clean



Soap & rinse water pails

Remove crumb pan & clean daily

Wipe pulleys & return idlers clean as required **Figure 2**

## All Slatted Belts

Daily maintenance of the belts must be done to avoid soil accumulation between the slats and carrier chains. Scrub stubborn accumulated, gummy soil from the belt face with cross strokes, using a damp cloth or loose small brush and non-abrasive cleaner (See Fig. 3). Flush the belts as needed to remove heavy, gummy soil.

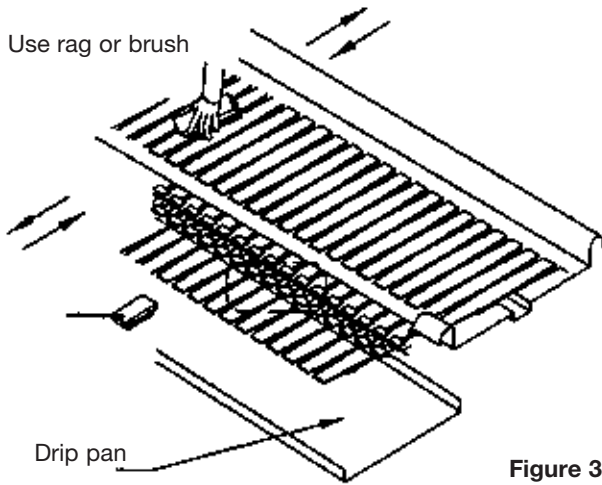


Figure 3

**NOTE:** All conveyors with slat belts are designed to allow complete belt lifting from sliders pan. When lifting belts be sure to:

1. Disconnect main power supply.
2. **DO NOT** disengage belt(s) from the head or tail sprockets.
3. **DO NOT** attempt to energize the conveyor with the belt lifted from the tracking slot.

The slider pans supporting the belts are sealed to provide easy cleaning. Remove the belt to clean the pan. Wash the pan down as needed. Dry the pan and belt with a clean, dry cloth.

**CAUTION:** Strong caustic solutions and cleaning agents containing free chlorine (such as Ajax) will cause damage to the plastic slats by crazing, crackling or blistering.

## Slatted Dry Belts

“D” BELT CLEANING SYSTEMS - Dry slatted belts are usually specified for tray make-up operations.

When required, clean soil or food spillage from the face of the belts using a damp cloth and mild detergent or soap and water. Then wipe them clean with a damp cloth. Repeat this operation for the slider and drip pans. Do not use cleaning hoses on these conveyors (there is no wash tank to contain the flow).

**CAUTION:** Strong caustic solutions and cleaning agents containing free chlorine (such as Ajax) will cause damage to the plastic slats by crazing, crackling or blistering.

## Safety

### DANGER

### ELECTRICAL WIRING AND MECHANICAL PARTS

Never attempt to clean the mechanical or electrical parts, or wiring. Water-tight materials and components are designed specifically for this purpose (this is referred to as a NEMA-4 construction) All U.L listed conveyors are built to “NEMA-4” construction and may be so cleaned.

### Remember The Following

1. Instruct people to place all silver and dishes on the tray- no loose items allowed on the belt. Employ monitors, if necessary, to enforce this rule. Also, check transfer belts and turns for telescoping and spillage.
2. Instruct employees to properly use and clean your particular conveyors.
3. Instruct employees to report, without delay, (for immediate maintenance) any unusual sounds developing in the drives or turns, any water drippage on the chain or bearings, any limit switch breakdown, any belt misalignment or fraying edges, etc.
4. Post signs, if required, as a reminder of the above.
5. Make periodic personal inspections, checking equipment and employee performance.

### SAFETY INSTRUCTIONS

1. **DO NOT** put fingers, hands, or objects in or under moving beds.
2. **DO NOT** operate conveyors with access panels removed.
3. **DO NOT** spray water directly into drive housing (excessive water may damage electrical and mechanical equipment located within).
4. Use common sense when operating moving conveyor belts.
5. **DO NOT** attempt to clean belts or any parts of moving conveyors.
6. **DO NOT** place hands into belt washer while conveyor is in motion or under skirting. **NEVER** place hand anywhere you lose sight of it.
7. Report to maintenance or your supervisor any electric cords, switches, etc. that look frayed or broken.

## Troubleshooting

PROBLEM	POSSIBLE CAUSE	REMEDY
Motor won't run	<ol style="list-style-type: none"> <li>1. Power off</li> <li>2. Limit switch activated</li> <li>3. Blown fuse</li> </ol>	<ol style="list-style-type: none"> <li>1. Restore power</li> <li>2. Remove object &amp; adjacent linkage</li> <li>3. Replace fuse</li> </ol>
Motor runs; Belt does not	<ol style="list-style-type: none"> <li>1. Set screw on drive pulley loose</li> <li>2. Gear box oil</li> <li>3. IR comp. on speed board set to low</li> <li>4. Set screws thru bearing to drive shaft loose</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten screw</li> <li>2. Check oil &amp; refill if required - Repair leak &amp; inspect gears</li> <li>3. Turn IR comp. clockwise until belt runs steady</li> <li>4. Tighten set screws</li> </ol>
Motor runs intermittently	<ol style="list-style-type: none"> <li>1. Loose wire connection</li> <li>2. IR comp. on speed board set to high</li> </ol>	<ol style="list-style-type: none"> <li>1. Check wires</li> <li>2. Turn IR comp. counter clockwise until motor stabilizes</li> </ol>
Belts do not run smoothly	<ol style="list-style-type: none"> <li>1. Excessive slack</li> <li>2. Drive chain has excessive slack</li> <li>3. Object under belt</li> </ol>	<ol style="list-style-type: none"> <li>1. Remove slack by adjusting</li> <li>2. Remove slack</li> <li>3. Remove object</li> </ol>
Belt squeals while running	<ol style="list-style-type: none"> <li>1. Slider pan surface dirty</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean with shela shine polish</li> </ol>
Belt does not move	<ol style="list-style-type: none"> <li>1. Speed control knob loose</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten knob</li> </ol>

## CONVEYOR START-UP & CHECK LIST

**NOTE:** If answer is **YES**, proceed to next step. If answer is **NO**, take appropriate action to resolves situation, follow suggestions, or refer to maintenance manual.

1. Is conveyor to be field jointed?
  - a. Bolted
  - b. Welded
2. If bandveyor bands are to be spliced, refer to band splicing instructions.
3. Is conveyor in one piece?
4. Is conveyor portable?
5. Is conveyor in proper location?
6. Is conveyor level?
7. Are all final electrical, drain and water connections made?

### Bandveyor

Bandveyor, are bands routed properly through pulleys as per directions? (See Fig. 4)

### Slat

Is butt slat held together with stainless steel hinge pins?  
Is the belt moving in proper direction as designated by the arrows on the underside of the slat? Arrow must move towards drive housing. (See Fig. 4)

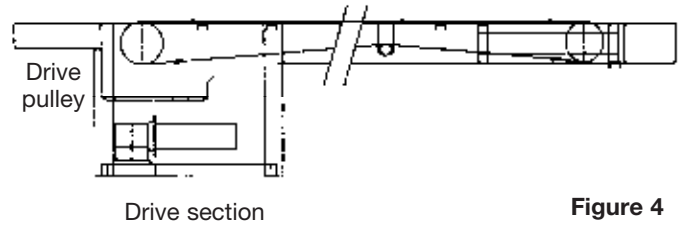


Figure 4

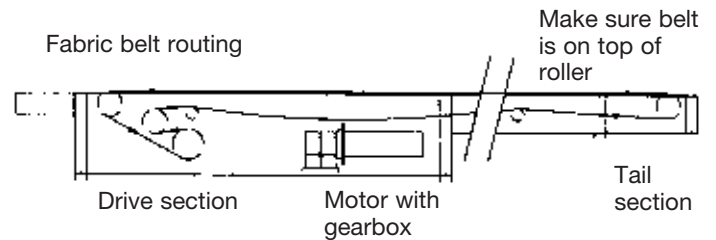


Figure 5

### Fabric

Is 10" wide fabric belt routed properly through pulleys as per directions? (See Fig. 5)

Before starting the conveyor for the first time, the following should be checked:

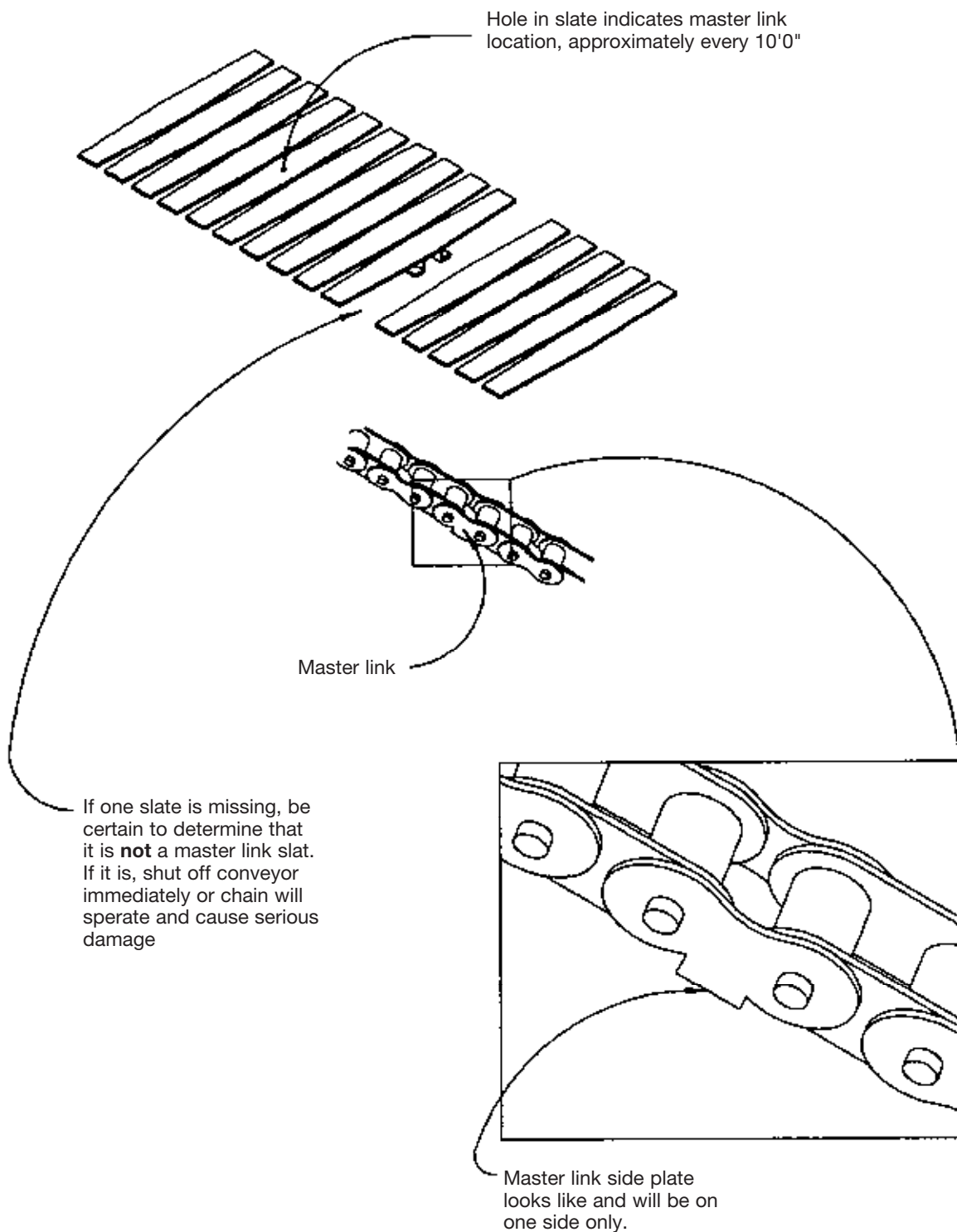
1. Conveyor and belt must be clear of all debris.
2. Wash grit out of belt slider channel, or off slider pan surface.
3. Check the belt washer if equipped. The only articles that should be in the belt washer are scrap baskets.
4. Make sure belt wash (manual wash) on tray make-up, if required. Is in off position.
5. Make sure there are no objects on the belt.
6. Determine that speed control is set at **ZERO**. If variable speed equipped,

Proceed by pushing or turning the **ON** button (if provided) or the **START** button (if provided). The conveyor will not move until the speed is increased. To do this, turn the speed dial until belt begins to move.

**CAUTION:** If any loud sounds are heard, shut the conveyor off immediately...and look to see whether an object may be jamming the belt. If the belt runs smoothly, the speed may be increased. This is done by turning the speed dial to desired speed (if provided).

**NOTE:** The belt may "squeal" until slider pan has been cleaned. Refer to the maintenance section (Pg. 3).

### Slate Belt Slate Replacement



## DINEX® Warranty

These Warranties cover the following CARLISLE | DINEX (“Dinex”) equipment products (the “Warranted Products”):

- Rethermalization Equipment Products
- Induction Heating System Products (excluding Induction Bases covered under separate warranty)\*
- Milk Cooler Products
- Ice Cream Freezer Products
- Air Curtain Refrigerator Products
- Blast Chiller Products
- Hot/Cold Food Counter Products
- Plate, Rack and Tray Dispenser Products
- Plate Heater Products
- Base Heater Products
- Drying and Storage Rack Products
- Starter Station Products
- Conveyor Products
- Tray and Other Cart Products

Warranted Products also includes any other Equipment System Products identified on Dinex’s website ([www.dinex.com](http://www.dinex.com)) from time to time.

**Standard Warranty.** Except as indicated otherwise below, Dinex warrants that the Warranted Products will be free from defects in title, material and workmanship under normal use and service and will perform substantially in accordance with Dinex’s written technical specifications for the Warranted Products (as such specifications exist on the date the Warranted Products are shipped) (the “Product Specifications”). This warranty covers both parts and labor and is available only to end-users (the “Customers”) that purchase the Warranted Products from Dinex or its authorized distributors. For the purpose of these warranties, a defect is determined by Dinex after its good faith investigation.

**Dinex Software.** In addition to the other warranties set forth herein, with respect to Dinex’s licensed software, Dinex warrants that it has the right to license or sublicense the software to Customer for the purposes and subject to the terms and conditions set forth in Dinex’s standard terms and conditions.

**Supplies and Accessories.** Dinex’s warranty for its supplies and accessories that are shipped with Warranted Products is covered by a separate warranty statement, which is available at [www.dinex.com](http://www.dinex.com). Services. Dinex warrants that any service it provides to Customer will be performed by trained individuals in a workmanlike manner.

### DURATION

Dinex provides a one year warranty for the Warranted Products\*. The warranty period begins on the date the Warranted Products are shipped to Customer. The warranty period for any Warranted Product or part furnished to correct a warranty failure will be the unexpired term of the warranty applicable to the repaired or replaced Warranted Product.

\*Turbo•Temp and Smart•Therm Induction Chargers are Warranted for two years.

### REMEDIES

If Customer promptly notifies Dinex of Customer’s warranty claim and makes the Warranted Product available for service, Dinex will, at its option, either repair or replace (with new or exchange replacement parts) the non-conforming Warranted Product or parts of the Warranted Product. With respect to Dinex’s licensed software, Dinex will, at its option, either correct the non-conformity or replace the applicable licensed software. Warranty service will be performed without charge from 8:00 a.m. to 5:00 p.m. CST, Monday - Friday, excluding Dinex holidays, and outside those hours

at Dinex’s then prevailing service rates and subject to the availability of personnel. With respect to Dinex’s warranty for the services it provides to Customer, Customer’s exclusive remedy shall be the re-performance of the services by Dinex. The foregoing remedies are Customer’s exclusive remedies and Dinex’s sole liability for warranty claims under this warranty statement. This exclusive remedy shall not have failed of its essential purpose (as that term is used in the Uniform Commercial Code) as long as Dinex remains willing to repair or replace defective Warranted Products within a commercially reasonable time after being notified of Customer’s warranty claim.

### LIMITATIONS

THESE WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER WRITTEN, ORAL, EXPRESSED, IMPLIED OR STATUTORY. EXCEPT AS PROVIDED HEREIN, NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, SYSTEM INTEGRATION AND DATA ACCURACY, WILL APPLY. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THOSE DESCRIBED IN THIS DOCUMENT AND NO PRIOR STATEMENTS BY ANY OF DINEX’S REPRESENTATIVES SHALL MODIFY OR EXPAND THESE WARRANTIES. DINEX AND DINEX’S AFFILIATES AND REPRESENTATIVES SHALL HAVE NO LIABILITY TO CUSTOMER FOR (1) ANY SPECIAL, PUNITIVE, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE WARRANTED PRODUCTS, REGARDLESS OF WHETHER SUCH LIABILITY SHALL BE CLAIMED IN CONTRACT, TORT, EQUITY OR OTHERWISE, (2) ANY ASSISTANCE NOT REQUIRED UNDER DINEX’S QUOTATION OR (3) ANYTHING OCCURRING AFTER THE WARRANTY PERIOD ENDS.

DINEX’S STANDARD WARRANTIES ONLY APPLY TO END-USER-PURCHASERS LOCATED IN THE UNITED STATES AND CANADA. ANY SALE TO END-USER-PURCHASERS OUTSIDE THE UNITED STATES AND CANADA WILL BE SUBJECT TO COMMERCIAL TERMS SPECIFICALLY AGREED BY DINEX AND THE END-USER PURCHASER. DINEX MAKES NO WARRANTY, EXPRESS OR IMPLIED, TO END-USER-PURCHASERS OUTSIDE THE UNITED STATES OR CANADA UNLESS OTHERWISE EXPRESSLY AGREED IN WRITING.

These warranties do not apply to, and Dinex shall not have any obligation to Customer hereunder with respect to, any warranty claim resulting from or arising out of: (i) normal wear and tear; (ii) damage caused by shipping or accident; (iii) damage caused by improper installation, repair or alteration not performed by Dinex; (iv) the use of the Warranted Product in combination with any software, tools, hardware, equipment, supplies, accessories or any other materials or services, not furnished by Dinex or recommended in writing by Dinex; (v) the use of the Warranted Product in a manner or environment, or for any purpose, for which Dinex did not design or license it, or inconsistent with Dinex’s recommendations or instructions on use including, but not limited to, power supply requirements identified in Product Specifications; (vi) any alteration, modification or enhancement of the Warranted Product by Customer or any third party not authorized or approved in writing by Dinex; (vii) Warranted Product manufactured to meet customer specifications or designs; or (viii) any accessories or supplies or other equipment or products that may be delivered with the Warranted Product .

In addition, these warranties do not cover: (i) Any defect or deficiency (including failure to conform to Product Specifications) that results, in whole or in part, from any improper storage or handling, failure to maintain the Warranted Products in the manner described in any applicable instructions or specifications, inadequate backup or virus protection or any cause external to the Warranted Products or beyond Dinex’s reasonable control, including, but not limited to, power failure and failure to keep Customer’s site clean and free of dust, sand and other particles or debris; (ii) the payment or reimbursement of any facility costs arising from repair or replacement of the Warranted Products; (iii) any adjustment, such as alignment, calibration, or other normal preventative maintenance required of Customer; and (iv) expendable supply items.