



# OPERATION MANUAL Low Profile Conveyor

## Safety Instructions (continued)

The following precautions were written specific to IMI supplied drives but are good general precautions for all electrical drives.

6. Plug the conveyor into a properly ground outlet only. Operate the conveyor at the voltage and frequency shown on the motor housing. Operating the conveyor at voltage or frequency not specified will void the LPC's drive warranty. Check with a qualified electrician if you are not sure if the outlet is ground properly.
7. Do not overload wall outlet or extension cords. This can increase the risk of fire or electrical shock.
8. Do not allow anything to rest on the power cord. Do not install the conveyor where people will walk on the cord.
9. Unplug the conveyor from the electrical outlet before cleaning, belt adjustment or maintenance. Do not use liquid or aerosol cleaners. When necessary, clean using a soft cloth moistened with a mild detergent solution.
10. Do not locate the conveyor in areas where water or other fluids may splash on the motor or electrical junction box.
11. The conveyor gearmotor is air-cooled. The gearmotor should not be placed in a built-in enclosure unless proper ventilation is provided.
12. Do not operate the conveyor during an electrical storm. If your area gets frequent thunderstorms, we strongly recommend plugging your conveyor into a power surge protector.
13. Unplug the conveyor from the outlet and consult a qualified service representative in any of the following situations.
  - A. When the power supply cord is frayed or damaged.
  - B. If liquid is spilled on the motor housing or electrical junction box.
  - C. If the conveyor does not operate normally when following the basic operating instructions.
  - D. If the conveyor has been dropped or the motor, gearhead, or electrical junction box is damaged.

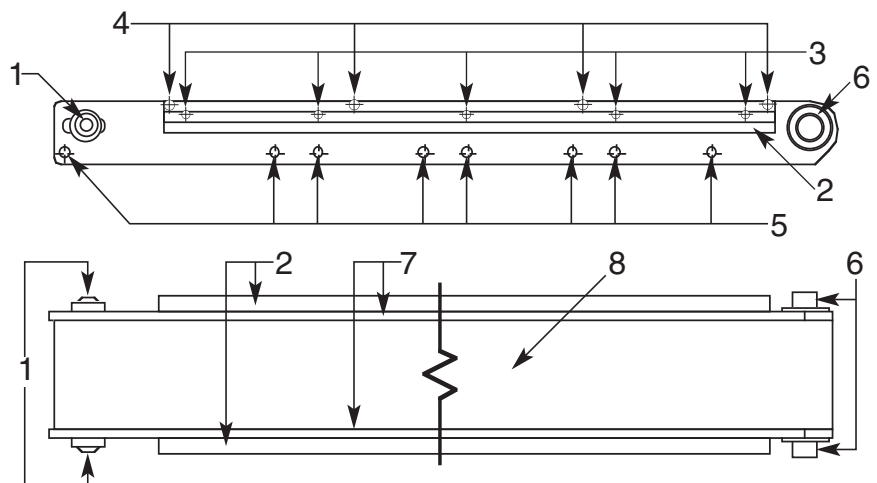
**SAVE THESE INSTRUCTIONS.**

Help Line  
1-888-582-0823

## Location & Function

The illustrations to the right provide location of conveyor drive shaft, maintenance access screws, belt adjustment points, and mounting holes. The following lists their description and function.

- 1. Belt Tension/Tracking Adjustment Lock Screws:** Locks idler pulley in position after belt tensioning or tracking adjustment is completed.
- 2. T-Slot Extrusion:** Facilitates mounting of guide rails, sensors and other accessories. (Not supplied with all units)
- 3. 10-32 Flat Head Fasteners:** Attaches T-slot extrusion to frame side rail. Quantity per conveyor is length specific.
- 4. 10-32 Cap Screw Fastener:** Attaches frame side rail to bed plate. Quantity per conveyor is length specific. Screws are located behind the T-slot extrusion.
- 5. Tapped 10-32 Holes:** Conveyor mounting holes. Typical 8X on all conveyors. Refer to LP brochure for location.
- 6. Universal Drive Shaft:** Drives conveyor. Allows universal left or right side drive position. Depending on drive side. Contact IMI for specifics.
- 7. Frame Side Rails:** Precision-machined aluminum. Part of conveyor frame.
- 8. Bed Plate:** Polished aluminum slider bed under belt.



# OPERATION MANUAL Low Profile Conveyor

## Specifications

### Conveyor Module

#### **Construction:**

- Frame Side Rails: 0.250" clear anodized, machined aluminum
- Drive Pulley: 1.125" knurled surface aluminum bar
- Idler Pulley: 1.125" precision crowned aluminum bar
- Belt Material: Reinforced,  Urethane  PVC, endless finger spliced
- Slider Bed: 0.375 polished aluminum
- Bearings: Doubled sealed, ball type
- Drive Shaft: Polished stainless steel

#### **Conveyor Drive:**

Note: LP series conveyors are supplied with or without gearmotor drives. Should the drive be supplied by other, this section will be blank.

#### **Motor:**

- Continuous Rating:  1/50 HP, VAC-60Hz, 0.33 Amp       1/30 HP, VAC-60Hz, 0.49 Amp  
 1/18 HP, VAC-60Hz, 0.68 Amp       1/12 HP, VAC-60Hz, 1.25 Amp  
 1/8 HP, VAC-60Hz, 1.45 Amp

Thermal Protection: Internal, automatic restart after temperature drops. Safety Standards: UL Recognized, CSA Certified

#### **Gearhead/Drive:**

Gear Ratio: \_\_\_\_\_ Gear Speed: \_\_\_\_\_ Torque: \_\_\_\_\_ Drive Speed: \_\_\_\_\_ FPM

#### **Reversing the Direction of the Belt Travel:**

All LP series drives are reversible. The motor must come to a complete stop before changing direction. A wiring diagram showing the wire connection change required to reverse direction is located inside the motor control junction box.

## Installation & Operating Instructions

**Read All Safety Instructions Listed on Pages 1 & 2 Before Installing or Operating Your Conveyor.**

**Installation:** Your conveyor may be located on any stable surface, mounted to stands, surface or machine mounting brackets or other sturdy fabricated bracket. The conveyor should not be located in an area where the gearmotor or electrical junction box would be exposed to water or other liquids. The gearmotor should not be located in an enclosure unless proper ventilation is provided. Plug the conveyor into a properly grounded electrical receptacle that conforms to the voltage and frequency specifications listed on the motor housing. The conveyor may be oriented in any position from vertical to horizontal. Consideration should be given to installations that restrict access to removal of the side rail opposite the gearmotor for cleaning or if belt replacement is required.

**Operation:** LP series conveyors are shipped ready for operation. The belt has been tensioned and the wiring, if the gearmotor is supplied, will be configured for belt movement toward the gearmotor. (Certain wiring configurations are not pre-wired to motor controls and will require wiring and controls by other.)

## Cleaning & Maintenance

Utilizing a rugged aluminum frame, sealed bearings, and reinforced endless belting, LPC conveyors are designed for years of trouble free service. To maximize belt life and reduce the risk of damaging the bed plate and side rail surfaces, removal of scrap and cleaning the conveyor belt on a regular basis is recommended. Procedures for cleaning, belt replacement, and adjusting the belt tension follow:

**Removing the Blank Side Rail:** (See location illustrations on page 2)

1. Disconnect the conveyor drive from the power source.
2. Remove the unit from the stand, or other mounting and place it on a flat, stable surface.
3. Locate the belt tension/tracking adjustment lock screws (See illustration pg.2) and loosen (don't remove) using the 3/16" hex key.

# OPERATION MANUAL Low Profile Conveyor

## Cleaning & Maintenance (continued)

4. Turn the unit on its side with the drive side down.
5. Using the 1/8" hex key remove the fasteners attaching the T-slot extrusion to the side rail (See illustration pg.2) and set the extrusion to the side (T-slot extrusions are not supplied with all conveyors)
6. Using the 1/8" key, remove the side rail to bed plate attachment screws (See illustration pg.2)
7. Lift the side rail straight up to access the belt and bed plate and set aside.

### Cleaning:

1. Follow the procedure above to remove the blank side rail.
2. Slide the belt off both pulleys and set aside.
3. Using a brush (do not use a wire brush) or cloth, remove any scrap or other bulk material from the inside surface of the drive side rail and all surfaces of the removed side rail.
4. Using a mild solution of detergent and warm (not hot) water, clean all surfaces of both side rails, bed plate and belt.

**Caution: Do not allow liquid to enter the motor or electrical junction box.**

**(Polyurethane belts only)** When the detergent and water solution method is unsuccessful.

**Occasional Cleaning:** Use ethyl alcohol (denaturated alcohol).

Rinse with water after wiping with the ethyl alcohol.

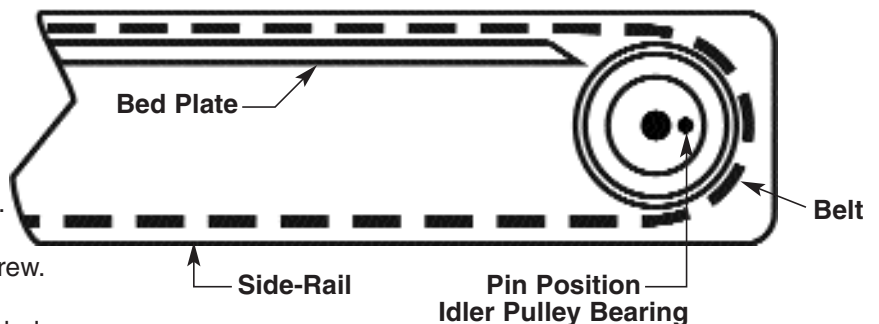
**Infrequent Cleaning:** Toluene may be used. This is not recommended for weekly cleaning. Follow with a thorough cleaning with detergent and water.

### Belt Replacement:

1. Follow the procedure on the facing page to remove the side rail opposite the drive side.
2. Slide the old belt off the pulleys and discard.
3. Slide the new belt over the pulleys and follow the reassembly procedure below.

### Reassembly:

1. After the belt has been positioned on the pulleys, orient the pulley bearing alignment pin as illustrated below.
2. Position the side rail to align the side rail to bed plate screw holes and bearing alignment pin in the appropriate slot.
3. Insert and hand tighten the side rail to bed plate screws.
4. Using the 1/8" hex key, tighten the screws until the L handle flexes approximately 1/2".
5. Install the T-slot extrusion (If supplied)
6. Install the belt tension/tracking adj. Lock screw. Do not tighten.
7. Follow adjusting the belt tension procedure below.



### Adjusting the Belt Tension:

1. Position the conveyor to easily access both sides of the idler end. (opposite the gearmotor end)
2. Install the belt tension tool with hook connector over the belt tension adjustment screw washers. (See Figure 1 on pg.5)
3. Turn the knurled adjustment knob on the tensioning tool clockwise until tensioning cross brace is against the conveyor side rail ends. (See Figure 1 on pg.5)
4. Using the 3/16" hex key loosen both the belt tension/tracking adjustment lock screws.
5. To tension belt, tighten (clockwise) the tensioning tool knurled adjustment knob in 1/2 turn increments until hand tight.  
**Caution:** Do not over tension belt. Use only that force that can be applied by thumb and forefinger on the tensioning tool adjustment knob.
6. Using the 3/16" hex key tighten the belt tension adjustment screws until the wrench handle flexes approximately 1/2 inch.
7. Remove the tension tool by loosening the adjustment knob. The conveyor is ready to return to service.

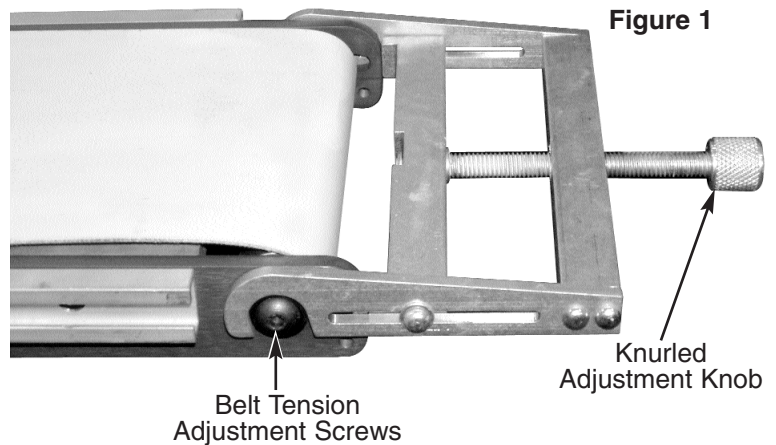
# OPERATION MANUAL Low Profile Conveyor

## Cleaning & Maintenance (continued)

### Belt Tracking Adjustment:

LPC conveyors utilize precision crowned pulleys for superior belt tracking. Belt tension and tracking are initially set at the factory prior to shipment. Over time, belt tracking may require adjustment in the field. The procedure for adjusting the belt tracking using the belt tension tool is as follows:

1. Perform "Adjusting the Belt Tension" procedure steps 1 through 5 on page 4.
2. Start the conveyor and run the belt without load for 30 seconds. While facing the idler end of the conveyor, observe the belt tracking position. Should the belt be center tracking, follow the "Adjusting the Belt Tension" procedure steps 6 & 7 on page 4. Should the belt be tracking to either side, tighten the belt tension adjustment screw on the side opposite to which the belt is tracking.
3. To adjust the belt tracking, tighten (clockwise) the tensioning tool knurled adjustment knob in about 1/16-turn increments until the belt is center tracking. Run the conveyor an additional 1-2 minutes to assure the belt continues to center track. Make any final adjustments required.
4. Using the 3/16" hex wrench, tighten the tension adjustment lock screw until the wrench handle flexes approximately 1/2 inch. The conveyor is ready to return to service.



Help Line  
1-888-582-0823

## Warranty Service

Industrial Magnetics, Inc. - Conveyor One-Year Limited Warranty

### **Warranty Service Provided**

Industrial Magnetics, Inc. warrants LPC Conveyors against defects in material or workmanship for a period of one (1) year from the date of purchase. Industrial Magnetics' responsibility under this warranty is limited to the repairing or replacing, at its sole option, any defective product. The warranty begins on the date of purchase and continues for one (1) year unless you sell or rent the unit, in which case, the warranty is voided.

INDUSTRIAL MAGNETICS, INC. MAKES NO OTHER WARRANTY. INDUSTRIAL MAGNETICS, INC. SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE. IN NO EVENT SHALL INDUSTRIAL MAGNETICS, INC. BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, OR CONSEQUENTIAL DAMAGES.

### **Warranty Service Not Provided**

This warranty does not cover Conveyor belts, damage resulting from accident, misuse, abuse, improper installation, unauthorized modification and/or loss of parts. This warranty is voided if any unauthorized person opens, alters, or repairs the unit beyond that which is directed in this manual.

### **Obtaining Service Under Warranty**

You must obtain a Return Authorization number from Industrial Magnetics, Inc. customer service. The product must be returned to Industrial Magnetics, Inc. with transportation charges prepaid and must be accompanied by a brief description of the problem encountered and proof of purchase.

### **Product Return Policy**

A Return Authorization number from Industrial Magnetics, Inc. is required for return of any product to Industrial Magnetics. This number must be clearly visible on the packing carton.

Please retain the original shipping carton and packing materials. The original shipping carton is the best shipping container for returning your conveyor, if required.

# DRIVE PACKAGE MANUAL Low Profile Conveyor

**LPC CONVEYOR**  
MADE IN THE U.S.A

LPC - Low Profile Conveyor Series

**S Style Drive Package**  
**Instructions for Mounting Drive**  
**Package to Conveyor Module**

1. Unpack gearmotor and control module
2. Remove mounting screws and washers from the side of gearmotor adapter plate and set aside.
3. Slide gearmotor drive coupler over conveyor drive shaft and align mounting screw holes with slot on L mounting bracket attached to conveyor
4. Install screws and washers and tighten
5. Tighten clamp screw on drive coupler
6. Plug power cord into properly grounded receptacle
7. Start conveyor using the Module power switch

Problems? Contact IMI's Customer Service at: 1-888-582-0823

S

**INDUSTRIAL MAGNETICS, INC.**