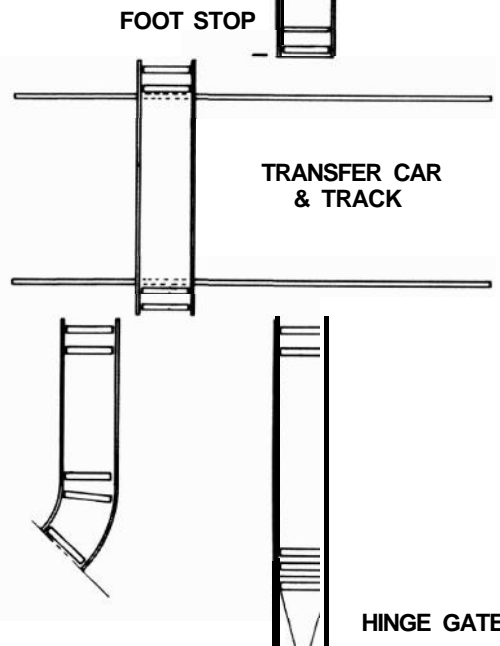
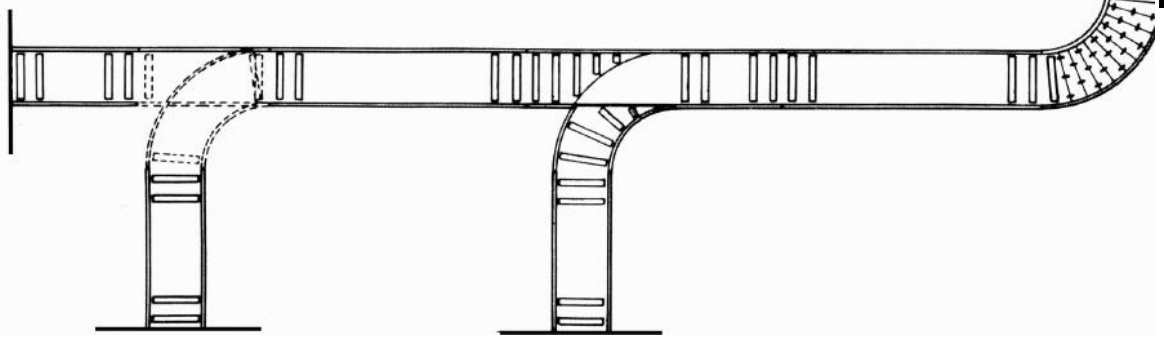


**SADLER  
Conveyor  
Service  
Manual**



90° ROLLOVER CURVE  
DIVERGING

90° SPUR SWITCH  
DIVERGING



# **SADLER CONVEYOR SYSTEMS**

## **SERVICE MANUAL**

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## REFERENCE DATA

Name of Owner \_\_\_\_\_

Sadler Contract No. \_\_\_\_\_

Date of Installation \_\_\_\_\_

Model or System \_\_\_\_\_

We sincerely hope you will be the proud owner and user of a quality designed and built SADLER Conveyor.

Please familiarize yourself with the owner's manual so that our field service personnel may answer your questions upon completion of the installation. He would like the opportunity to instruct you in the proper use of your SADLER Conveyor.

If you would like us to service your SADLER Conveyor(s), refer to the "SADLER SERVICE" section of this manual for that plan which may best suit your requirements.

# INTRODUCTION

Belt conveyors are a low unit cost and a most economical means of conveying package and bulk material through horizontal and vertical distances. All belt conveyors are relatively simple mechanical devices consisting primarily of an endless belt, supported by rollers or sliding over a smooth surface and driven by either an electric motor or a gasoline engine. The material is placed on the belt and travels along with the belt to its point of discharge, usually over one of the two end terminal pulleys of the conveyor.

The conveyor belt is the primary part of a conveyor. All other components such as supporting bed, terminal pulleys and drive are secondary in that they allow or assist the belt to convey the material. While the belt is virtually maintenance free, the conveyor requires, as do all machines, periodic inspection and preventive maintenance to ensure proper running of the conveyor belt.

Many conveyor belts have to be replaced before the end of its normal life span from lack of maintenance, abuse or accident and not on account of wear or service. Since the cost of the belt may run as high as 25% of the total cost of the conveyor, preventive maintenance will save the conveyor user costly replacements, insuring minimum "down-time" and will save a good deal of hard cash. Conveyor maintenance is very simple and does not require a great amount of special knowledge. It is well worthwhile to acquaint your maintenance men with the few simple facts and requirements in this manual to insure the highest efficiency and dependability from your SADLER Conveyor.

# I SHIPMENT

## A. INSPECTING SHIPMENT

Goods are shipped F.O.B. Sadler plant in Montreal. We are responsible for the equipment until the carrier accepts and acknowledge it is in good order by signing the bill of lading at our plant. The carrier acts as your agent and your responsibility commences when the carrier signs the bill of lading. The carrier protects himself by having you sign for receipt in good order.

Our equipment is thoroughly checked and carefully packed in our Factory. Should this equipment be received in a damaged condition, apparent or concealed, a claim for damage must be made upon the carrier by the Consignee.

### APPARENT LOSS OR DAMAGE

Upon receipt of this shipment, should visual inspection show loss or damage, it must be noted on the freight bill or express receipt and signed by the carrier's agent. Failure to do this may result in the carrier refusing to honour a claim.

The Carrier will furnish you with the necessary forms for filing a claim.

**WE WILL NOT CONSIDER ANY CLAIM FOR SHORTAGES IF NOT MADE IN WRITING WITHIN 21 DAYS OF DATE OF SHIPMENT.**

### CONCEALED LOSS OR DAMAGE

All containers should be opened and contents inspected immediately. When loss or damage is not apparent until the equipment has been unpacked, then a claim for concealed damage should be entered. When damage has been discovered, make a written request to the Carrier for inspection. Keep all cartons and fillers. This request to the Carrier for inspection must be made within 15 days of the delivery. The Carrier will furnish you with an inspection report and necessary forms for filing a concealed damage or loss claim, since such damage or loss is the Carrier's responsibility.

**SHOULD THE CONSIGNEE CARRY OUT FIELD REPAIRS ON DAMAGED MATERIAL WITHOUT OUR WRITTEN AUTHORITY, THE NORMAL EQUIPMENT WARRANTY WILL BE VOID.**

Advise us at once if the equipment is damaged or missing, so that if we are to install it we can advise you whether it is more economical for you to have us repair it in the field, return it (prepaid) to our factory, or order a new part. (Be sure to send us a written purchase order).

## B. STORING BELT

Belt must be stored in a dry place and with the belting roll laying on the round side, not on the flat end of the roll. It is preferable that the roll of belting be suspended, off the floor, on a bar pushed through the center of the roll. Rolls of belts, especially cut edge, should never be rested on a concrete floor but always upright on a dry wooden floor if not suspended. The belting may be damaged or permanently bowed in which case you will have to purchase a new belt. Please note we do not warrant the belting unless defective.

## C. WARRANTY (Refer to the Contract for Specific Coverage)

The warranty is limited to furnishing but not installing without charge to you, F.O.B. point of manufacture any part proven to have unacceptable defects (as defined in applicable codes and specifications) in workmanship, provided you give us immediate notice in writing of the defect and our examination proves your claim.

Our warranty period shall not exceed one year or 2000 hours of operation whichever occurs first commencing at the earlier of the following dates: (a) the date of first usage of the equipment; (b) the date being not more than two months from date of shipment, provided that you shall not be in default of any obligation placed on you herein.

**We exclude from our warranty, conveyor belting, which (unless defective) is not warranted for any specific length of time or measure of service. After acceptance we shall neither be responsible for the adjustment of the tracking of the conveyor belt(s) nor the damage caused by improperly tracked conveyor belt(s).**

Deterioration of equipment due to exposure or corrosive, abrasive or sticky substances, or operation of equipment under abnormal dampness shall not be deemed attributable to defectiveness of material or workmanship. In Case of motor control or speed reducer failure, please contact either the manufacturer, their nearest authorized distributor, or your SADLER representative.

**Note: We would suggest that in order to minimize lost production, you should issue a purchase order for all replacement parts whether or not you feel they are on warranty. Upon receipt, return the original part. If our examination proves your claim, we will issue you a credit note.**

## 2. INSTALLATION

### A. BELT CONVEYORS

- 1. Centerlines.** Snap a chalk line on the floor along the conveyor center-line. Snap another chalk line parallel to the first and 1/2 the conveyor width distant from the first. All installations should use this as a base line by dropping a plumbline from the conveyor edge to this line.
- 2. Squaring.** Check all frame sections, end units, drive units, etc., for "squareness". They are sometimes bent out of square during shipment. All rollers and pulleys must be square with the conveyor frame. The belt or packages will run off to the side of the conveyor if it is out of square.
- 3. Levelling.** The belt and packages will run off to the lower side of the conveyor if it is not level across its width.
- 4. Anchors and Supports.** Anchor the supports securely. We furnish "red-head" anchor bolts only when we do the installation. On floor supported conveyors, normally the two end supports and every alternate side of each intermediate support are anchored, Conveyors subjected to bumping should have every support anchored on both sides. After anchors are installed, check conveyor carrying surface for straightness with a stretched line. If necessary, shim conveyor frame sections at supports to eliminate any vertical offset in the carrying surface where sections join.
- 5. Belt.** Once the conveyor is ready to run, screw the take-up into the minimum position and thread the belt onto the conveyor. Stretch the belt tight to eliminate all slack, mark the length and cut it off square with the conveyor centerline while it is still under tension.
- 6. Lacing.** It is very important to prepare the belting before applying lacing. Apply the lacing according to Section XI page 16. Follow the instructions carefully. When using a rough-surfaced belt, cut the rubber roughtop 1/2" back from both ends. This will countersink the lacing and ensure it has a good grip on the carcass (fabric).
- 7. Drive.** Inspect the chain drive from the reducer to the drive pulley and the V belt from the motor to the reducer so they are in line; otherwise, they will wear excessively. Also check for the proper direction of rotation of the drive pulley.  
**Alignment:** Place a straight edge or stretch a string across the diameters of both sheaves and /or sprockets. If each drive is properly aligned, the straight edge should touch the 2 points of each diameter. Rotate each 90 degrees and remeasure. If all 4 points/drive do not touch then the shaft and/or sheaves/sprockets are bent or are not parallel.

**Tension: V-Belt** - Correct tension =  $1/64$ " inward deflection / 1 inch of center distance e.g. 12" centers x  $1/64 = 3/16$ ". If the force required to deflect the belt the proper distance is greater than 3-4 lbs. the belt is too tight, if less than 3-4 lbs. the belt is too loose.

**Chain** - Correct tension = 2% or  $.020$ " inward deflection per 1" of center distance e.g. 18" centers x  $.020 = 3/8$ ". Since chain does not stretch as does a V belt the force required to deflect the chain is not important. Measure the amount of sag by using a straight edge.

- 8. Start Up.** Check the motor and gearbox (speed reducer) for lubricant. Some are shipped with oil in, and some without oil. Follow lubricating instructions on the tag carefully.

Some models are equipped with "sealed for life" units. They are filled with a synthetic lubricant and never need "topping up". The gearbox vented breather plug is replaced with an unvented plug. If leakage does occur at the shaft seals, vent (drill a hole) the plug on the top of the unit.

Remove all tools from the surface of the belt. Check the return side of the belt for any material which may have fallen on it. Check for belt slip on the drive pulley. Adjust the take-up to tighten the belt if it slips. Slippage will damage the belt and the pulley lagging. A belt which is too tight will reduce belt and bearing life. The happy medium is a belt which is tightened just beyond the slip point when the conveyor is fully loaded.

Check that the belt is "tracking". It should not run to the side of the conveyor. Refer to **CONVEYOR BELT TROUBLES**, section V. The belt will be damaged if the edge is allowed to rub against the frame.

- 9. Tight Rollers.** If a roller is "tight" in turning, spread the frame slightly by tapping on the inside with a hammer. If it is still tight, the bearing should be cleaned, as dirt may have entered it during shipment.

## **B. LIVE ROLLER CONVEYORS**

- 1. General.** All instructions included in the **A. Belt Conveyor** also apply to live roller conveyors. The following additional instructions are important.
- 2. Pressure Rollers.** The pressure rollers must be set level and square with the conveyor centerline or they will prevent the belt from tracking properly. The belt should run between the bed rollers and the pressure rollers. They may be used to track the belt. However, this should be attempted only after the other tracking adjustments listed under **6. BELT TRACKING** are made. Packages should not be allowed to rub against the guard rail since the driving force of the live roller conveyor is significantly less than the belt conveyor, resulting in package hangups.

### 3. OPERATING

After the conveyor has been installed and tested the following suggestions will help to reduce excessive wear and maintenance:

1. Always start the conveyor empty and let it run for a few minutes to check the tracking of the belt.

Many conveyor belts must be replaced because of abuse or accident, not on account of wear in service. Belts must be kept running true and straight and should not be allowed to rub on any stationary object, such as the framework, because this will damage the belt.

Head and tail pulleys should be kept aligned. Sufficient clearance should be provided to permit the belt to sway a little without striking the frame or housing. Our standard clearance is 3".

The belt should not be allowed to slip on the drive pulley as this will damage its surface.

This may be prevented by slightly tightening the take-ups. See Take-Up section IV).

Avoid excessive take-up tension which may overstretch the belt and cause ply separation. For the same reason avoid frequent starting under full load.

2. On reversing drive – bring belt to stop before reversing.
3. Excessive wear on the carrying surface of the belt should be avoided. Material should be fed in the same direction as the belt is running and should have as little vertical drop as possible.
4. The space under the conveyor should be kept clear of material and all foreign matter to ensure the return strand of the belt does not become worn or torn by rubbing.
5. Where assembly conveyors are used, blockages should be avoided or, if unavoidable, the surface of the article in contact with the belt should be smooth.
6. Avoid frequent stop & start under load unless the conveyor was specifically designed for this type of operation.

Daily inspection is very important and will uncover such things as loose bolts or nuts, material wedged against the belt or pulley, material build-up on pulleys, fasteners getting loose and etc.

## 4. MAINTENANCE

### A. BELT CONVEYORS

#### 1. Vertical Curves

Vertical curves or transitions (Nosed Over) have rollers on which the belt “breaks” or changes direction. These rollers are very sensitive in affecting belt tracking. They should be set square with the conveyor frame.

#### 2. Belt Lacing

See lacing instructions Section II, Item

#### 3. Belt Tracking

All rollers and pulleys must be set square with the frame before making any belt tracking adjustments. All tracking adjustments should be made with the belt running.

Initial tracking adjustments should be made with the return rollers. Mark the initial position before making any adjustment. Make all adjustments in small increments, one at a time and allow running period to see effect.

Reversing belts may require that the belt run slightly off center to one side in one direction, and to the opposite side in the opposite direction. This is due to the nature of the belt. In either direction the belt should not be allowed to run so far off center that it rubs the side of the conveyor.

The belt will stretch during the first few days of operation. This will affect its tracking since it must be under tension to track. Adjust the take-up for the stretch. In some cases it may be necessary to cut off a piece of belting. Tracking instructions for various types of conveyors are listed under **6. BELT TRACKING**.

Extreme variations in temperature and humidity will affect belt tension. As a rule, cold and/or moist conditions will cause the belt to tighten and vice-versa for hot and/or dry conditions. It is not unusual for the belt fasteners to tear loose from the belt if the tension becomes too great.

#### 4. Cleaning Bearings

If roller or wheel bearings become sluggish from dust or dirt they should be removed, flushed out, oiled with a few drops of light machine oil and reinstalled. Do not remove the bearing from the roller for cleaning because the end of the roller will be damaged. Dip the roller ends into a solvent degreaser (National Chemsearch SS-25 or equivalent). Bearings in foundries and very dirty locations should not be oiled as the dirt adheres to the oil.

For slight gravity grades or in cold room installations all grease or oil should be flushed from the bearings.

#### 5. Drive Chain and Sprockets (refer to INSTALLATION, Section II for alignment).

The drive chain and sprockets on the reducer and drive pulley should be in line. Adjust the reducer position to remove all slack from the chain. If you are unable to move the reducer shorten the chain length by removing a link next to the connecting link. This can be done with a chain breaker or by filing off one end of the rivet.

Before this is done be sure one full link can be removed otherwise you will have to add a half or offset link. (See our suggested spare parts list).

#### 6. V Belt and Sheaves (refer to INSTALLATION, Section II for alignment).

The V Belt drive on the reducer and motor should be in line. Adjust the motor position to remove all slack from the belt. If the reducer is relocated to tighten the chain drive then the motor must be relocated to ensure the V belt drive is properly aligned.

## **7. Take-Up**

Adjust the take-up to maintain an approximate 1% tension. This may be calculated by placing two parallel lines 25" apart on the surface of the conveyor belt while it is slack. Tighten up the take-up until the distance between the 2 lines is 25-1/4". Both sides of the take-up must be moved exactly the same amount, or the belt tracking will be thrown off. See **Belt Tracking**, Item 3. Check for belt slip on the drive pulley and re-adjust the take-up if necessary.

## **8. Motor and Speed Reducer**

Check both for temperature. Although they may feel extremely warm to the touch this is not necessarily a sign of overheating. A temperature rise in excess of 100 degrees F. above the surrounding (ambient) temperature would be cause for concern and in all cases the heat must not cause the paint to blister or the oil to smoke.

## **9. Shortening Belt**

If all available take-up adjustment is used, it is necessary to shorten the belt. On a head drive, a piece of belt twice the length of the take-up adjustment (12") should be cut off. On a center drive a piece of belt (36") may be cut off. Both cut ends must then be re-laced, see Section II, Item 6. Always use new lacing to ensure a firm joint.

## **10. Service Factor**

The conveyors covered in this manual are designed for 8 hours a day and 5 days a week service in a reasonably clean industrial or commercial type of service.

## **B. LIVE ROLLER - FLAT BELT DRIVEN**

In addition to the general maintenance of Belt Conveyors, the following should be noted.

It is imperative that the belting and all rollers be kept clean. They must be checked regularly, at least once a week, and all accumulation of dirt or other foreign matter removed.

For normal operation, except at transfers or other locations requiring a positive drive, the belt should not be squeezed so tightly between the bed and the pressure rollers so that the bed rollers cannot be stopped easily from turning by hand when the belt is running.

## **C. LIVE ROLLER - CHAIN DRIVEN**

The chain must be given the same maintenance as the chain drive. Never reverse or jog the conveyor excessively. This will cause the chain to stretch. No take-up is required on the roller to roller drive (i.e. 2 sprockets/roller) because of the close center distances.

## **D. LIVE ROLLER - V BELT DRIVEN**

Avoid excessive pressure between the idler sheave and bed roller since this will contribute to premature belt wear. Curves are subject to short belt life due to the tangential scrubbing action between the belt and roller.

Belt life of a few months is not uncommon.

## **5. CONVEYOR BELT TROUBLES, CAUSES AND CURES**

To track a straight and true belt is not very difficult. All that is necessary is a wrench to fit the up screw and the knowledge that a belt tends to move towards the loose (lower) side of the pulley. The results of each adjustment can be seen only after the belt has run for a few minutes, or at least 2 revolutions. Never try to track the belt while it is stopped.

If a NEW belt is running slightly to one side on both terminal pulleys yet still maintains its position, DO NOT ADJUST. Give the belt time to "Break in" (3-4 days) before attempting to get perfect alignment.

Probably the most frustrating experience is trying to diagnose the cause of a belt which refuses to track properly. The second most frustrating experience is finding the remedy.

Time and effort spent in trying to solve such problems have real dollar value. Prompt elimination of crooked-running belts will prevent premature and costly belt failure. On the following page is a chart which will assist you to determine the cause and cures for some troubles you may incur.



## 6. BELT TRACKING ADJUSTMENTS (AN ART – NOT A SCIENCE)

Belt Tracking is an ART – Not a Science, due to the numerous adjustment possibilities. It is very difficult to state specifically which roller and pulleys should be adjusted and how much. However, we have reduced the number of alternatives and have indicated which ones to adjust first, second and etc. to correct certain tracking problems. All rollers and pulleys must be set square in the frame prior to making any adjustments, for without this reference point, tracking would be next to impossible.

Belt Tracking problems can be localized by examining the belt location between adjacent pulleys or return rollers. If the belt is in a different position relative to the side of the frame, then the upstream roller or pulley should be adjusted.

Shown below is a list of those rollers and pulleys which may be adjusted to aid in belt tracking.

Each one has been numbered, named and had its diameter specified for ease of physical identification.

This list should be used in conjunction with the following “BELT TRACKING” drawings.

No.	DESCRIPTION (FUNCTION – NOT LOCATION)	ROLLERS		PULLEYS	
		1.9"	2.5"	3.5"-4"	7"-9"
1.	TAIL TERMINAL			X	
2.	HEAD TERMINAL			X	
3.	DRIVE				X
4.	DRIVE TAKE-UP (CENTER DRIVE ONLY)			X	
5.	DRIVE SNUB		X		
6.	3 PULLEY DEVICE - TAIL FEED			X	
7.	3 PULLEY DEVICE - HOLD DOWN			X	
8.	3 PULLEY DEVICE - INCLINE			X	
9.	3 PULLEY DEVICE RETURN		X		
10.	NOSED OVER INCLINE		X		
11.	NOSED OVER - TOP		X		
12.	HEAD RETURN	X			
13.	TAIL RETURN	X			
14.	BED	X			
15.	BED RETURN	X			
16.	PRESSURE	X			

When the conveyor is made for two way belt travel always check tracking in both directions with and without a load prior to extensive adjustments.

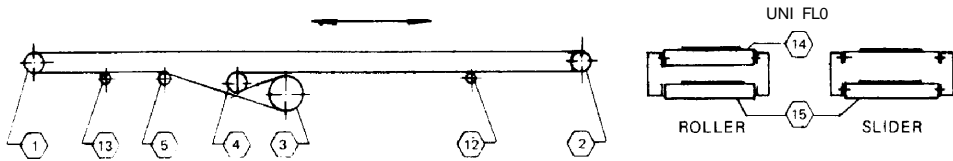
The bed (14) and return (15) rollers may, when looking in direction of belt travel (away from you) be skewed clockwise to move the belt to the right and anti-clockwise to move the belt to the left.

# BELT TRACKING

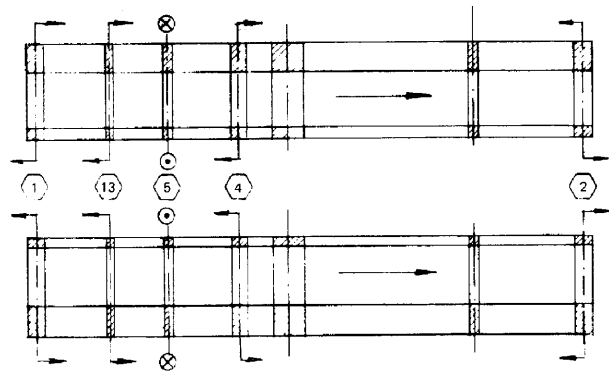
## HOW TO ADJUST PULLEYS OR ROLLERS TO CENTER THE BELT

### CENTER DRIVE - BELT ON ROLLER OR SLIDER

BELT SLACK TAKE-UP = + OR - 4"



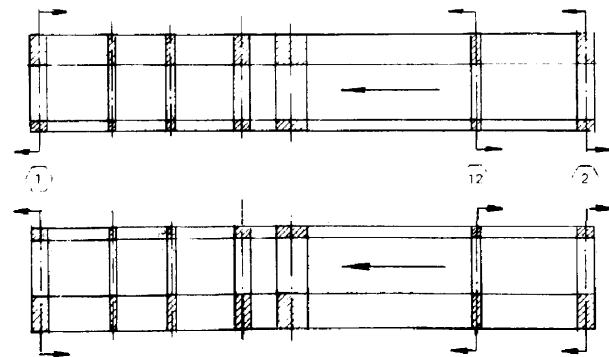
#### FORWARD TRAVEL



#### ADJUSTMENT

- STEP 1 #13 & 1 IN DIRECTION OF AR ROWS  
STEP 2: #2, 5 & 4 ONLY IF NECESSARY

#### REVERSE TRAVEL

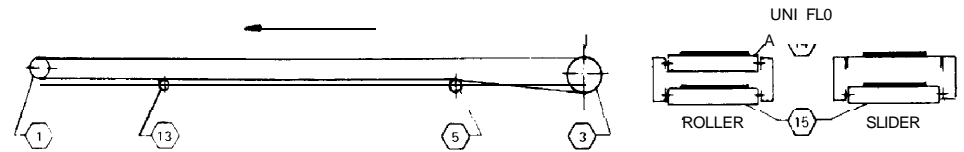


- STEP 1 #12 & 2 IN DIRECTION OF AR ROWS  
STEP 2 #1 ONLY IF NECESSARY

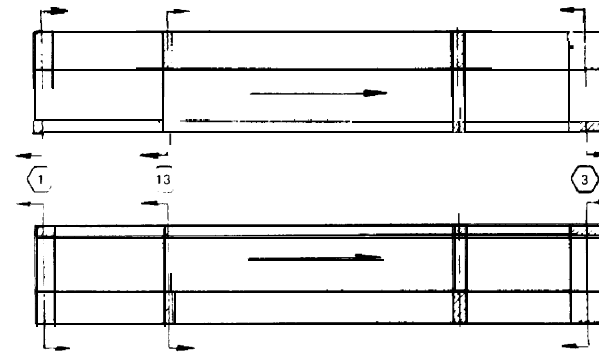
LEGEND:  
→ DIRECTION TO RIGHT OR LEFT  
⊙ UP  
⊗ DOWN

### END DRIVE - BELT ON ROLLER OR SLIDER

BELT SLACK TAKE-UP = + OR - 1"



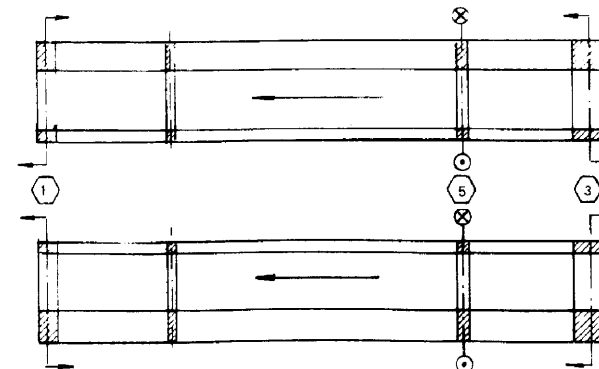
#### FORWARD TRAVEL



#### ADJUSTMENT

- STEP 1: #13 & 1 IN DIRECTION OF AR ROWS  
STEP 2: #3 ONLY IF NECESSARY

#### REVERSE TRAVEL



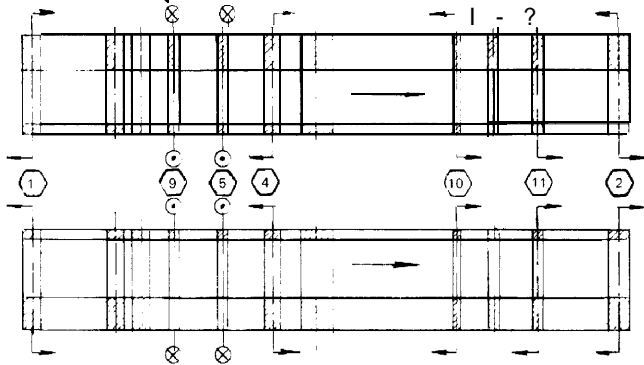
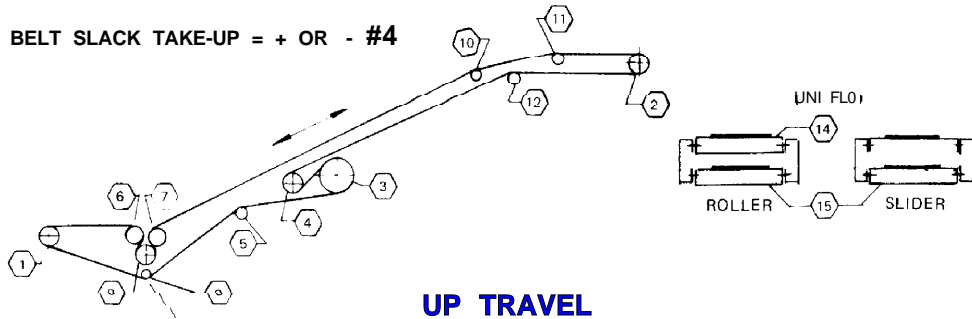
- STEP 1: #5 IN DIRECTION OF ARROWS  
STEP 2: #3 & 1 ONLY IF NECESSARY

LEGEND:  
→ DIRECTION TO RIGHT OR LEFT  
⊙ UP  
⊗ DOWN

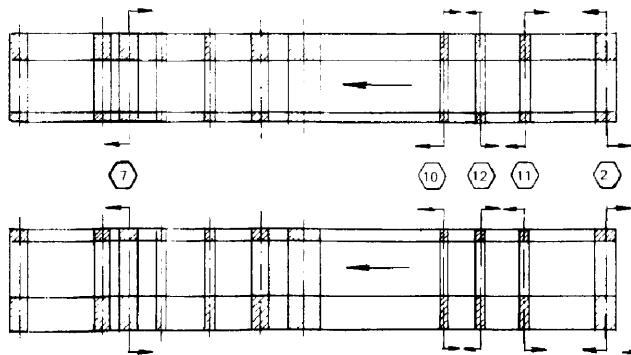
# BELT TRACKING

## HOW TO ADJUST PULLEYS OR ROLLERS TO CENTER THE BELT

### INTERFLOOR - CENTER DRIVE - BELT ON ROLLER OR SLIDER



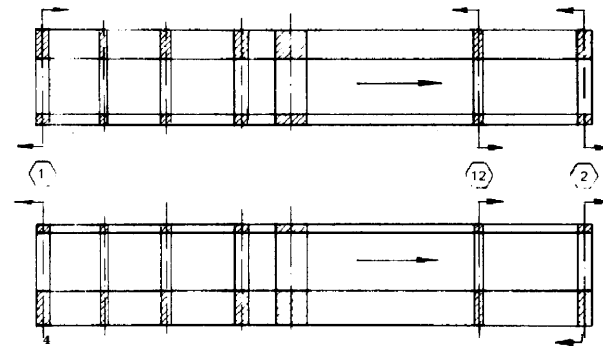
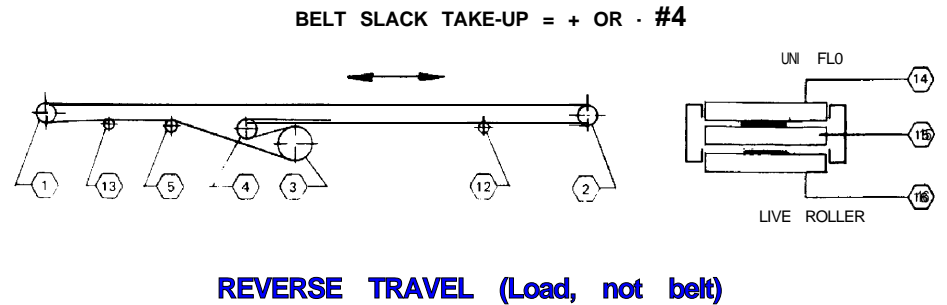
### DOWN TRAVEL



**ADJUSTMENT**  
STEP 1, #9, 1 & 10 IN DIRECTION OF ARROWS  
STEP 2, #11, 2, 5 & 4 ONLY IF NECESSARY

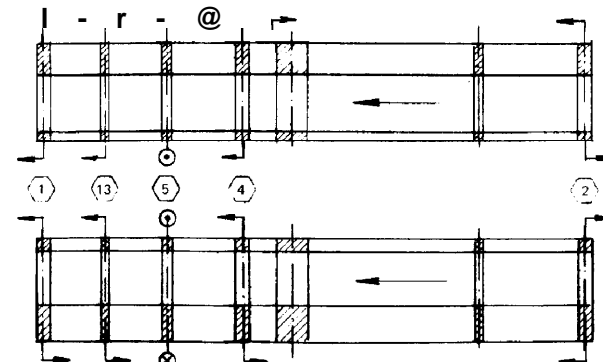
LEGEND:  
→ DIRECTION TO RIGHT OR LEFT  
⊙ UP  
⊗ DOWN

### CENTER DRIVE - LIVE ROLLER



**ADJUSTMENT**  
STEP 1: #12 & 2 IN DIRECTION OF ARROWS  
STEP 2: #1 ONLY IF NECESSARY

### FORWARD TRAVEL (Load, not belt) 1



LEGEND:  
→ DIRECTION TO RIGHT OR LEFT  
⊙ UP  
⊗ DOWN

## 7. LUBRICATION

### A. Rollers and Pulleys

**Grease Packed, Regreaseable Bearings** should be regreased with any lithium base grease such as “Shell Alvania 3” every week or 6 months depending on operating conditions. High humidity conditions require lubrication more frequently.

**Grease Packed Non Regreaseable Bearings** are grease packed at the factory and have no provision for further lubrication.

**Non-Grease Packed Bearings** may be lubricated with a few drops of light motor oil every 1 to 6 months. For humid conditions, they should be oiled frequently. For slight gravity grades or in cold room installations they should not be oiled or lubricated at all.

For very dirty conditions, such as foundry installations, bearings should be dry, not oiled. Oil attracts and holds dirt.

### B. Drive Chain

Lubricate with a light bodied motor oil (SAE No. 20 or 30 viscosity) once a week for 24 hour service, and once a month for 8 hour service. Oil should be applied by brush or oil can to the inside of the chain so centrifugal force & sprocket engagement will force it into the chain. Use light oil which can penetrate the chain joints. Do not use grease. It is too thick to enter the chain joints and “seals” them.

### C. Gear Reducers

The gear reducer should be lubricated according to the instructions of the manufacturer. The “sealed for life” reducers are filled with a synthetic lubricant and never need “topping up”.

Some brands of gearmotors require gearcase lubricants which contain additives while other brands forbid use of additive lubricants. It is therefore necessary to follow the manufacturer’s instructions carefully.

## 8. SAFETY

A conveyor contains many moving parts including chain, sprockets, shafts, pulleys, rollers and belting. Any moving part is a potential source of danger to a careless or untrained operator.

Particular danger or “pinch” points are:

1. The chain and sprockets.
2. Any point at which the belt bends around a roller or pulley.
3. Any point where two rollers or pulleys are close together and give a “wringer” effect.

Personnel should never ride or walk on a conveyor. The conveyor should never be operated with guards removed. A Conveyor should be turned off when servicing, and procedures taken to prevent accidental restarting by other persons.

All personnel should be instructed in the necessity of continual care and attention to safety in the operation of a conveyor.

## 9. SPARE PARTS

Very few spare parts are required and we suggest that they be kept to a minimum. The extent of spare parts depends directly on the degree of usage and the length of time the conveyor can remain inoperative while a new part is purchased.

Shown below is a recommended minimum spare parts stock list for each conveyor in accordance with the degree of usage and an approximate cost (2001) which varies with the conveyor length, width and H.P.

**1. INTERMITTANT USE - 4-8 hours per day Cost \$250.00 - 350.00**

- 2 V Belts for the drive
- 1 Box of conveyor belt lacing (4 sets)
- 1 Box of Roller chain (10 Ft.)
- 2 Connecting links
- 2 Offset links.

**2. NORMAL USE - 8-12 hours per day Cost (incl. #1) \$800.00-1,100.00**

In addition to No. 1 we suggest:

- 1 Motor
- 1 Speed Reducer
- 2 Pulley bearings

**3. CONTINUOUS USE - 12-24 hours per day Cost (incl. #1 & 2) \$1,100.00-2,000.00**

In addition to Nos. 1 and 2 we suggest:

- 25 Ft. of belting
- 10 Bed rollers
- 1 End pulley
- 1 Drive pulley (complete assembly)
- 1 Drive sprocket.

## 10. SADLER SERVICE

If you are unable to spend time or do not have someone qualified to perform preventive maintenance or service on the conveyor or are unable to diagnose the problem, we have factory trained technical service personnel to assist you.


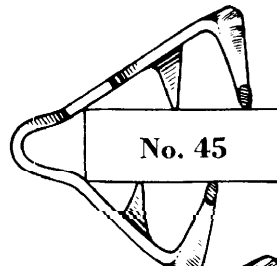

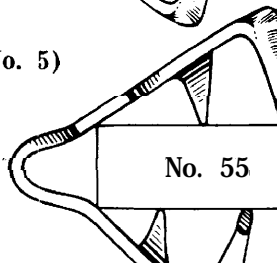

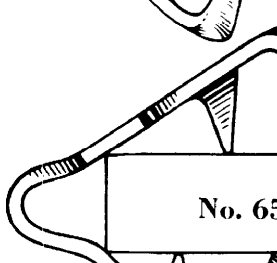

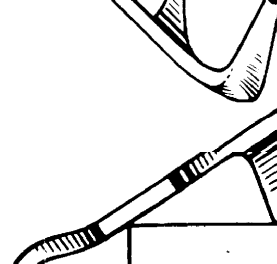

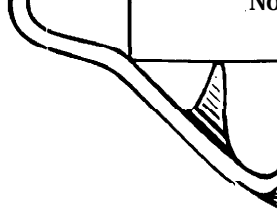


This service is available in two basic plans:

1. Annual Service Contract including quarterly scheduled service calls and a fixed number of emergency calls. The only additional cost would be for material not covered by warranty. All labour and expenses are included.
2. One time Service Call for which actual time, expenses and material is charged for.

Whichever plan may be chosen we are sure you will be satisfied with SADLER SERVICE.

# ALLIGATOR Belt Lacing

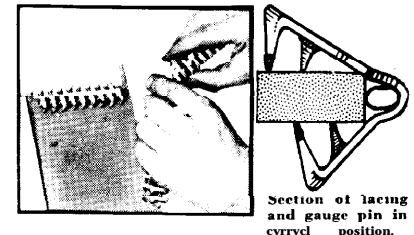
Use the Correct Size For Each Belt

 <p><b>No. 00</b> For belts up to and including 1/16" thick. (1.5 mm.)</p>	 <p><b>No. 45</b> For belts 5/16" thru 3/8" thick. (8 to 9.5 mm.)</p>
 <p><b>No. 1</b> For belts 1/16" thru 3/32" thick. (1.5 to 2.5 mm.)</p>	 <p><b>No. 55</b> For belts 3/8" thru 7/16" thick. (9.5 to 11 mm.)</p>
 <p><b>No. 7 (Replaces No. 5)</b> For belts 3/32" thru 9/64" thick. (2.5 to 3.2 mm.)</p>	 <p><b>No. 65</b> For belts 7/16" thru 1/2" thick. (11 to 13 mm.)</p>
 <p><b>No. 15</b> For belts 1/8" thru 5/32" thick. (3.2 to 4 mm.)</p>	 <p><b>No. 75</b> For belts 1/2" thru 5/8" thick. (13 to 16mm.)</p>
 <p><b>No. 20</b> For belts 5/32" thru 3/16" thick. (4 to 4.8 mm.)</p>	 <p><b>No. 35</b> For belts 9/32" thru 5/16" thick. (7 to 8 mm.)</p>
 <p><b>No. 25</b> For belts 3/16" thru 7/32" thick. (4.8 to 5.6 mm.)</p>	
 <p><b>No. 27</b> For belts 7/32" thru 9/32" thick. (5.6 to 7 mm.)</p>	

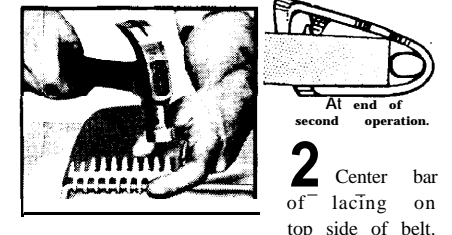
# ILLUSTRATED DIRECTIONS

Bar of Lacing Must Be On Top Side of Belt

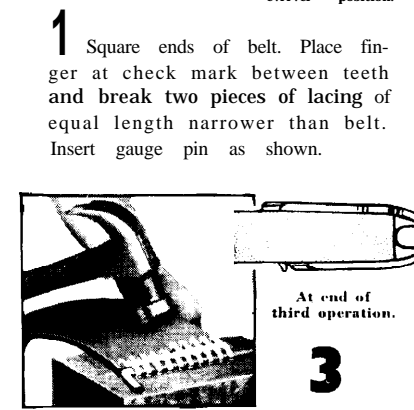
Use The Correct Size For Each Belt



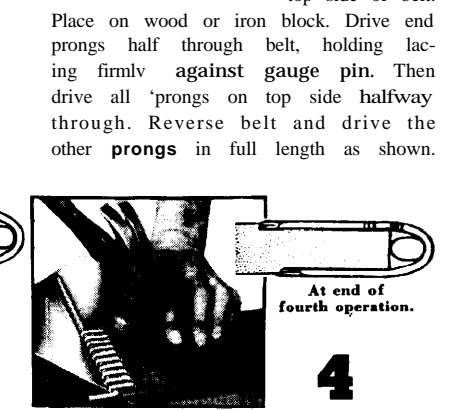
**1** Square ends of belt. Place finger at check mark between teeth and break two pieces of lacing of equal length narrower than belt. Insert gauge pin as shown.



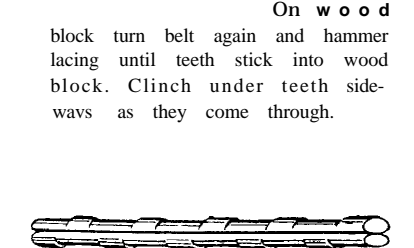
**2** Center bar of lacing on top side of belt. Place on wood or iron block. Drive end prongs half through belt, holding lacing firmly against gauge pin. Then drive all prongs on top side halfway through. Reverse belt and drive the other prongs in full length as shown.



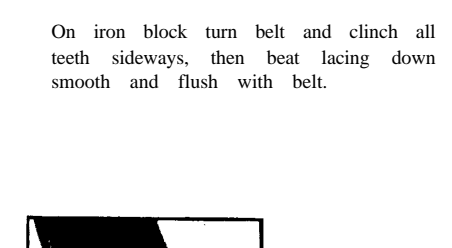
**3** On wood block turn belt again and hammer lacing until teeth stick into wood block. Clinch under teeth sideways as they come through.



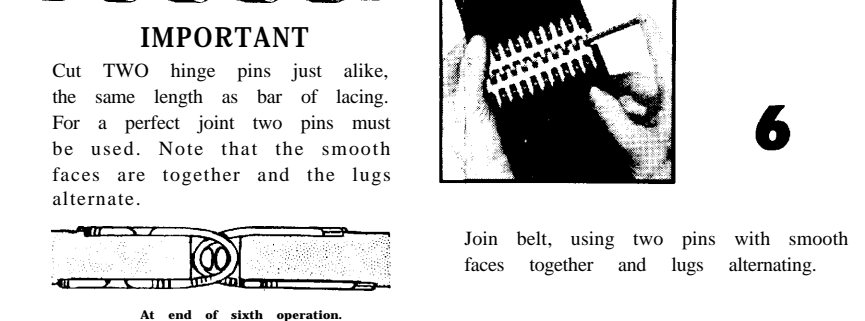
**4** On iron block turn belt and clinch all teeth sideways, then beat lacing down smooth and flush with belt.



**IMPORTANT**  
Cut TWO hinge pins just alike, the same length as bar of lacing. For a perfect joint two pins must be used. Note that the smooth faces are together and the lugs alternate.



**6** Join belt, using two pins with smooth faces together and lugs alternating.



At end of sixth operation.

DATE: **M/STD/191** TITLE: **UNI-FLO INTERFLOOR BELT CONVEYOR**

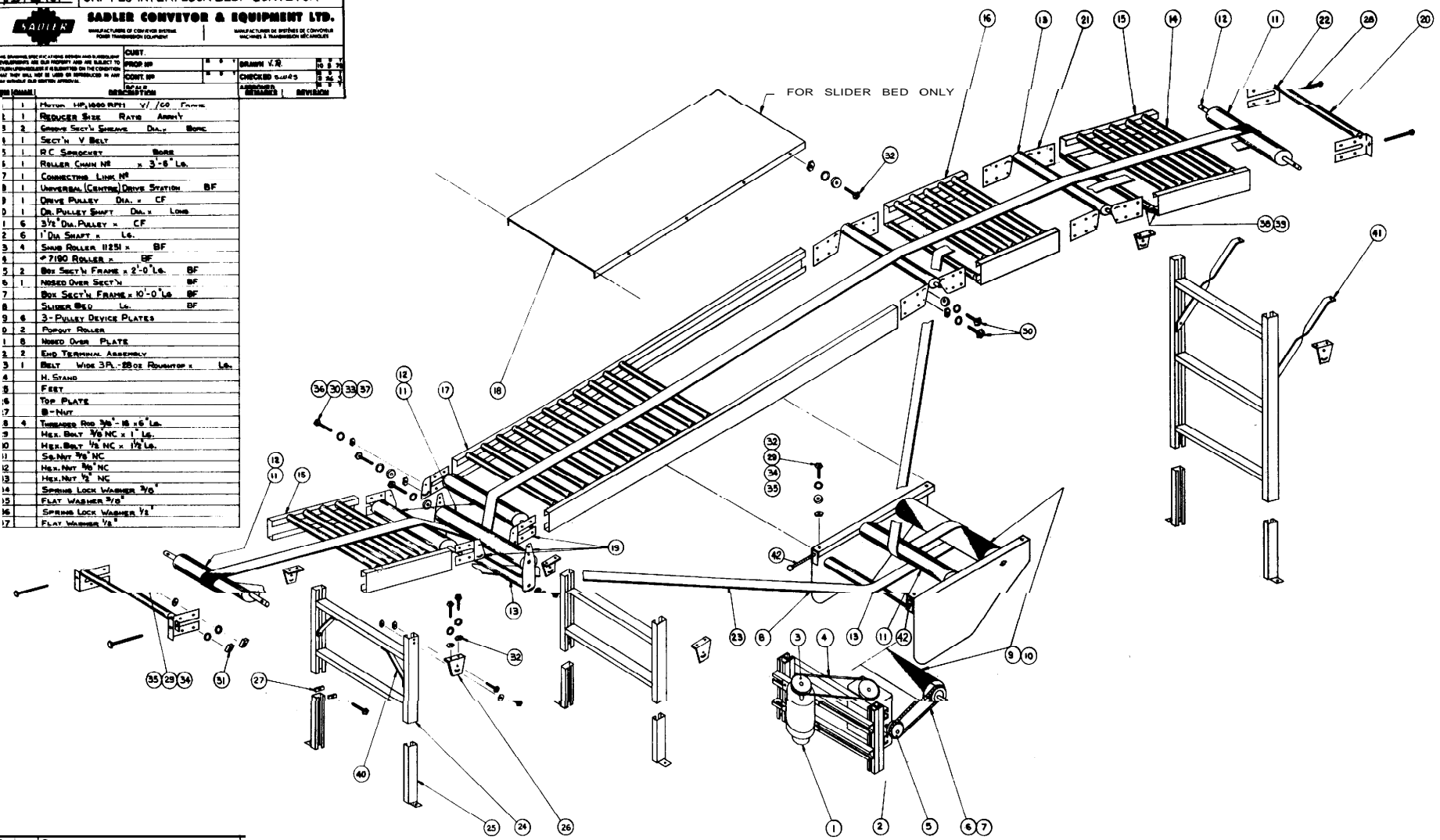


**SADLER CONVEYOR & EQUIPMENT LTD.**

MANUFACTURERS OF CONVEYOR SYSTEMS  
FOR THE MINING INDUSTRY

CUST. NO.	PROJ. NO.	BRANCH / F.R.
CONTRACT NO.	CHECKED BY	DATE
REVISED BY	APPROVED BY	REVISION

ITEM NO.	DESCRIPTION	QTY	UNIT
1	Motor 1/2 HP 1000 RPM 1/2 100 Frame	1	
2	REDUCER SIZE RATIO 40:1	1	
3	CONV. SECT'N FRAME 2'-0" DIA. x 3'-6" LG.	1	
4	SECT'N V BELT	1	
5	D.C. SWITCH	1	
6	ROLLER CHAIN NR x 3'-6" LG.	1	
7	CONNECTING LINK NR	1	
8	UNIVERSAL (CENTR) DRIVE STATION BF	1	
9	DRIVE PULLEY DIA. x CF	1	
0	DR. PULLEY SHAFT DIA. x LG.	1	
1	3/2" DIA. PULLEY x CF	6	
2	1" DIA. SHAFT x LG.	2	
3	SNUG ROLLER 1/2" x BF	4	
4	7/8" ROLLER x BF	2	
5	BOX SECT'N FRAME x 2'-0" LG. BF	1	
6	POSSD OVER SECT'N	1	
7	BOX SECT'N FRAME x 10'-0" LG. BF	1	
8	SLIDER BED LG.	1	
9	3-PULLEY DEVICE PLATES	2	
0	FLYING ROLLER	1	
1	POSSD OVER PLATE	1	
2	END TERMINAL ASSEMBLY	2	
3	BELT WIDE 3/4" - 2200 ROLLER x LG.	1	
4	H. STAND	2	
5	FEET	4	
6	TOP PLATE	1	
7	B-NUT	1	
8	TUBESER ROD 3/8" x 16" LG.	4	
9	HEX. BOLT 3/8" NC x 1" LG.	10	
0	HEX. BOLT 1/2" NC x 1 1/2" LG.	10	
1	3/8" NUT 3/8" NC	10	
2	1/2" NUT 1/2" NC	10	
3	HEX. NUT 3/8" NC	10	
4	HEX. NUT 1/2" NC	10	
5	SPRING LOCK WASHER 3/8"	10	
6	FLAT WASHER 3/8"	10	
7	SPRING LOCK WASHER 1/2"	10	
8	FLAT WASHER 1/2"	10	



32	SCREEN
33	RETURN ROLLERS
34	SWAY BRACES
35	WAVE BRACES
36	TAKE-UP SCREEN 3/4" DIA. - 16 NC 2'-0" LG.

SAADLER CONVEYOR & EQUIPMENT LTD.  
M/STD/191



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[info@sadler-conveyor.com](mailto:info@sadler-conveyor.com)

## WHAT SADLER CONVEYORS MAY MEAN TO YOU

SADLER Conveyors permit the plant operator to obtain the fullest capacity production possible from his processing and manufacturing equipment.

SADLER Conveyors provide the means of timing and pacing manufacturing operations so essential to quantity production and mass assembly.

SADLER Conveyors maintain a constant, measured flow of materials; they provide moving, out-of-the-way storage for parts and subassemblies with unfailing delivery of the right thing at the right place at the right time and their flexibility is such that production schedules for an entire plant may be set in a matter of seconds with no more than the adjustment of a dial or the push of a button. Conveyors utilize "air rights" by moving along ceilings or they may make use of space beneath a floor which would be wasted otherwise. They reduce and even eliminate, in many cases, the chance for human errors in sequence of, or time of, operations. They provide a constant visual check of the progress of a production schedule. They reduce work-in-progress inventories to a minimum. Conveyors are a significant factor in the reduction of industrial accidents through the elimination of lifting and carrying and by making it unnecessary for man to even approach dangerous areas.

For the worker, conveyors reduce the necessity to serve as a beast of burden and they encourage him to raise his productivity. He can now control power instead of generating it himself. He can now make the last hour of his work-day as productive as the first.

For management, conveyors offer a means of improved relations through better and safer working conditions, better control over costs and higher productivity.

It is our desire to assist you to find the best solution to your particular handling problem, regardless of volume, quantity, weight, or rate of movement. It is our function to tailor a conveyor system to fit each user's own peculiar combination of conditions and it is a rare occurrence when identical installations are possible, for materials to be handled vary, distances and heights vary, and ideas vary.

Fortunately, due to the modular design of our UNI-FL0 conveyors, we are able in many cases to make a conveyor from standard components. Because of this, we are able to have one operating and maintenance manual cover the many types of conveyors we manufacture.