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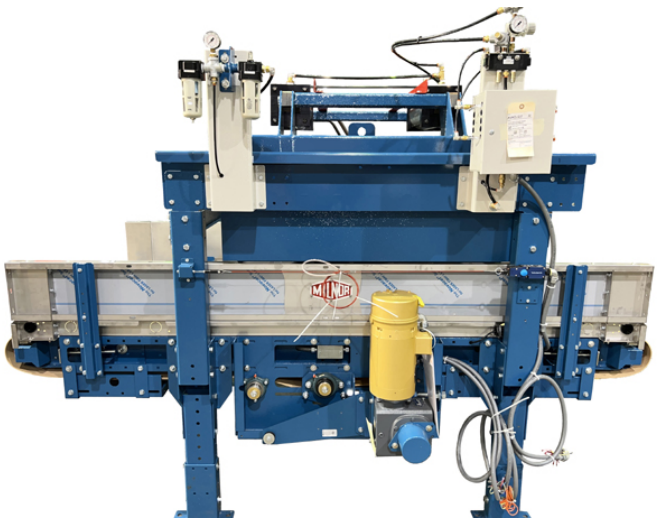
Service & Mechanical Parts

CONVEY44 with Cake Breaker



Read the separate safety manual before installing, operating, or servicing

PELLERIN MILNOR CORPORATION POST OFFICE BOX 400, KENNER, LOUISIANA 70063-0400, U.S.A.

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MAPCBCVRAE/23103A

PELLERIN MILNOR CORPORATION
LIMITED STANDARD WARRANTY

We warrant to the original purchaser that MILNOR machines including electronic hardware/software (hereafter referred to as "equipment"), will be free from defects in material and workmanship for a period of one year from the date of shipment (unless the time period is specifically extended for certain parts pursuant to a specific MILNOR published extended warranty) from our factory with no operating hour limitation. This warranty is contingent upon the equipment being installed, operated and serviced as specified in the operating manual supplied with the equipment, and operated under normal conditions by competent operators.

Providing we receive written notification of a warranted defect within 30 days of its discovery, we will—at our option—repair or replace the defective part or parts, EX Factory (labor and freight specifically NOT included). We retain the right to require inspection of the parts claimed defective in our factory prior to repairing or replacing same. We will not be responsible, or in any way liable, for unauthorized repairs or service to our equipment, and this warranty shall be void if the equipment is tampered with, modified, or abused, used for purposes not intended in the design and construction of the machine, or is repaired or altered in any way without MILNOR's written consent.

Parts damaged by exposure to weather, to aggressive water, or to chemical attack are not covered by this warranty. For parts which require routine replacement due to normal wear—such as gaskets, contact points, brake and clutch linings, belts, hoses, and similar parts—the warranty time period is 90 days.

We reserve the right to make changes in the design and/or construction of our equipment (including purchased components) without obligation to change any equipment previously supplied.

ANY SALE OR FURNISHING OF ANY EQUIPMENT BY MILNOR IS MADE ONLY UPON THE EXPRESS UNDERSTANDING THAT MILNOR MAKES NO EXPRESSED OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR USE OR PURPOSE OR ANY OTHER WARRANTY IMPLIED BY LAW INCLUDING BUT NOT LIMITED TO REDHIBITION. MILNOR WILL NOT BE RESPONSIBLE FOR ANY COSTS OR DAMAGES ACTUALLY INCURRED OR REQUIRED AS A RESULT OF: THE FAILURE OF ANY OTHER PERSON OR ENTITY TO PERFORM ITS RESPONSIBILITIES, FIRE OR OTHER HAZARD, ACCIDENT, IMPROPER STORAGE, MIS-USE, NEGLECT, POWER OR ENVIRONMENTAL CONTROL MALFUNCTIONS, DAMAGE FROM LIQUIDS, OR ANY OTHER CAUSE BEYOND THE NORMAL RANGE OF USE. REGARDLESS OF HOW CAUSED, IN NO EVENT SHALL MILNOR BE LIABLE FOR SPECIAL, INDIRECT, PUNITIVE, LIQUIDATED, OR CONSEQUENTIAL COSTS OR DAMAGES, OR ANY COSTS OR DAMAGES WHATSOEVER WHICH EXCEED THE PRICE PAID TO MILNOR FOR THE EQUIPMENT IT SELLS OR FURNISHES.

THE PROVISIONS ON THIS PAGE REPRESENT THE ONLY WARRANTY FROM MILNOR AND NO OTHER WARRANTY OR CONDITIONS, STATUTORY OR OTHERWISE, SHALL BE IMPLIED.

WE NEITHER ASSUME, NOR AUTHORIZE ANY EMPLOYEE OR OTHER PERSON TO ASSUME FOR US, ANY OTHER RESPONSIBILITY AND/OR LIABILITY IN CONNECTION WITH THE SALE OR FURNISHING OF OUR EQUIPMENT TO ANY BUYER.

BMP720097/19036

BIUUUD19 (Published) Book specs- Dates: 20081231 / 20081231 / 20081231 Lang: ENG01 Applic: UUU

How to Get the Necessary Repair Components

This document uses Simplified Technical English.
Learn more at http://www.asd-ste100.org.

You can get components to repair your machine from the approved supplier where you got this machine. Your supplier will usually have the necessary components in stock. You can also get components from the Milnor® factory.

Tell the supplier the machine model and serial number and this data for each necessary component:

- The component number from this manual
- The component name if known
- The necessary quantity
- The necessary transportation requirements
- If the component is an electrical component, give the schematic number if known.
- If the component is a motor or an electrical control, give the nameplate data from the used component.

To write to the Milnor factory:

Pellerin Milnor Corporation
Post Office Box 400
Kenner, LA 70063-0400
UNITED STATES

Telephone: 504-467-2787
Fax: 504-469-9777
Email: parts@milnor.com

— End of BIUUUD19 —

Trademarks

BNUUUU02.R01 0000158093 F.2 E.2 3/3/21 9:47 AM Released

These words are trademarks of Pellerin Milnor® Corporation and other entities:

Table 1. Trademarks

AutoSpot™	GreenFlex™	MilMetrix®	PulseFlow®
CBW®	GearTrace™	MilTouch™	RAM Command™
Drynet™	GreenTurn™	MilTouch-EX™	RecircONE®
E-P Express®	Hydro-cushion™	MILRAIL™	RinSave®
E-P OneTouch®	Mentor®	Miltrac™	SmoothCoil™
E-P Plus®	Mildata®	PBW™	Staph Guard®
Gear Guardian®	Milnor®		

End of document: BNUUUU02

BIUUUS27 (Published) Book specs- Dates: 20051111 / 20051111 / 20060323 Lang: ENG01 Applic: VJU VIS VSS VAU

Safety—Stationary (non-Shuttling) Conveyors

1. General Safety Requirements—Vital Information for Management Personnel [Document BIUUUS04]

Incorrect installation, neglected preventive maintenance, abuse, and/or improper repairs, or changes to the machine can cause unsafe operation and personal injuries, such as multiple fractures, amputations, or death. The owner or his selected representative (owner/user) is responsible for understanding and ensuring the proper operation and maintenance of the machine. The owner/user must familiarize himself with the contents of all machine instruction manuals. The owner/user should direct any questions about these instructions to a Milnor® dealer or the Milnor® Service department.

Most regulatory authorities (including OSHA in the USA and CE in Europe) hold the owner/user ultimately responsible for maintaining a safe working environment. Therefore, the owner/user must do or ensure the following:

- recognize all foreseeable safety hazards within his facility and take actions to protect his personnel, equipment, and facility;
- work equipment is suitable, properly adapted, can be used without risks to health or safety, and is adequately maintained;
- where specific hazards are likely to be involved, access to the equipment is restricted to those employees given the task of using it;
- only specifically designated workers carry out repairs, modifications, maintenance, or servicing;
- information, instruction, and training is provided;
- workers and/or their representatives are consulted.

Work equipment must comply with the requirements listed below. The owner/user must verify that installation and maintenance of equipment is performed in such a way as to support these requirements:

- control devices must be visible, identifiable, and marked; be located outside dangerous zones; and not give rise to a hazard due to unintentional operation;
- control systems must be safe and breakdown/damage must not result in danger;
- work equipment is to be stabilized;
- protection against rupture or disintegration of work equipment;
- guarding, to prevent access to danger zones or to stop movements of dangerous parts before the danger zones are reached. Guards to be robust; not give rise to any additional hazards; not be easily removed or rendered inoperative; situated at a sufficient distance from the danger zone; not restrict view of operating cycle; allow fitting, replacing, or maintenance by restricting access to relevant area and without removal of guard/protection device;
- suitable lighting for working and maintenance areas;
- maintenance to be possible when work equipment is shut down. If not possible, then protection measures to be carried out outside danger zones;
- work equipment must be appropriate for preventing the risk of fire or overheating; discharges of gas, dust, liquid, vapor, other substances; explosion of the equipment or substances in it.

1.1. **Laundry Facility**—Provide a supporting floor that is strong and rigid enough to support–with a reasonable safety factor and without undue or objectionable deflection–the weight of the fully loaded machine and the forces transmitted by it during operation. Provide sufficient clearance for machine movement. Provide any safety guards, fences, restraints, devices, and verbal and/or posted restrictions necessary to prevent personnel, machines, or other moving machinery from accessing the machine or its path. Provide adequate ventilation to carry away heat and vapors. Ensure service connections to installed machines meet local and national safety standards, especially regarding the electrical disconnect (see the National Electric Code). Prominently post safety information, including signs showing the source of electrical disconnect.

1.2. **Personnel**—Inform personnel about hazard avoidance and the importance of care and common sense. Provide personnel with the safety and operating instructions that apply to them. Verify that personnel use proper safety and operating procedures. Verify that personnel understand and abide by the warnings on the machine and precautions in the instruction manuals.

1.3. **Safety Devices**—Ensure that no one eliminates or disables any safety device on the machine or in the facility. Do not allow machine to be used with any missing guard, cover, panel or door. Service any failing or malfunctioning device before operating the machine.

1.4. **Hazard Information**—Important information on hazards is provided on the machine safety placards, in the Safety Guide, and throughout the other machine manuals. **Placards must be kept clean so that the information is not obscured. They must be replaced immediately if lost or damaged. The Safety Guide and other machine manuals must be available at all times to the appropriate personnel.** See the machine service manual for safety placard part numbers. Contact the Milnor Parts department for replacement placards or manuals.

1.5. **Maintenance**—Ensure the machine is inspected and serviced in accordance with the norms of good practice and with the preventive maintenance schedule. Replace belts, pulleys, brake shoes/disks, clutch plates/tires, rollers, seals, alignment guides, etc. before they are severely worn. Immediately investigate any evidence of impending failure and make needed repairs (e.g., cylinder, shell, or frame cracks; drive components such as motors, gear boxes, bearings, etc., whining, grinding, smoking, or becoming abnormally hot; bending or cracking of cylinder, shell, frame, etc.; leaking seals, hoses, valves, etc.) Do not permit service or maintenance by unqualified personnel.

2. Safety Alert Messages—Internal Electrical and Mechanical Hazards [Document BIUUUS11]

The following are instructions about hazards inside the machine and in electrical enclosures.

WARNING 1: Electrocution and Electrical Burn Hazards—Contact with electric power can kill or seriously injure you. Electric power is present inside the cabinetry unless the main machine power disconnect is off.

- Do not unlock or open electric box doors.
- Do not remove guards, covers, or panels.
- Do not reach into the machine housing or frame.
- Keep yourself and others off of machine.
- Know the location of the main machine disconnect and use it in an emergency to remove all electric power from the machine.

WARNING 2: Entangle and Crush Hazards—Contact with moving components normally isolated by guards, covers, and panels, can entangle and crush your limbs. These components move automatically.

- Do not remove guards, covers, or panels.
- Do not reach into the machine housing or frame.
- Keep yourself and others off of machine.
- Know the location of all emergency stop switches, pull cords, and/or kick plates and use them in an emergency to stop machine motion.

3. Safety Alert Messages—External Mechanical Hazards [Document BIUUUS12]

The following are instructions about hazards around the front, sides, rear or top of the machine.

WARNING 3: Fall, Entangle, and Strike Hazards—Machine motion can cause you to fall or become entangled in or struck by nearby objects if you stand, walk, or ride on the machine. Shuttles and conveyor belts move automatically.

- Keep yourself and others off of machine.

4. Safety Alert Messages—Unsafe Conditions [Document BIUUUS14]

4.1. Damage and Malfunction Hazards

4.1.1. Hazards Resulting from Inoperative Safety Devices

WARNING 4: Multiple Hazards—Operating the machine with an inoperative safety device can kill or injure personnel, damage or destroy the machine, damage property, and/or void the warranty.

- Do not tamper with or disable any safety device or operate the machine with a malfunctioning safety device. Request authorized service.

WARNING 5: Electrocution and Electrical Burn Hazards—Electric box doors—Operating the machine with any electric box door unlocked can expose high voltage conductors inside the box.

- Do not unlock or open electric box doors.

WARNING 6: Entangle and Crush Hazards—Guards, covers, and panels—Operating the machine with any guard, cover, or panel removed exposes moving components.

- Do not remove guards, covers, or panels.

4.1.2. Hazards Resulting from Damaged Mechanical Devices

WARNING 7: Multiple Hazards—Operating a damaged machine can kill or injure personnel, further damage or destroy the machine, damage property, and/or void the warranty.

- Do not operate a damaged or malfunctioning machine. Request authorized service.

4.2. Careless Use Hazards

4.2.1. Careless Operation Hazards—Vital Information for Operator Personnel (see also operator hazards throughout manual)

WARNING 8: Multiple Hazards—Careless operator actions can kill or injure personnel, damage or destroy the machine, damage property, and/or void the warranty.

- Do not tamper with or disable any safety device or operate the machine with a malfunctioning safety device. Request authorized service.
- Do not operate a damaged or malfunctioning machine. Request authorized service.
- Do not attempt unauthorized servicing, repairs, or modification.
- Do not use the machine in any manner contrary to the factory instructions.
- Use the machine only for its customary and intended purpose.
- Understand the consequences of operating manually.

CAUTION 9: Goods Damage and Wasted Resources—Entering incorrect cake data causes improper processing, routing, and accounting of batches.

- Understand the consequences of entering cake data.

4.2.2. Careless Servicing Hazards—Vital Information for Service Personnel (see also service hazards throughout manuals)

WARNING 10: Electrocution and Electrical Burn Hazards—Contact with electric power can kill or seriously injure you. Electric power is present inside the cabinetry unless the main machine power disconnect is off.

- Do not service the machine unless qualified and authorized. You must clearly understand the hazards and how to avoid them.
- Abide by the current OSHA lockout/tagout standard when lockout/tagout is called for in the service instructions. Outside the USA, abide by the OSHA standard in the absence of any other overriding standard.

WARNING 11: Entangle and Crush Hazards—Contact with moving components normally isolated by guards, covers, and panels, can entangle and crush your limbs. These components move automatically.

- Do not service the machine unless qualified and authorized. You must clearly understand the hazards and how to avoid them.
- Abide by the current OSHA lockout/tagout standard when lockout/tagout is called for in the service instructions. Outside the USA, abide by the OSHA standard in the absence of any other overriding standard.

— End of BIUUUS27 —

Glossary of Tag Illustrations—Conveyor

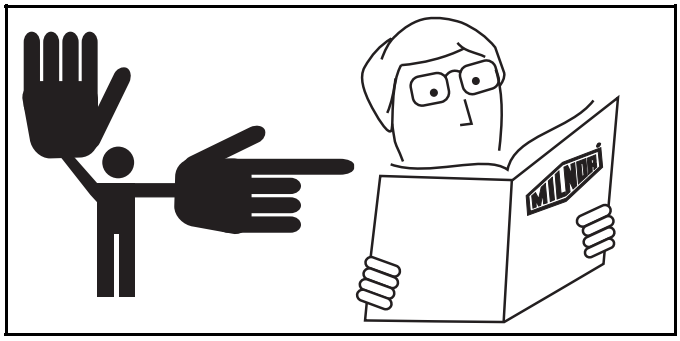
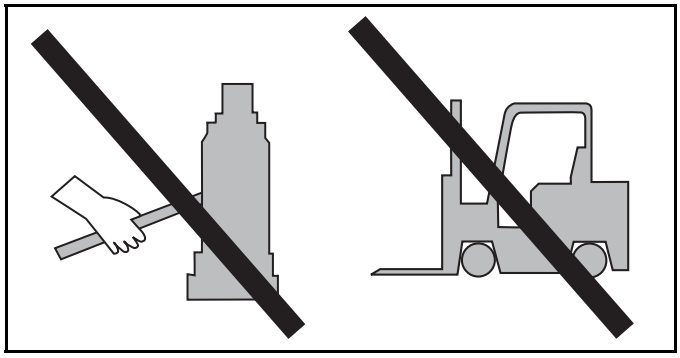
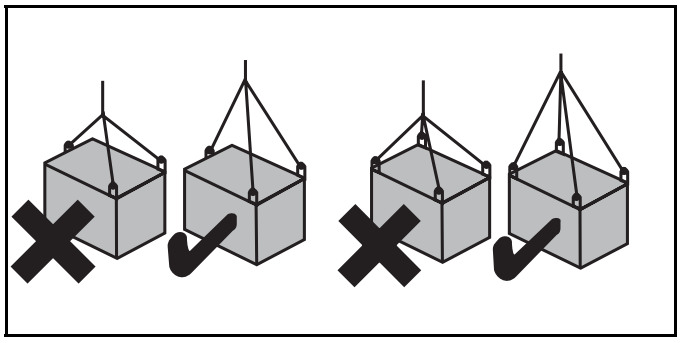
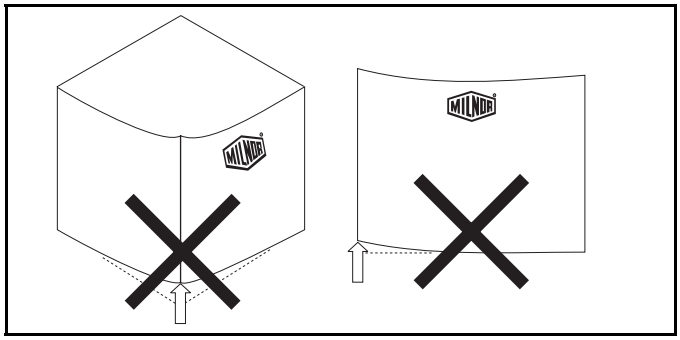
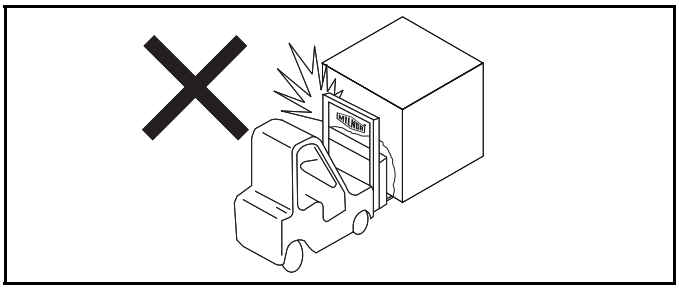
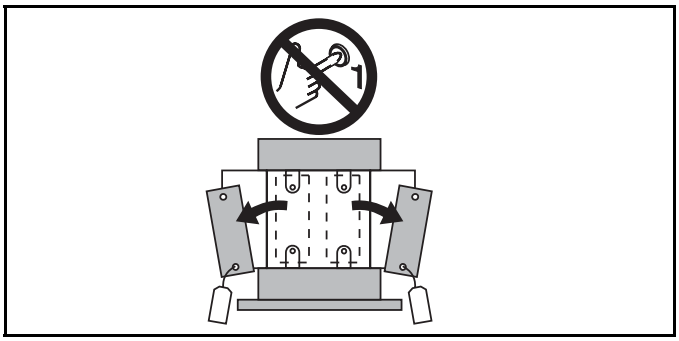
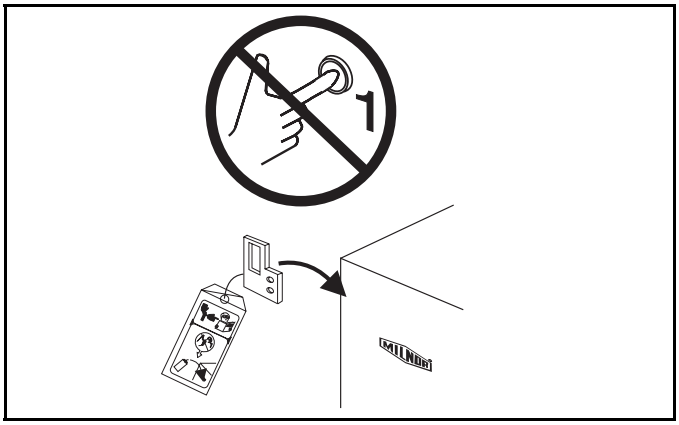
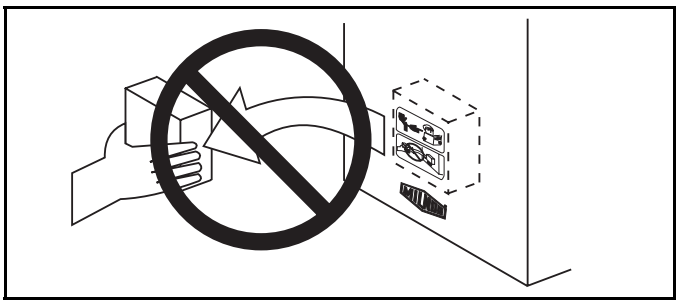
Illustration	Explanation
	Stop! Read the manual first for complete instructions before continuing.
	Do not jack the machine here. Do not lift the machine here.
	Use three point or four point lifting as determined by the lifting eyes furnished. Rig the load using lifting cables of sufficient size and length to ensure cables are not over-stressed.
	Do not lift the machine from one corner or one side edge.

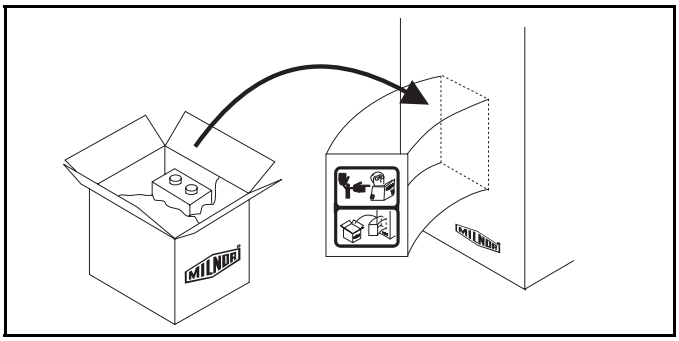
Illustration	Explanation
	Do not strike machine or components during fork lifting.
	Do not start this machine until the packing materials, lifting brackets, etc. with this tag attached or behind this panel are removed. These materials are painted red. Safety stands or brackets (also painted red) may be provided with this machine. Do not discard safety stands or brackets
	Do not step or stand on this machine part.
	This motor or pump should rotate in the direction of the arrow.



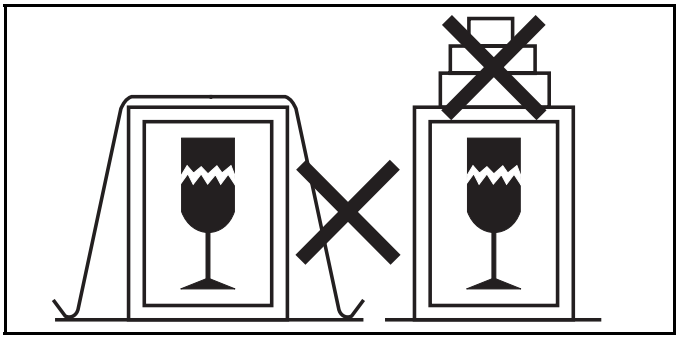
Do not start this machine until the part with this tag is installed on the machine.



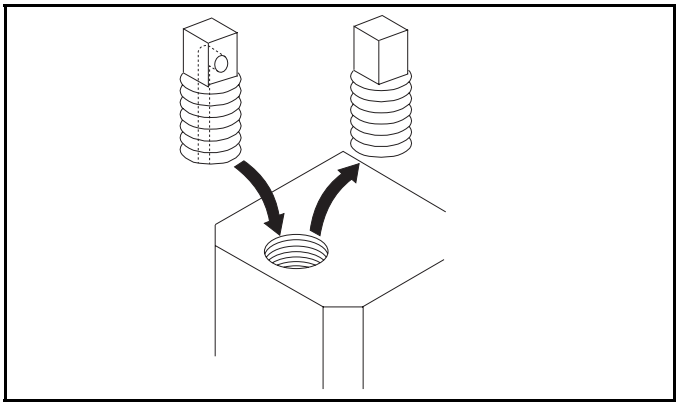
Do not remove this component from the machine.



Install the appropriate part here before operating the machine.



Do not strap or chain over box



Replace non-vented plug with vented plug on gear reducer before operating.

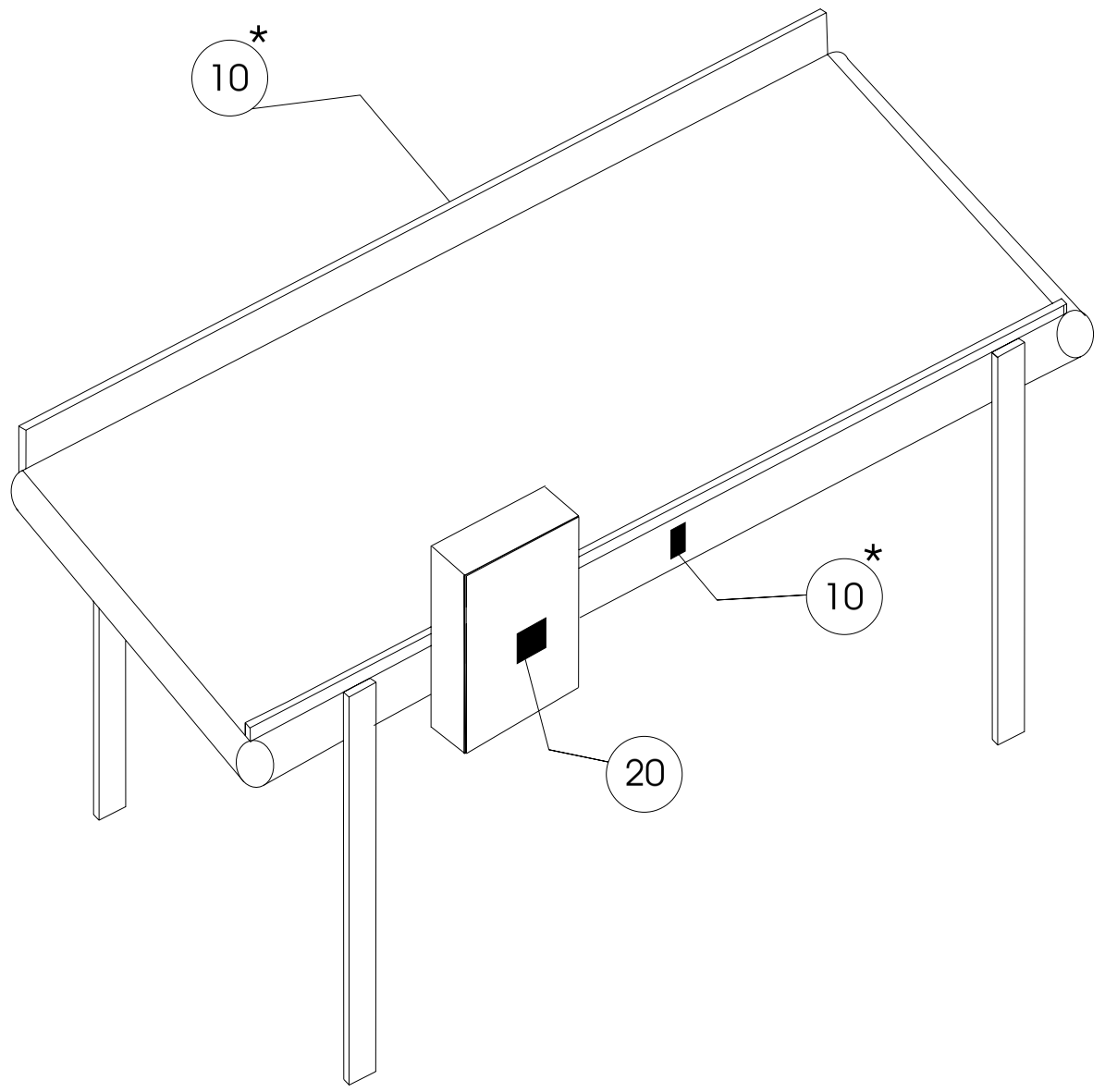
Safety Placard Use and Placement

ALL FIXED CONVEYORS

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.

Notes:
1. **Replace placard immediately, if removed or unreadable.**
2. **Approximate locations of placards are shown. Mounting holes are provided on machine. Use #8 self-tapping screws.**



NOTES:
*THESE PLACARDS ARE TO BE REPEATED IF CONVEYOR IS OVER 20 FEET (6.096 METERS) LONG

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.

Parts List—Safety Placard Placement

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
.				
			----------ASSEMBLIES----------	
			none	
			----------COMPONENTS----------	
all	10	01 10634A	NPLT:CONVEYOR HAZARDS-TCATA	
all	20	01 10375B	NPLT:ELEC HAZARD SMALL-TCATA	

Safety Placard Use and Placement ISO

ALL FIXED CONVEYORS

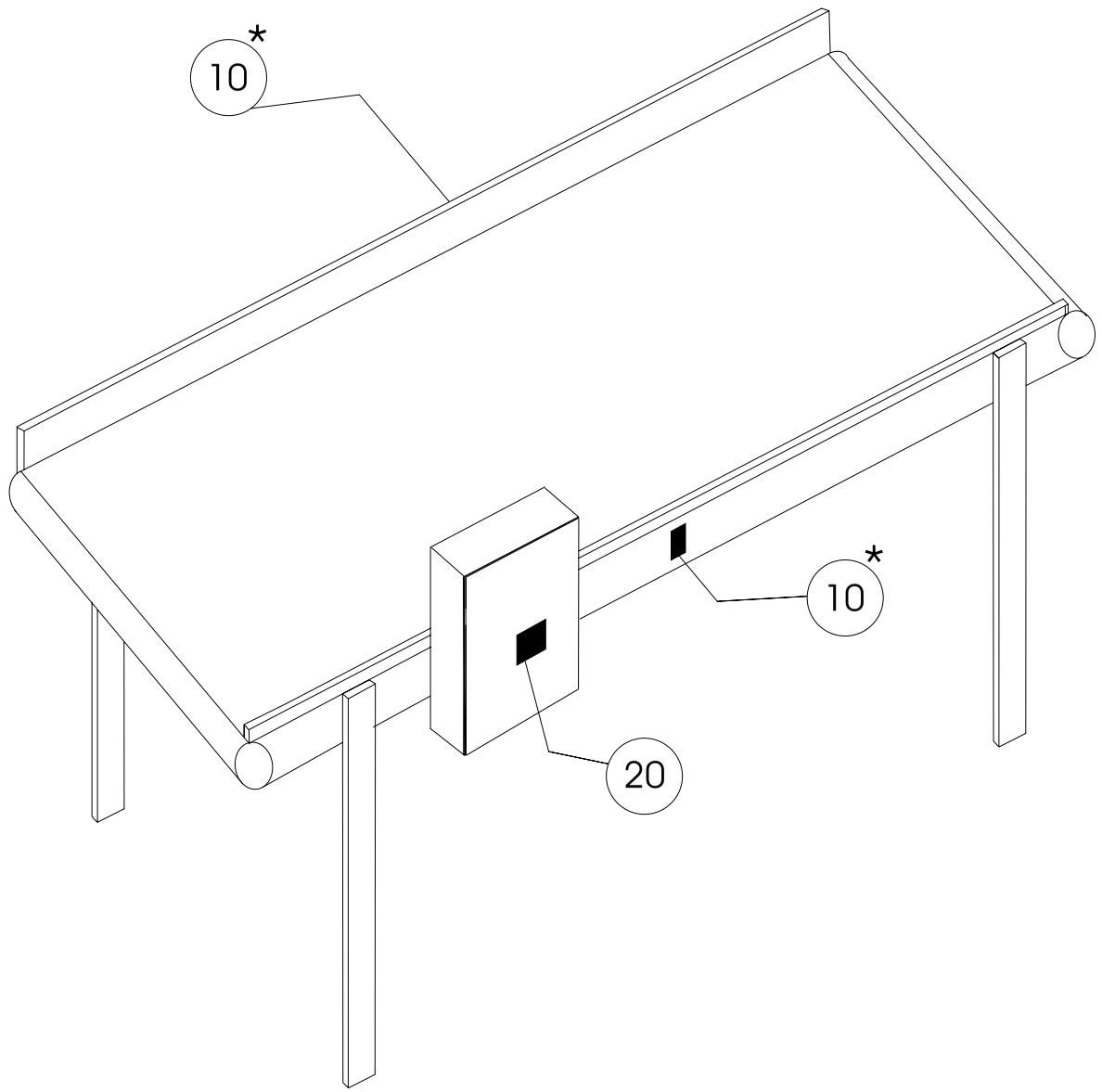
BMP070023/2007215B
(Sheet 1 of 2)

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.

ISO Placards
shown on this page

Notes:
1. **Replace placard immediately, if removed or unreadable.**
2. **Approximate locations of placards are shown. Mounting holes are provided on machine. Use #8 self-tapping screws.**



NOTES:
*THESE PLACARDS ARE TO BE REPEATED IF CONVEYOR IS OVER 20 FEET (6.096 METERS) LONG

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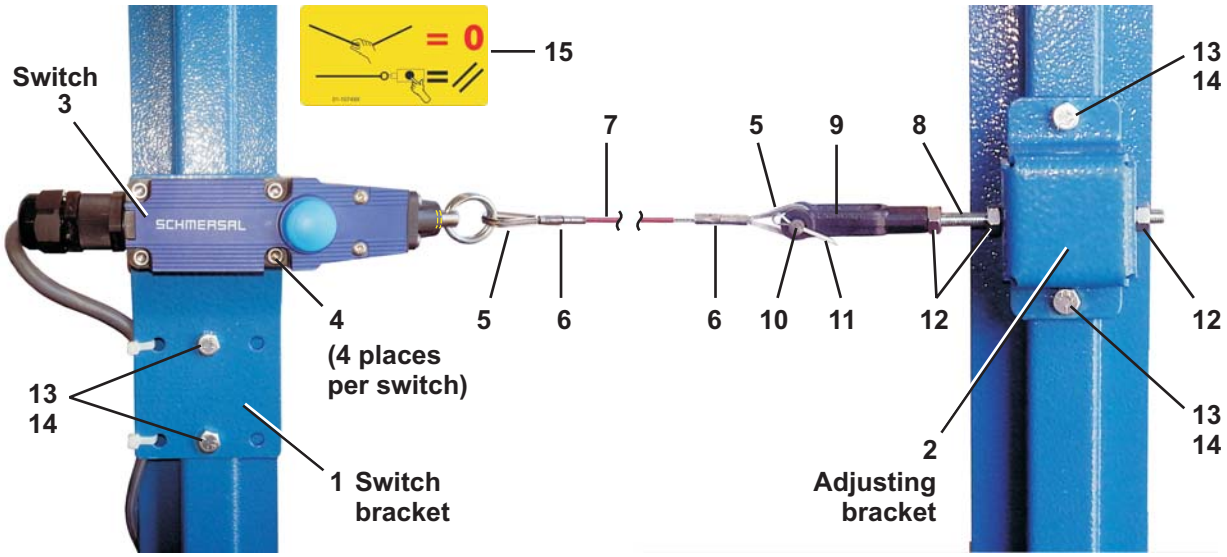
Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
.				
----------	----------	----------	----------ASSEMBLIES----------	----------
			none	
----------	----------	----------	----------COMPONENTS----------	----------
all	10	01 10634X	NPLT:WARN CONVEYORS -ISO	
all	20	01 10375	NPLTE:"WARNING" 2X2	

Pull-wire Stop Switch

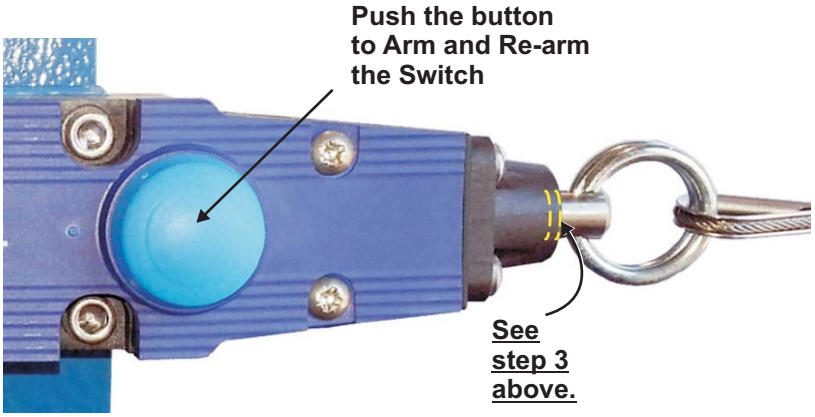
All Conveyors

Figure 1: Pull-wire Stop Switch Installation



Installation and operation:

1. Install the switch bracket, switch, and adjusting bracket to the conveyor side supports as shown. (Install pull-wire stop switch to both sides of all conveyors.)
For long spans, intermediate wire supports are required every 2 m to 5 m (6 ft to 16 ft). Sufficient space must be provided so that maximum perpendicular force on the wire to activate the switch is 200 N (45 pounds) and the maximum deflection of the wire is 400 mm (15”).
2. Assemble and install the cable (pull cord), thimbles, and sleeves so that the cable is tight but does not begin to move the switch shaft.
3. Adjust the position of the threaded rod (item 8) so that the cable pulls the switch shaft out until the first of two notches on the shaft is visible but the second notch is not.
4. Tighten the nuts on the threaded rod (item12) to hold it at this position.



5. Press the button on the switch to ARM. The button should remain depressed. If it does not, the switch shaft is not in the correct position.
6. Press the button to RE-ARM the switch after the wire has been tripped.

Pull-wire Stop Switch

All Conveyors

Parts List—Pull-wire Stop Switch

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
			----------ASSEMBLIES----------	
	A	ALC40005E	PULL-WIRE STOP SWITCH ASSY	
			----------COMPONENTS----------	
	1	04 20066	WIREPULL SWITCH BRACKET	CONVEYORS PLUS CONWA/CONLO
	1	04 24128	SAFETY SW MTG PLATE-4232M	EXTRACTOR CONVEYORS
all	2	04 20067	WIREPULL ADJUSTING BRKT	
all	3	09RS0002	PULL-WIRE SW SCHMERSAL#ZQ 700-11	
all	4	15K022B	SOKCPSCR 10-24UNC X 1+1/2"LG SS18	
all	5	27A951	1/16" SS WIRE ROPE THIMBLE	
all	6	27A952	1/16" OVAL SLEEVE S/S	
all	7	27A953	CABLE-AIRCRAFT 1/16SS7X7REDCV	
all	8	17R015	THRD ROD 1/4-28UNFX4.5" ZNC PL	
all	9	17A004	ADJ YOKE END 1/4-28 XYLAN COAT	
all	10	17A004A	CLEVIS PIN 1/4"X3/4"DRILLED SS	
all	11	15H031	STDCOTTERPIN 3/32X3/4 SS18-8	
all	12	15G177	HXNUT 1/4-28UNF2B SAE ZINC GR2	
all	13	15K038B	1/4-20X 1/2 HEXFLANGE SCREW	
all	14	15G178	1/4"-20 HEXFLANGE NUT ZINC	
all	15	01 10749X	NPLT:PULL TO STOP+RESET>ISO	

Service and Maintenance

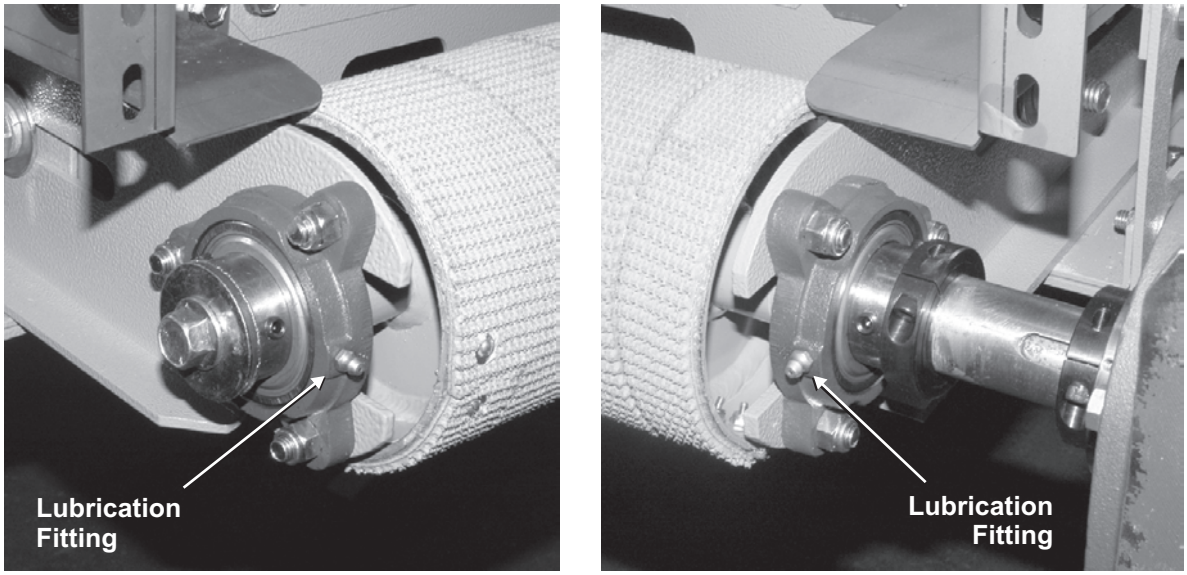
1

Conveyor Lubrication & Chain Adjustment

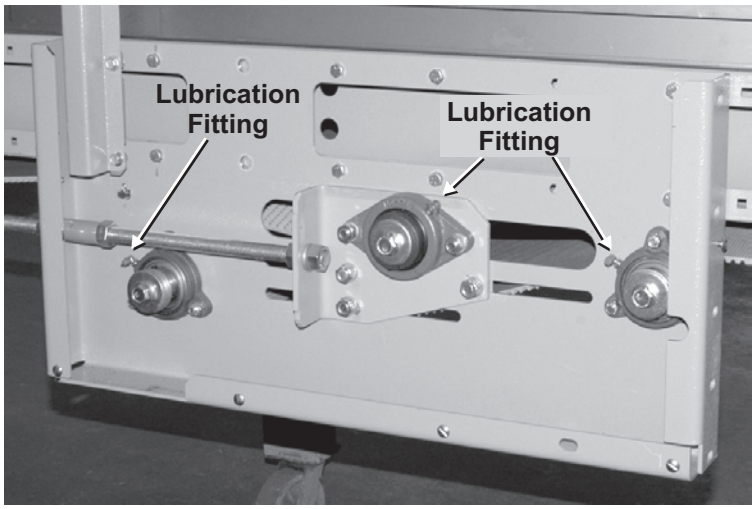
Flatbelt, Pod, Load, and Extractor Conveyors

CONVEYOR LUBRICATION:

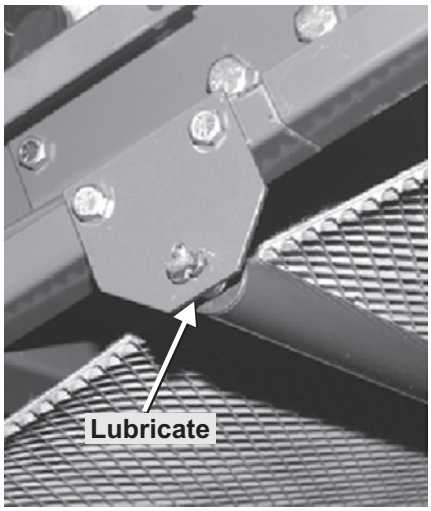
Every three months, all CONVEYOR ROLLER BEARINGS should be lubricated with bearing lubricant, Shell Alvania EP2 Lithium Grease or equivalent, using a hand pressure grease gun. Lubrication fittings are located on the bearings when they are easily accessible or they are remotely located to a position on the conveyor bed frame, if the bearing cannot be reached easily.



Roller Bearings



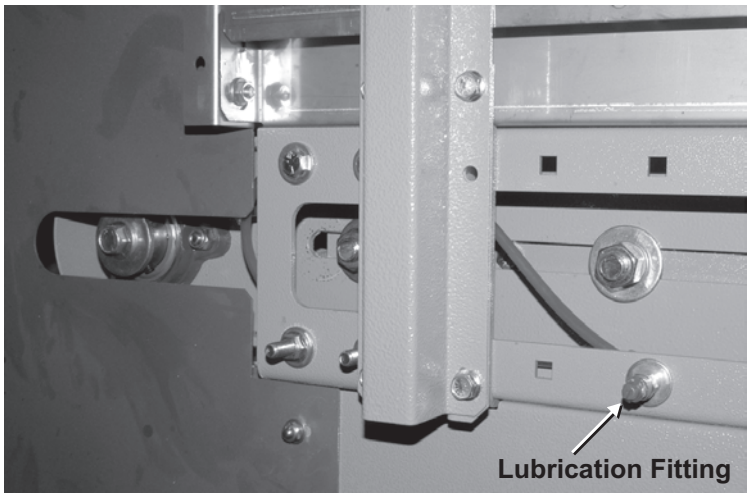
Underdrive



Idler Roller

Conveyor Lubrication & Chain Adjustment

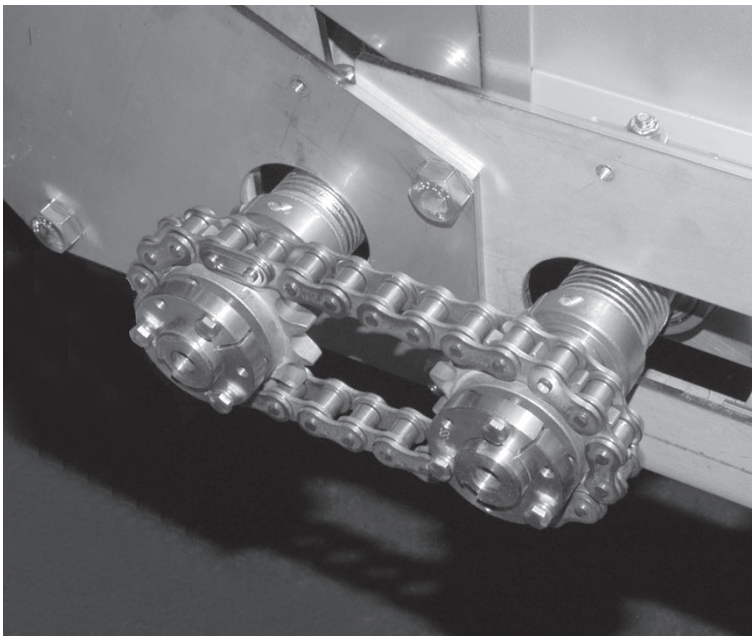
Flatbelt, Pod, Load, and Extractor Conveyors



Remote Lubrication Points

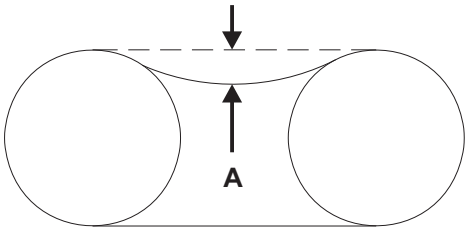
CHAIN LUBRICATION:

Every thirty days of operation, CHAIN DRIVES should be lubricated with bearing lubricant, Shell Alvania EP2 Lithium Grease or equivalent. Chain drives are covered by a safety cover and their lubrication fitting are remotely mounted where they are easily accessible.



CHAIN ADJUSTMENTS:

Every thirty days of operation, chain drives should be checked for proper adjustment.



Dimension A

New Chain	0-.125" (0-3MM)
After 48 hours	.125"-.25" (3MM-6MM)

Conveyor Adjustment Procedures

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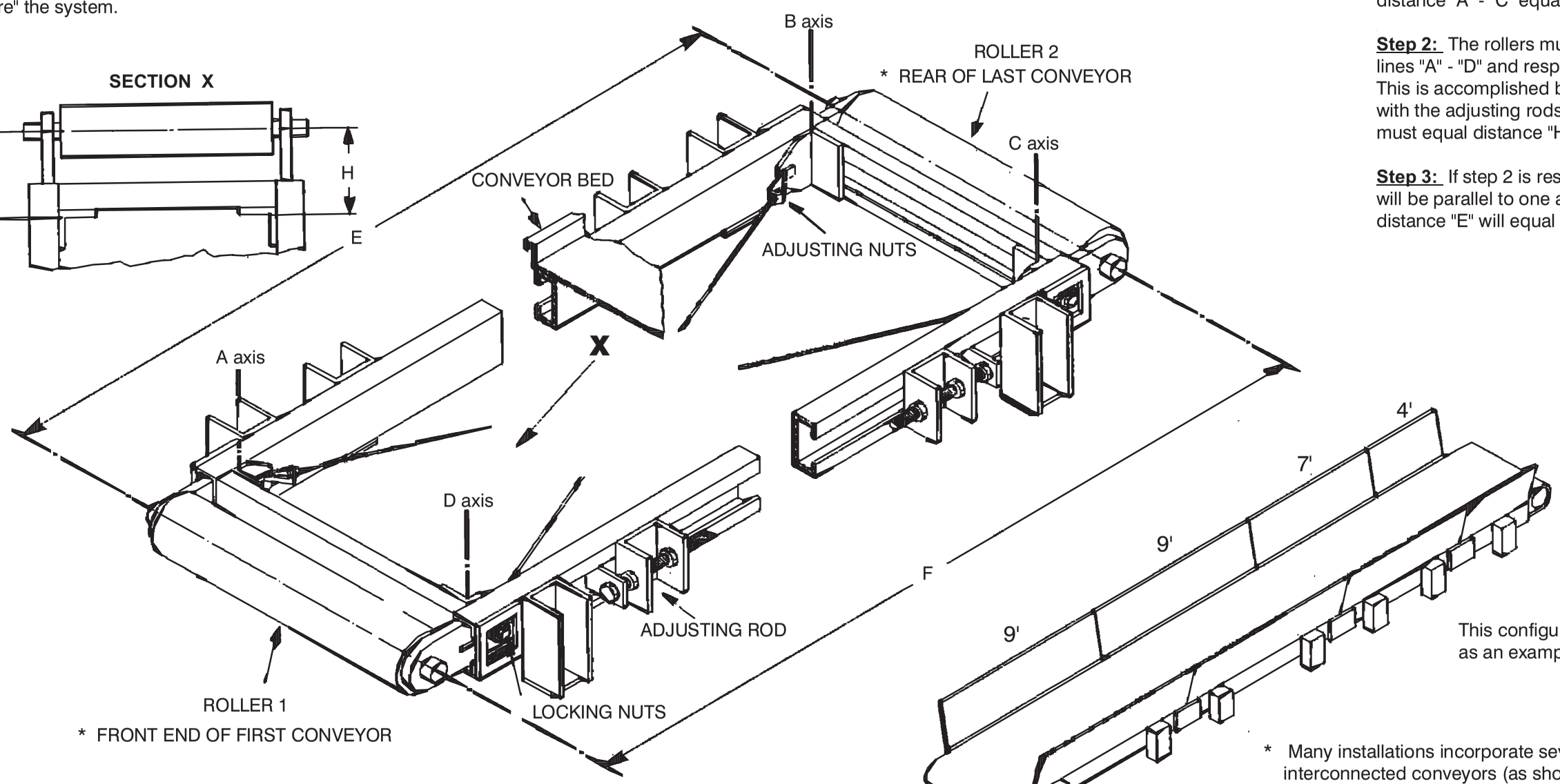
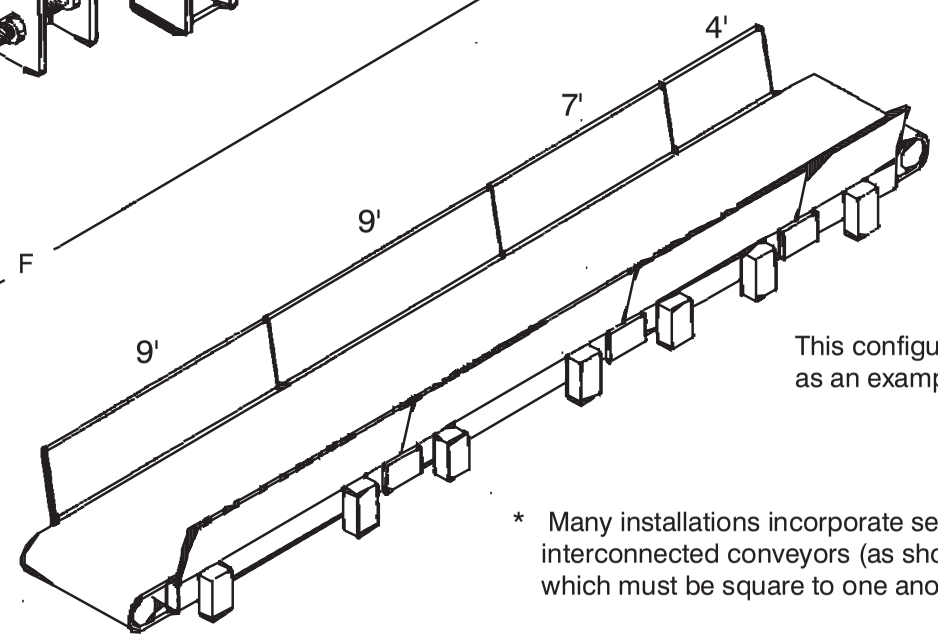
Litho in U.S.A.

Comments:
To provide optimum durability of the conveyor belt, it is essential that the conveyor is properly "squared". These instructions define the procedures to "square" the system.





This configuration is shown as an example only.

* Many installations incorporate several interconnected conveyors (as shown above) which must be square to one another.

Step 1: The conveyor frame must be "square". This is accomplished by adjusting the tie rods between points "A" - "C" and "B" - "D". The frame is "square" if and only if met: distance "A" - "C" equals distance "B" - "D".

Step 2: The rollers must be parallel to the lines "A" - "D" and respectively "B" - "C". This is accomplished by moving the rollers with the adjusting rods. Therefore distance "G" must equal distance "H".

Step 3: If step 2 is respected the rollers will be parallel to one another, therefore distance "E" will equal distance "F".

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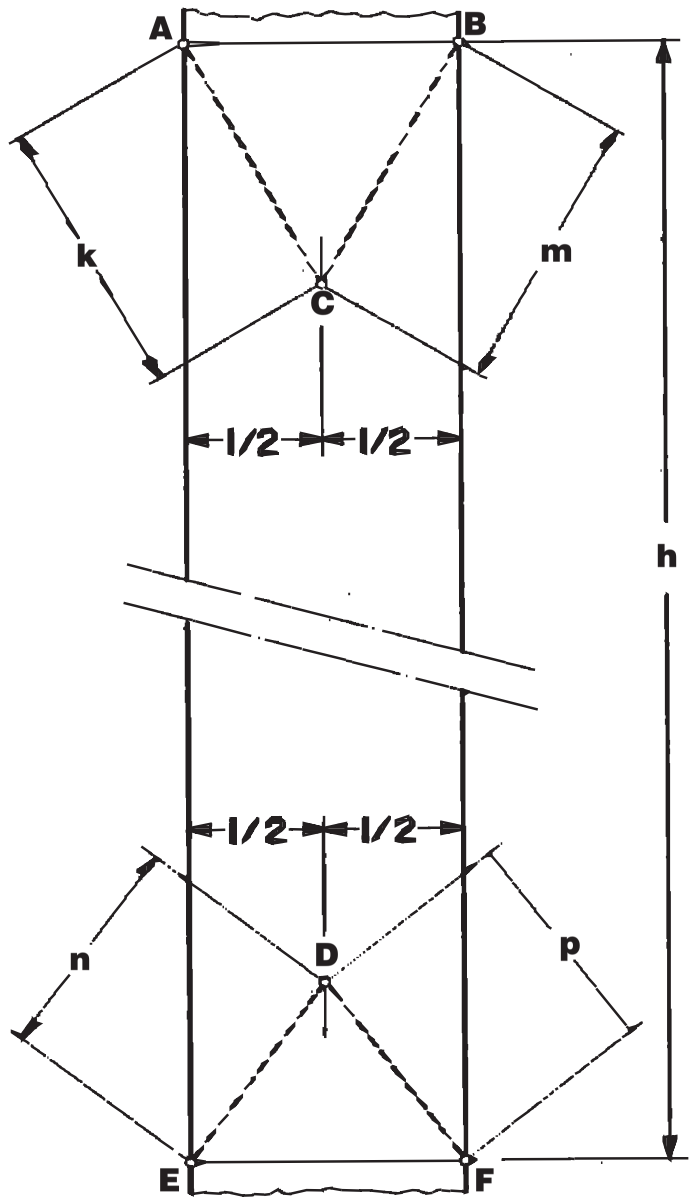


Step 1: At some point well back from the end of the belt, measure and carefully mark a point (C) at the exact center of the belt width.

Step 2: Measure from this centerpoint two equal lengths (k and m) and mark points (A and B) along the edges and near the end of the belt. Be sure length "k" equals length "m".

Step 3: Meausre the total desired length (h) from point "B" to point "F" and mark that point.

Step 4: At some point well back from this end of the belt, mark a point (D) at the exact center of the belt width.

Step 5: Repeat step 2 to find point "E". Be sure that length "n" equals length "p".

Step 6: Cut along lines "A" - "B" and "E" - "F". Cuts must be straight so that the ends may be laced together without causing the belt material to warp.

(THIS PROCEDURE TO BE USED IF A BELT IS TO BE CUT AND LACED IN THE FIELD.)

Conveyor Adjustment Procedures

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063-0400

Litho in U.S.A.

Step 1: Check the conveyor frame to make sure it is square in accordance with illustration 1. Make sure the ends of the belt are square and laced properly in accordance with illustration 2.

Step 2: Run the conveyor for enough revolutions to indicate what direction it tracks.
Example: If the belt tracks to the right, adjust the right side non driven end adjusting rod (for double ended drives pick one end to adjust only) by following these steps:

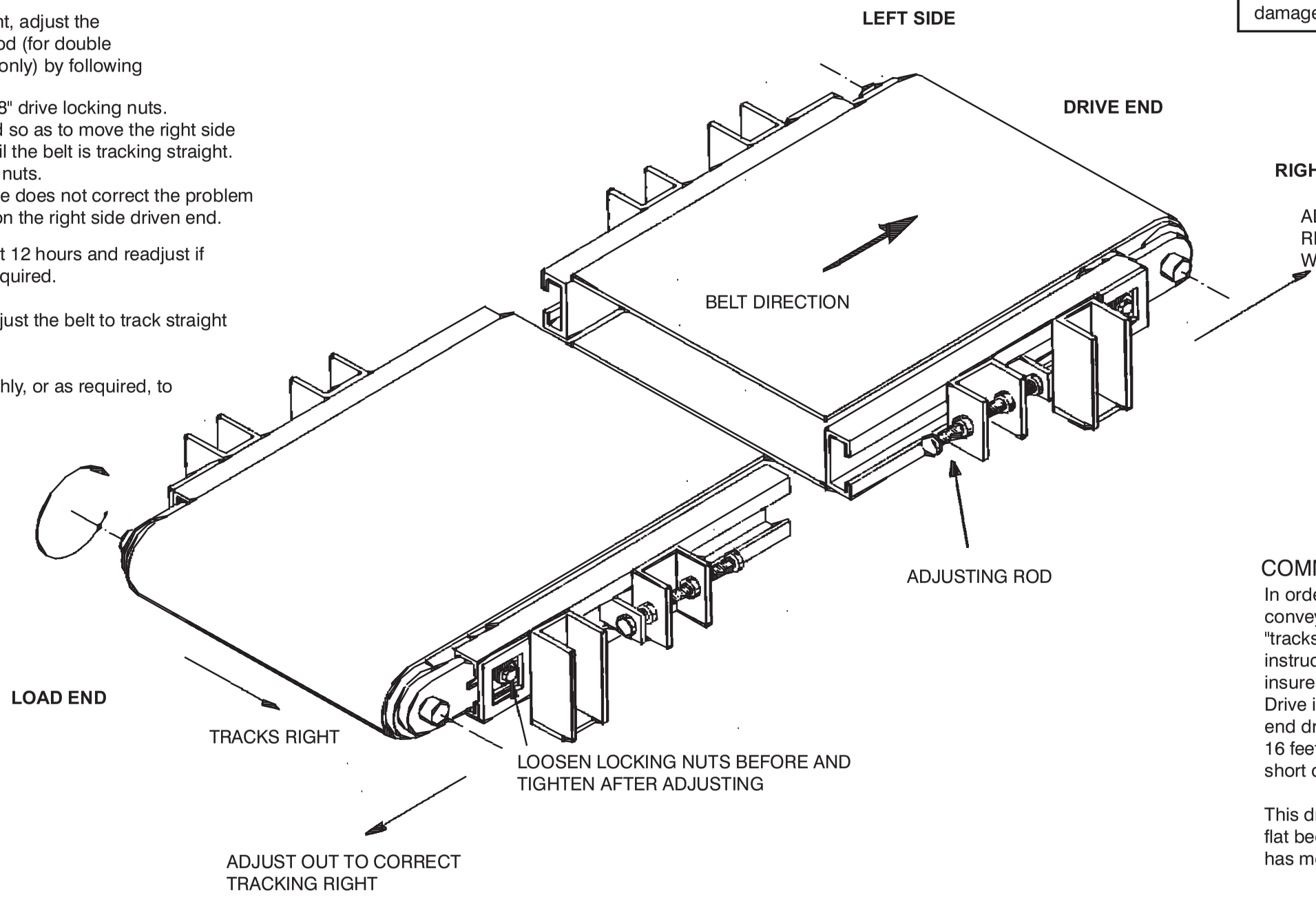
- **Step 2a:** Loosen the two (2) 5/8" drive locking nuts.
- **Step 2b:** Turn the adjusting rod so as to move the right side non-driven end out until the belt is tracking straight.
- **Step 2c:** Retighten the locking nuts.
- **Step 2d:** If the above procedure does not correct the problem apply the same steps on the right side driven end.

Step 3: Run the conveyor for at least 12 hours and readjust if necessary. Frequent inspection is required.

Step 4: After 72 hours operating, adjust the belt to track straight if required.

Step 5: Check the belt at least monthly, or as required, to insure straight tracking.

WARNING:
When moving conveyor, never allow frame to twist; such as would occur if one corner were raised higher than the others. Misalignment and damage to the frame may occur.



COMMENTS:

In order to insure optimum durablity of Milnor conveyor belts, it is essential that the belt "tracks" straight on the conveyor frame. These instructions provide step by step procedures to insure proper belt tracking.
Drive is normally located on discharge end. Double end drives are used on reversing conveyors over 16 feet long. Drive may be located on load end of short conveyors (4 feet).

This drawing intended for use with both flat bed and loading conveyor. Loading conveyor has metal dividers on belt, not shown here.

INCLINED CONVEYOR ASSEMBLY INSTRUCTIONS

APPLICABILITY: Inclined Conveyor

SCOPE: How to assemble

NOTE: Storage conveyors are generally shipped fully assembled or in various stages of assembly depending on special site conditions.

General

It is recommended to assemble inclined conveyors in the following sequence:

1. Join beds.

2. Install plastic anti-friction strips.

3. Install adjustment leg mounts.

4. Install belt to conveyor bed.

5. Install load end legs.

6. Install unloading end legs.

7. Install middle legs.

8. Install cross members.

9. Anchor bolt legs to floor where applicable.

10. Mount motor to gear reducer where applicable.

11. Make electrical connection and extend safety shut-off switch wires.

Installation Procedure

Joining Beds

Each conveyor bed is comprised of one or more 4, 7, or 9 foot section.

The connection between bed sections is made by eight 3/8" carriage bolts at each corner of the middle section or junction of two beds. (Combination: nut, bolt, lockwasher, and flatwasher.) Six on the side and two underneath.

When bolting sections together make sure all butting surfaces are flush and the conveyor is level along the entire length.

Install Plastic Anti-Friction Strips

The polymer anti-friction strips shipped with your conveyor must be installed after the conveyor sections have been joined together. These strips which run continuously along the entire conveyor length, prevent the conveyor belt from adhering to the bed and straining the motor when the conveyor is started.

Attach anti-friction strips as shown in the figure next page using the flat head bolts and self-locking nuts supplied. Note that the strips and conveyor bed were pre-drilled. Bolt heads must be countersunk slightly below the top surface of the strip to assure that bolt head doesn't cut into belt material.

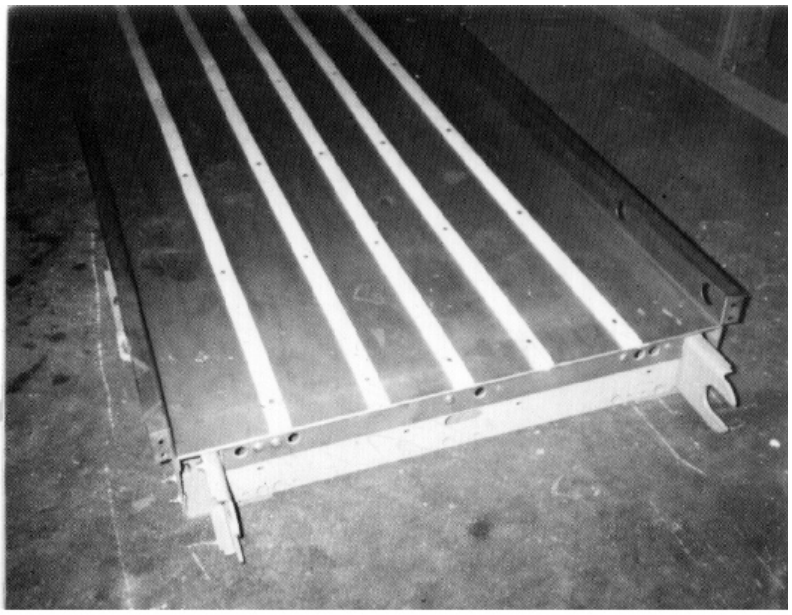


FIGURE 1: Install Anti-Friction Strips

Install Adjustment Leg Mounts

In order to raise conveyor from resting on floor, it is recommended to mount the adjustment leg mounts to the sides of the conveyor. Adjustment leg mount locations are marked with tags or illustrated by a shop sketch for positioning. Mounts are bolted to the conveyor bed in four places, as shown in the photo right, and figure next page.

Note: All bolts for attaching leg adjustment mounts, legs, and cross members are 1/2". All nuts have full threads and are used in a combination of bolt, lockwasher, and nut. Flatwashers are added where slotted holes are being used.

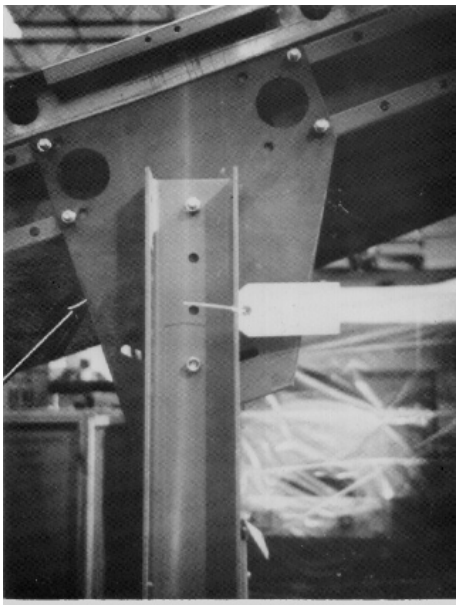


FIGURE 2: Adjustment Leg Mount

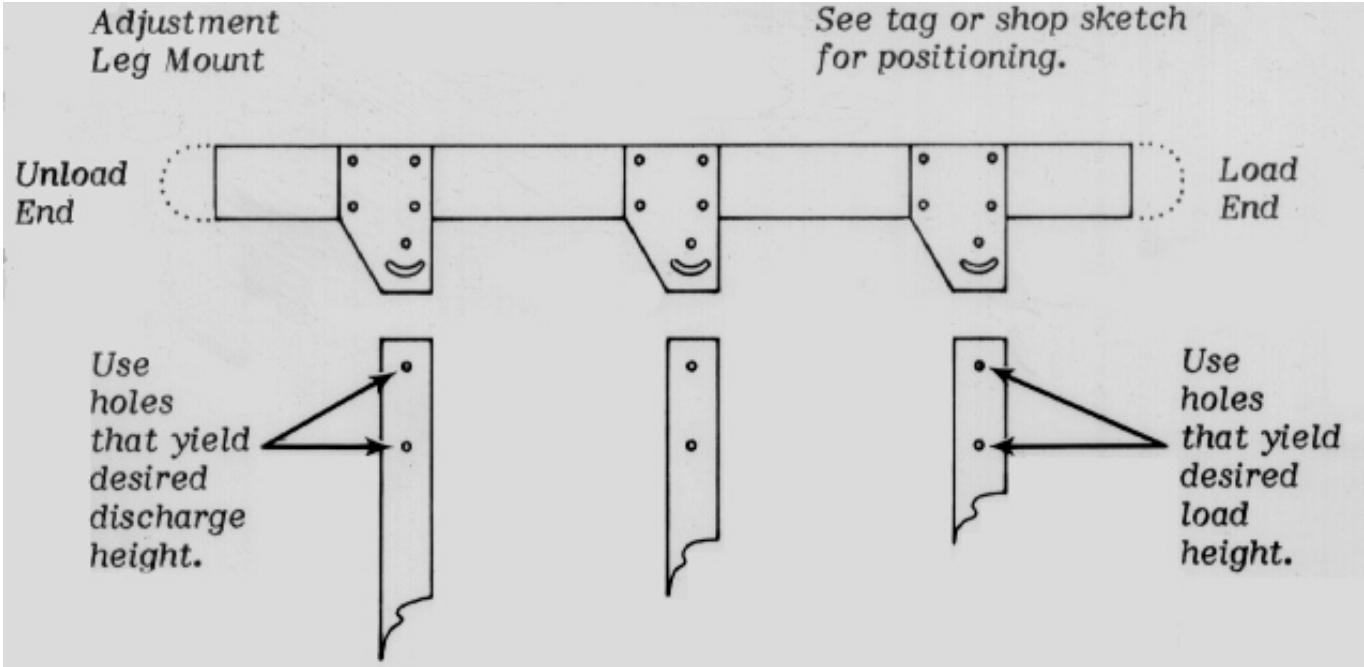


FIGURE 3: Adjustment Leg Mount & Leg Placement

Install Belt

Belt tension adjustments are made on the idler (load) end. The bearing carrier is attached loosely to adjust tension after belt is on.

Install Load End Legs

Raise load end of conveyor to load height. Position legs on adjustment leg mounts (see illustration above) and secure loosely.

Install Unloading End Legs

Raise unloading end of conveyor to discharge height and secure legs to adjustment leg mounts.

CAUTION: Do not lift conveyor from roller. This may damage the roller or belt. Lift from connecting bracket or conveyor bed.

Install Middle Legs

Install middle legs to adjustment leg mount and secure. Go back and adjust all legs vertically and tighten all bolts.

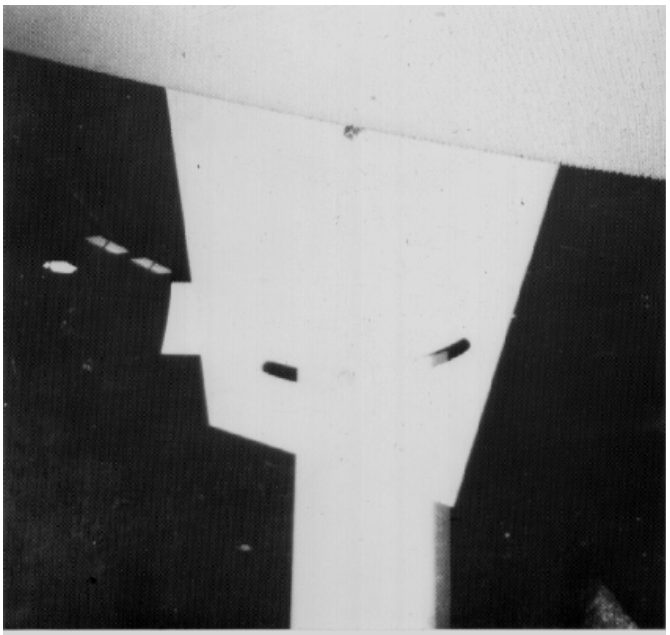


FIGURE 4: Backview Leg Connection

Install Crossmembers

Cross members are used in pairs, bracing legs front and back. Shorter legs ranging from 9" to 26" do not require crossmembers, whereas legs ranging from 27" to 145" require cross-bracing approximately 13" from the bottom of the leg using pre-drilled holes. Taller legs, ranging from 40" to 145" require a second pair of cross braces placed near the top of the legs where bolt holes are available. (See photo right.)

Anchor to Foundation

Use one 1 anchor bolt per leg. Anchor bolt hardware not supplied by Pellerin Milnor Corporation.

Mount Motors

All conveyors are shipped with gear reducers mounted to the drive roller (unloading end). Motors may need to be mounted to the gear reducer if shipped detached.

Note: No adjustment is needed on the drive end of the system.

Additional Connections

Make electrical connection and extend safety shut-off switch wires.

FIGURE 5: Crossmembers, one of two shown.

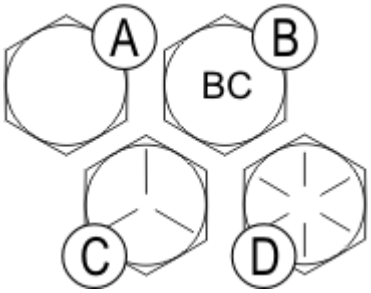
BIUUUM04 (Published) Book specs- Dates: 20180109 / 20180109 / 20180109 Lang: ENG01 Applic: UUU

Torque Requirements for Fasteners

This document uses Simplified Technical English. Learn more at http://www.asd-ste100.org.

The document about the assembly gives the torque requirements for other fasteners. **If fastener torque specifications or threadlocker requirements in an assembly document are different from this document, use the assembly document.**

Figure 1: The Bolts in Milnor® Equipment

The Marks on Bolt Heads	Legend
	**A.** SAE Grades 1 and 2, ASTM A307, and stainless steel **B.** Grade BC, ASTM A354 **C.** SAE Grade 5, ASTM A449 **D.** SAE Grade 8 and ASTM A354 BD

1. Torque Values

These tables give the standard dimension, grade, threadlocker, and torque requirements for fasteners frequently used on Milnor® equipment.

Note 1: Data from the Pellerin Milnor® Corporation "Bolt Torque Specification" (bolt_torque_milnor.xls/2002096).

1.1. Fasteners Made of Carbon Steel

1.1.1. Without a Threadlocker

Table 1: Torque Values for Standard Fasteners with Maximum 5/16-inch Diameters and No Lubricant

	The Grade of the Bolt							
	Grade 2		Grade 5		Grade 8		Grade BC	
Dimension	Pound-Inches	N-m	Pound-Inches	N-m	Pound-Inches	N-m	Pound-Inches	N-m
1/4 x 20	66	7	101	11	143	16	126	14
1/4 x 28	76	9	116	13	163	18	--	--
5/16 x 18	136	15	209	24	295	33	258	29
5/16 x 24	150	17	232	26	325	37	--	--

Table 2: Torque Values for Standard Fasteners Larger Than 5/16-inch Diameters and No Lubricant

	The Grade of the Bolt							
	Grade 2		Grade 5		Grade 8		Grade BC	
Dimension	Pound-feet	N-m	Pound-feet	N-m	Pound-feet	N-m	Pound-feet	N-m
3/8 x 16	20	27	31	42	44	59	38	52
3/8 x 24	23	31	35	47	50	68	--	--
7/16 x 14	32	43	49	66	70	95	61	83
7/16 x 20	36	49	55	75	78	105	--	--
1/2 x 13	49	66	75	102	107	145	93	126
1/2 x 20	55	75	85	115	120	163	--	--
9/16 x 12	70	95	109	148	154	209	134	182
9/16 x 18	78	106	121	164	171	232	--	--
5/8 x 11	97	131	150	203	212	287	186	252
5/8 x 18	110	149	170	231	240	325	--	--
3/4 x 10	172	233	266	361	376	510	329	446
3/14 x 16	192	261	297	403	420	569	--	--
7/8 x 9	167	226	429	582	606	821	531	719
7/8 x 14	184	249	473	641	668	906	--	--
1 x 8	250	339	644	873	909	1232	796	1079
1 x 12	274	371	704	954	994	1348	--	--
1 x 14	281	381	723	980	1020	1383	--	--
1 1/8 x 7	354	480	794	1077	1287	1745	1126	1527
1 1/8 x 12	397	538	891	1208	1444	1958	--	--
1 1/4 x 7	500	678	1120	1519	1817	2464	1590	2155
1 1/4 x 12	553	750	1241	1682	2012	2728	--	--
1 3/8 x 6	655	888	1469	1992	2382	3230	2085	2827
1 3/8 x 12	746	1011	1672	2267	2712	3677	--	--
1 1/2 x 6	869	1178	1949	2642	3161	4286	2767	3751
1 1/2 x 12	979	1327	2194	2974	3557	4822	--	--

Table 3: Torque Values for Plated Fasteners with Maximum 5/16-inch Diameters and No Lubricant

	The Grade of the Bolt							
	Grade 2		Grade 5		Grade 8		Grade BC	
Dimension	Pound-Inches	N-m	Pound-Inches	N-m	Pound-Inches	N-m	Pound-Inches	N-m
1/4 x 20	49	6	76	9	107	12	95	11
1/4 x 28	56	6	88	10	122	14	--	--
5/16 x 18	102	12	156	18	222	25	193	22
5/16 x 24	113	13	174	20	245	28	--	--

Table 4: Torque Values for Plated Fasteners Larger Than 5/16-inch Diameters and No Lubricant

	The Grade of the Bolt							
	Grade 2		Grade 5		Grade 8		Grade BC	
Dimension	Pound-feet	N-m	Pound-feet	N-m	Pound-feet	N-m	Pound-feet	N-m
3/8 x 16	15	20	23	31	33	44	29	38
3/8 x 24	17	23	26	35	37	49	--	--
7/16 x 14	24	32	37	50	52	71	46	61
7/16 x 20	27	36	41	55	58	78	--	--
1/2 x 13	37	49	56	76	80	106	70	93
1/2 x 20	41	55	64	85	90	120	--	--
9/16 x 12	53	70	81	110	115	153	101	134
9/16 x 18	59	79	91	122	128	174	--	--
5/8 x 11	73	97	113	150	159	212	139	186
5/8 x 18	83	110	127	172	180	240	--	--
3/4 x 10	129	173	200	266	282	376	246	329
3/14 x 16	144	192	223	297	315	420	--	--
7/8 x 9	125	166	322	430	455	606	398	531
7/8 x 14	138	184	355	474	501	668	--	--
1 x 8	188	250	483	644	682	909	597	796
1 x 12	205	274	528	716	746	995	--	--
1 x 14	210	280	542	735	765	1037	--	--
1 1/8 x 7	266	354	595	807	966	1288	845	1126
1 1/8 x 12	298	404	668	890	1083	1444	--	--
1 1/4 x 7	375	500	840	1120	1363	1817	1192	1590
1 1/4 x 12	415	553	930	1261	1509	2013	--	--
1 3/8 x 6	491	655	1102	1470	1787	2382	1564	2085
1 3/8 x 12	559	758	1254	1672	2034	2712	--	--
1 1/2 x 6	652	870	1462	1982	2371	3161	2075	2767
1 1/2 x 12	733	994	1645	2194	2668	3557	--	--

1.1.2. With a Threadlocker

Table 5: Threadlocker by the Diameter of the Bolt (see Note 2)

	Dimension			
LocTite Product	1/4-inch	1/4- to 5/8-inch	5/8- to 7/8-inch	1-inch +
LocTite 222	OK			
LocTite 242		OK		
LocTite 262			OK	
LocTite 272			High temperature	
LocTite 277				OK

Note 2: The acceptable bolt size ranges for various LocTite® threadlocking products is the LocTite manufacturer's **general** recommendation. Specific applications sometime require that a LocTite product is applied to a bolt size outside the ranges shown here. For example, Milnor specifies LocTite 242 for use on certain 1" bolt applications and has confirmed this usage with the LocTite manufacturer. You may see variances such as this in the documentation for specific machine assemblies.

Table 6: Torque Values if You Apply LocTite 222

	The Grade of the Bolt							
	Grade 2		Grade 5		Grade 8		Grade BC	
Dimension	Pound-inches	N-m	Pound-inches	N-m	Pound-inches	N-m	Pound-inches	N-m
1/4 x 20	60	7	96	11	132	15	108	12
1/4 x 28	72	8	108	12	144	16	--	--

Table 7: Torque Values if You Apply LocTite 242

	The Grade of the Bolt							
	Grade 2		Grade 5		Grade 8		Grade BC	
Dimension	Pound-feet	N-m	Pound-feet	N-m	Pound-feet	N-m	Pound-feet	N-m
5/16 x 18	11	15	17	23	25	34	22	30
5/16 x 24	13	18	19	26	27	37	27	37
3/8 x 16	20	27	31	42	44	60	38	52
3/8 x 24	23	31	35	47	50	68	--	--
7/16 x 14	32	43	49	66	70	95	61	83
7/16 x 20	36	49	55	75	78	106	--	--
1/2 x 13	49	66	75	102	107	145	93	126
1/2 x 20	55	75	85	115	120	163	--	--
9/16 x 12	70	95	109	148	154	209	134	182
9/16 x 18	78	106	121	164	171	232	--	--
5/8 x 11	97	132	150	203	212	287	186	252
5/8 x 18	110	149	170	230	240	325	--	--

Table 8: Torque Values if You Apply LocTite 262

	The Grade of the Bolt							
	Grade 2		Grade 5		Grade 8		Grade BC	
Dimension	Pound-feet	N-m	Pound-feet	N-m	Pound-feet	N-m	Pound-feet	N-m
3/4 x 10	155	210	240	325	338	458	296	401
3/4 x 16	173	235	267	362	378	512	--	--
7/8 x 9	150	203	386	523	546	740	477	647
7/8 x 14	165	224	426	578	601	815	--	--

Table 9: Torque Values if You Apply LocTite 272 (High-Temperature)

	The Grade of the Bolt							
	Grade 2		Grade 5		Grade 8		Grade BC	
Dimension	Pound-feet	N-m	Pound-feet	N-m	Pound-feet	N-m	Pound-feet	N-m
1 x 8	350	475	901	1222	1272	1725	1114	1510
1 x 12	383	519	986	1337	1392	1887	--	--
1 x 14	393	533	1012	1372	1428	1936	--	--
1-1/8 x 7	496	672	1111	1506	1802	2443	1577	2138
1-1/8 x 12	556	754	1247	1691	2022	2741	--	--
1-1/4 x 7	700	949	1568	2126	2544	3449	2226	3018
1-1/4 x 12	774	1049	1737	2355	2816	3818	--	--
1-3/8 x 6	917	1243	2056	2788	3335	4522	2919	3958
1-3/8 x 12	1044	1415	2341	3174	3797	5148	--	--
1-1/2 x 6	1217	1650	2729	3700	4426	6001	3873	5251
1-1/2 x 12	1369	1856	3071	4164	4980	6752	--	--

Table 10: Torque Values if You Apply LocTite 277

	The Grade of the Bolt							
	Grade 2		Grade 5		Grade 8		Grade BC	
Dimension	Pound-feet	N-m	Pound-feet	N-m	Pound-feet	N-m	Pound-feet	N-m
1 x 8	325	441	837	1135	1181	1601	1034	1402
1 x 12	356	483	916	1242	1293	1753	--	--
1 x 14	365	495	939	1273	1326	1798	--	--
1-1/8 x 7	461	625	1032	1399	1674	2270	1464	1985
1-1/8 x 12	516	700	1158	1570	1877	2545	--	--
1-1/4 x 7	650	881	1456	1974	2362	3202	2067	2802
1-1/4 x 12	719	975	1613	2187	2615	3545	--	--
1-3/8 x 6	851	1154	1909	2588	3097	4199	2710	3674
1-3/8 x 12	970	1315	2174	2948	3526	4781	--	--
1-1/2 x 6	1130	1532	2534	3436	4110	5572	3597	4877
1-1/2 x 12	1271	1723	2852	3867	4624	6269	--	--

1.2. Stainless Steel Fasteners

Table 11: Torque Values for Stainless Steel Fasteners 5/16-inch and Smaller

	316 Stainless		18-8 Stainless		18-8 Stainless with Loctite 767	
Dimension	Pound-Inches	N-m	Pound-Inches	N-m	Pound-Inches	N-m
1/4 x 20	79	9	76	9	45	5
1/4 x 28	100	11	94	11	56	6
5/16 x 18	138	16	132	15	79	9
5/16 x 24	148	17	142	16	85	10

Table 12: Torque Values for Stainless Steel Fasteners Larger Than 5/16-inch

	316 Stainless		18-8 Stainless		18-8 Stainless with Loctite 767	
Dimension	**Pound-feet**	**N-m**	**Pound-feet**	**N-m**	**Pound-feet**	**N-m**
3/8 x 16	21	28	20	27	12	16
3/8 x 24	23	31	22	29	13	18
7/16 x 14	33	44	31	42	19	25
7/16 x 20	35	47	33	45	20	27
1/2 x 13	45	61	43	58	26	35
1/2 x 20	47	64	45	61	27	37
9/16 x 12	59	81	57	77	34	46
9/16 x 18	66	89	63	85	38	51
5/8 x 11	97	131	93	125	56	75
5/8 x 18	108	150	104	141	62	84
3/4 x 10	132	179	128	173	77	104
3/4 x 16	130	176	124	168	75	101
7/8 x 9	203	275	194	263	116	158
7/8 x 14	202	273	193	262	116	157
1 x 8	300	406	287	389	172	233
1 x 14	271	367	259	351	156	211
1-1/8 x 7	432	586	413	560	248	336
1-1/8 x 12	408	553	390	529	234	317
1-1/4 x 7	546	740	523	709	314	425
1-1/4 x 12	504	683	480	651	288	390
1-1/2 x 6	930	1261	888	1204	533	722
1-1/2 x 12	732	992	703	953	422	572

2. Preparation

WARNING 2: Fire Hazard—Some solvents and primers are flammable.

- Use threadlocker and primers with sufficient airflow.
- Do not use flammable material near ignition sources.

1. Clean all threads with a wire brush or a different tool.
2. Remove the grease from the fasteners and the mating threads with solvent. Make the parts dry.

   Note 3: LocTite 7649 Primer™ or standard solvents will remove grease from parts.

3. Apply a spray of LocTite 7649 Primer™ or equal on the fasteners and the mating threads. Let the primer dry for one minute minimum.

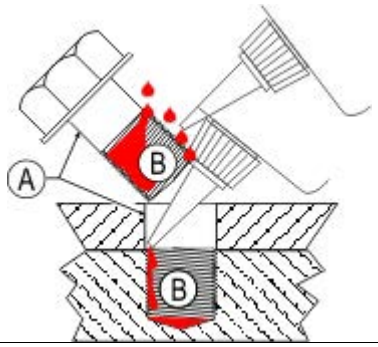
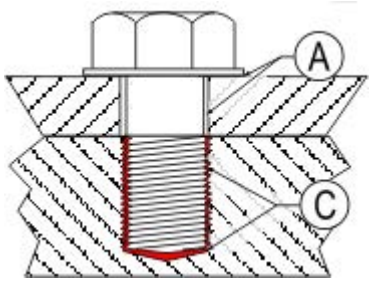
3. How to Apply a Threadlocker

CAUTION 3: Malfunction Hazard—Heat, vibration, or mechanical shocks can let the fasteners loosen if you do not apply the threadlocker correctly. Loose fasteners can cause malfunctions of the equipment.

- Read the threadlocker manufacturer's instructions and warnings. Obey these instructions.

Apply the threadlocker only to the areas where the fastener threads and the mating threads engage.

Figure 2: Blind Hole

Application	Coverage
	

Legend

A. No threadlocker here
B. Apply here
C. Fill all space with threadlocker

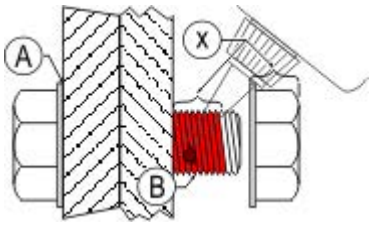
3.1. Blind Holes

1. Apply the threadlocker down the threads to the bottom of the hole.
2. Apply the threadlocker to the bolt.
3. Tighten the bolt to the value shown in the correct table (Table 5 to Table 11).

3.2. Through Holes

1. Put the bolt through the assembly.
2. Apply the threadlocker only to the bolt thread area that will engage the nut.
3. Tighten the bolt to the value shown in the correct table (Table 5 to Table 11).

Figure 3: Through Hole

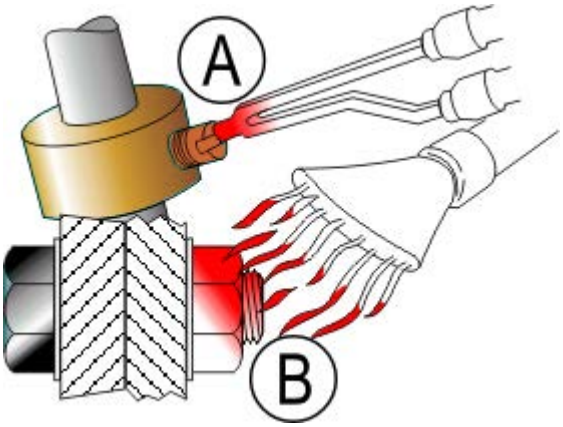
Application	Legend
	**A.** No threadlocker here **B.** Apply the threadlocker to this area **x.** Nut depth

3.3. Disassembly—For high-strength threadlocker, apply heat for five minutes. Disassemble with hand tools while the parts are hot.

For low-strength and moderate-strength threadlocker, disassemble with hand tools.

Figure 4: Disassembly

Apply Heat to a Small Area



Legend

A. How to apply heat to a small fastener
B. How to apply heat to a large fastener

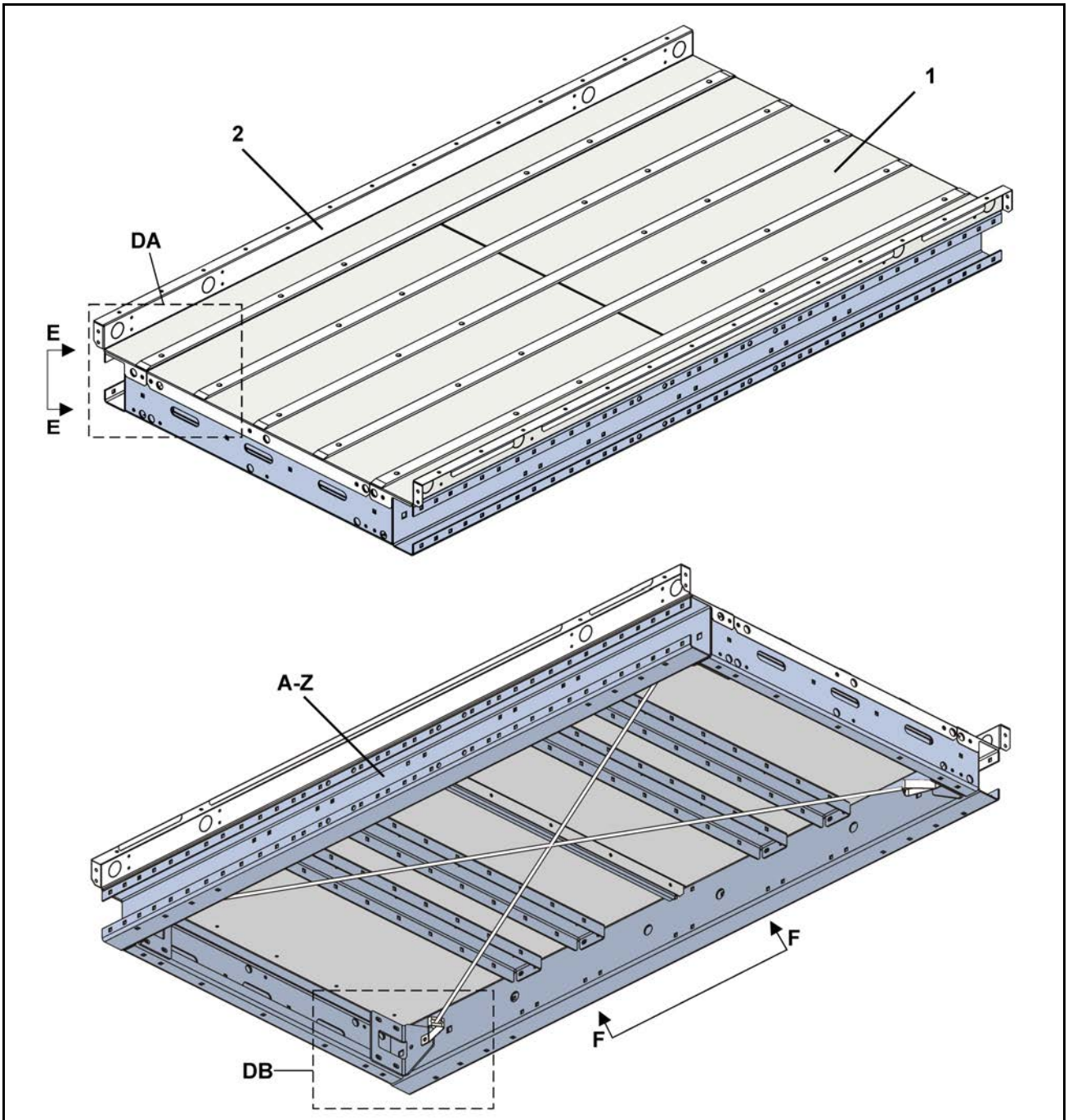
— End of BIUUUM04 —

Parts 2

2 Conveyor 2.1

44" Wide Bed Assembly

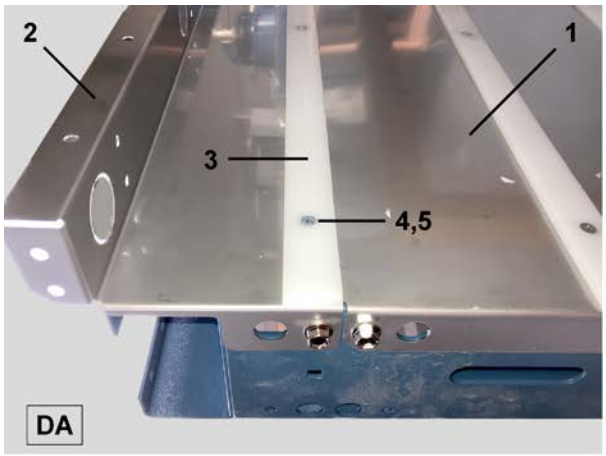
CONVEY44

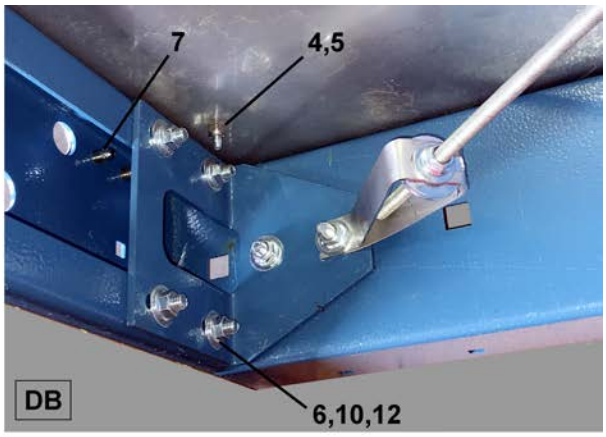


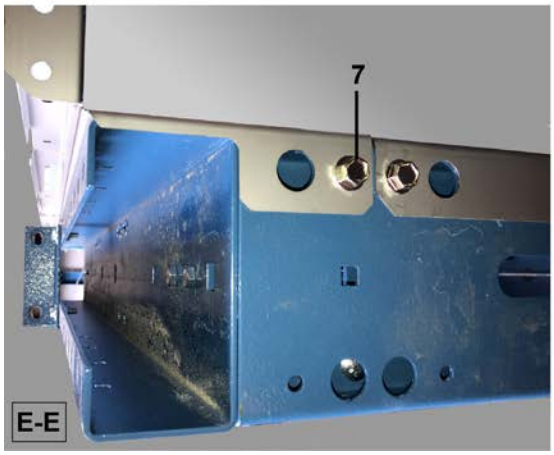
A-Z See reference bed sizes in the parts list.
DA See Detail DA.
DB See Detail DB.
EE See View EE.
FF See View FF.

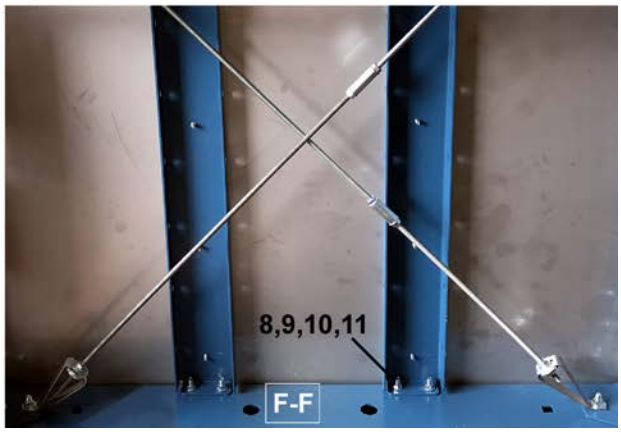
44" Wide Bed Assembly

CONVEY44









DA View DA
DB View DB
EE View EE
FF View FF

44" Wide Bed Assembly

CONVEY44

Parts List

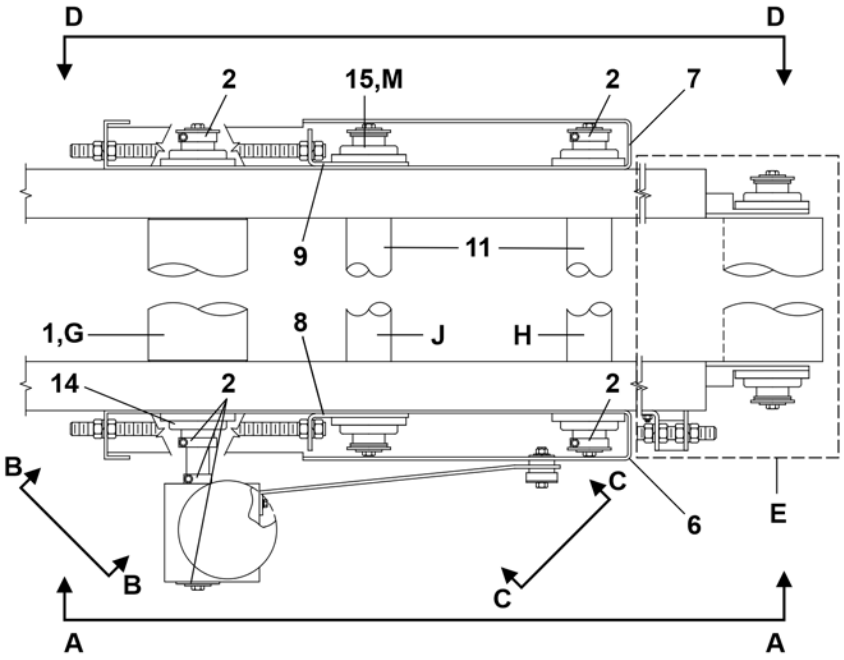
Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
			----------REFERENCE ASSEMBLIES----------	
	A	ALC44002	MCS CONVEY W=44"XL=84" ASSY	
			----------COMPONENTS----------	
all	1	04 24593A	CONV BED FULL 44WX84LG	
all	2	04 20002	MCS 84” SIDE MEMBER	
all	3	X4 24344	CONV 7FT BED UHMW STRIP-MACHINED	
all	4	15N176	FLATMACSCR 1/4-20NCX3/4SS18-8	
all	5	15G166A	HXLOKNUT NYL1/4-20 UNC2A STL/Z	
all	6	15A011	CARBOLT 3/8-16UNC2X1 ZINC GR2	
all	7	15P200	TRDCUT-F HXWASHD 3/8-16X3/4NIK	
all	8	15K095	HXCPSCR 3/8-16UNC2AX1 GR5 ZINC	
all	9	15U255	LOCKWASHER MEDIUM 3/8 ZINCPL	
all	10	15U240	FLATWASHER(USS STD) 3/8" ZNC P	
all	11	15G205	HXNUT 3/8-16UNC2B ZINC GR2	
all	12	15G198	HXFLGNUT 3/8-16 ZINC	
all	13	15K092	HEXFLGSCR 3/8-16X1 GR8 CS	

Underdrive Assemblies

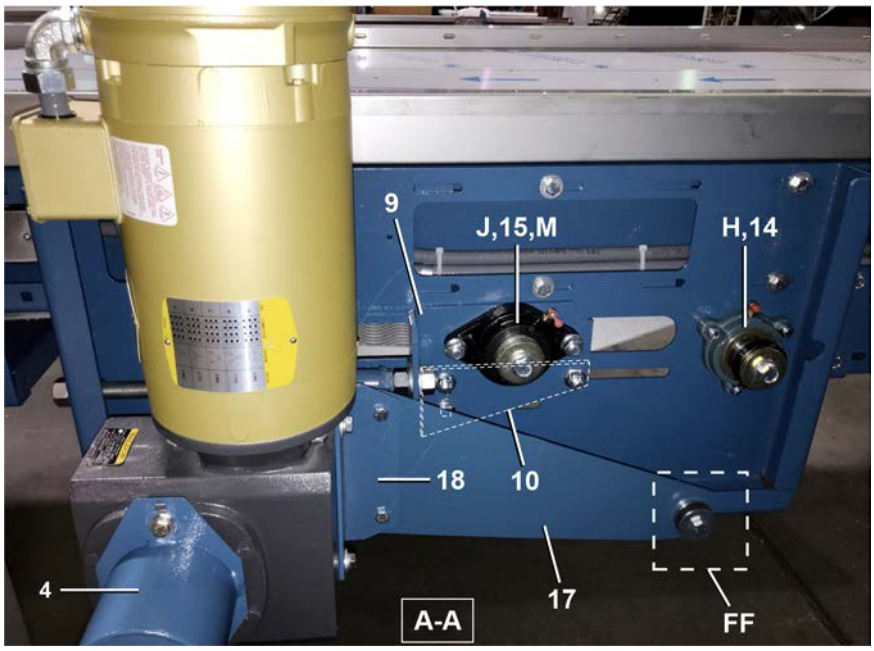
Flat Belt Conveyors: CONVEY24/36/40/42/44/48/50/60

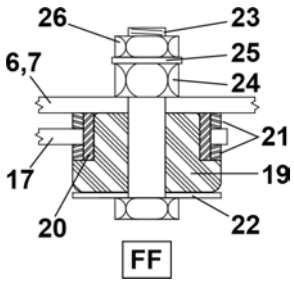
Figure 1. Components and Hardware



Legend

AA.	Side View, drive side
E.	Idler roller, see BPVAUN01.
FF.	Detail View, torque arm bushing assembly
G.	Drive roller for Underdrive
H.	Stationary tension roller
J.	Adjustable tension roller
M.	Includes a shaft collar.

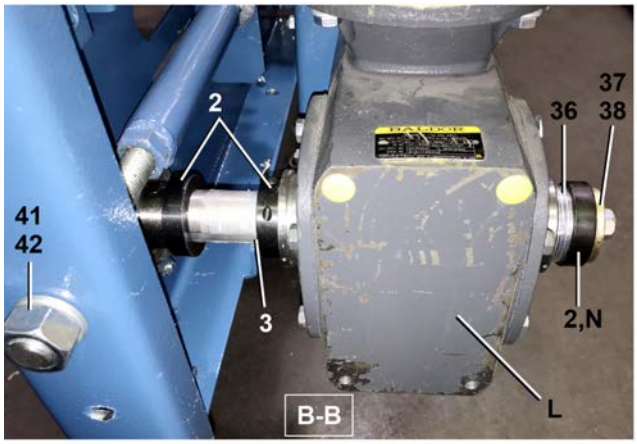


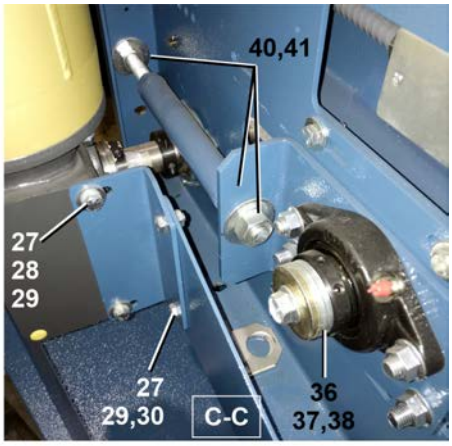


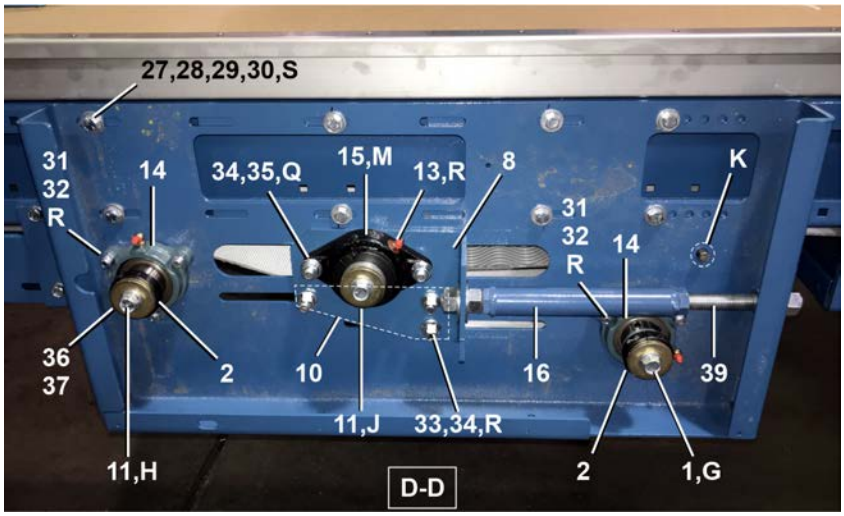
Underdrive Assemblies

Flat Belt Conveyors: CONVEY24/36/40/42/44/48/50/60

Figure 2. Components and Hardware

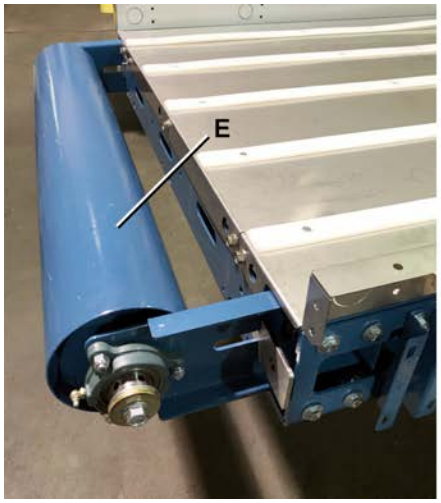


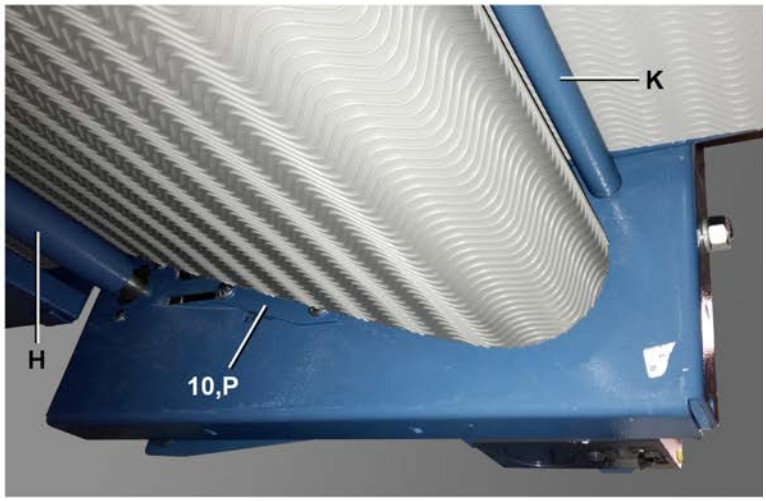




Legend

B-B.	Detail View, drive side
C-C.	Detail View, drive side
D-D.	Side View, non-drive side
E.	Idler roller, see BPVAUN021
G.	Drive roller for underdrive
H.	Stationary tension roller
J.	Adjustable tension roller
K.	Bed support roller
L.	Reducer, see BPAUVN03.
M.	Includes a shaft collar
N.	Not used on #732 reducers
P.	2 instances
Q.	4 instances
R.	6 instances
S.	42 instances





Underdrive Assemblies

Flat Belt Conveyors: CONVEY24/36/40/42/44/48/50/60

Table 1. Parts List—Underdrive Assemblies

Find the assembly for your machine and the letter shown in the "Item" column. The components for your machine will show this letter or the word "all" in the "Used In" column. The numbers shown in the "Item" column are those shown in the illustrations.				
Used In	**Item**	**Part Number**	**Description/Nomenclature**	**Comments**
Assemblies				
	A	ALC24041	24"UNDERDRIVE ASSY	24” wide conveyors
	B	ALC36041	36"UNDERDRIVE ASSY	36” wide conveyors
	C	ALC40041	40"UNDERDRIVE ASSY	40” wide conveyors
	D	ALC40078	42"UNDERDRIVE ASSY	42” wide conveyors
	E	ALC44004	44W UNDERDRIVE ASSEMBLY	44” wide conveyors
	F	ALC48041	48"UNDERDRIVE ASSY	48” wide conveyors
	G	ALC50149	50W UNDERDRIVE ASSEMBLY	50” wide conveyors
	H	ALC60042	60"UNDERDRIVE ASSEMBLY	60” wide conveyors
Components				
A	1	APC24001B	24"UND/DR 1DR-LAG 1.44 INPUT	24” drive roller for underdrive
B	1	APC36005A	36"UND/DR 1DR-LAG 1.44 INPUT	36” drive roller for underdrive
C	1	APC40004B	40"UND/DR 1DR-LAG 1.44 INPUT	40” drive roller for underdrive
D	1	APC42008	42W UND/DR ROLLER LAG 1.44	42” drive roller for underdrive
E	1	APC44001	44W UNDERDR LAGGED ROLLER	44” drive roller for underdrive
F	1	APC48005A	48"UND/DR 1DR-LAG 1.44 INPUT	48” drive roller for underdrive
G	1	APC50004	50W UND/DR ROLLER LAG 1.44	50” drive roller for underdrive
H	1	APC60002	60" DR LAGGED 1.437 TELE BED	60” drive roller for underdrive
all	2	54JH11437C	SHAFTCOLLAR 1.4375 CFG #23S	
all	3	15E210A	SQMACH KEY 1/4X3+1/4 NOTAPER N	
all	4	W4 24340	GEAR REDUCER SHAFT COVER-726/732	
all	6	04 20160D	UNDERDRIVE SUPP BRKT-LF	
all	7	04 20160E	UNDERDRIVE SUPP BRKT-RT	
all	8	04 20161B	TENSION ROLLER ADJ BRKT-LF	
all	9	04 20161C	TENSION ROLLER ADJ BRKT-RT	
all	10	04 20161D	TENSION ROLLER BACKING PLATE	
A	11	04 20165A	UNDERDRIVE TENSION ROLLER 24	24” tension roller
B	11	04 20165	UNDERDRIVE TENSION ROLLER 36	36” tension roller
C	11	04 20165B	UNDERDRIVE TENSION ROLLER 40	40” tension roller
D	11	04 20165E	UNDERDRIVE TENSION ROLLER 42W	42” tension roller
E	11	X4 24584	UNDERDRIVE TENSION ROLLER 44W	44” tension roller
F	11	04 20165C	UNDERDRIVE TENSION ROLLER 48	48” tension roller
G	11	X4 21976	UNDERDRIVE TENSION ROLLER-50W	50” tension roller
H	11	04 20165D	UNDERDRIVE TENSION ROLLER 60	60” tension roller
A	12	04 20298C	BELT GUARD FOR 24"CONVEYOR	
B	12	04 20298A	BELT GUARD FOR 36 CONVEYOR	
C	12	04 20298B	BELT GUARD FOR 40"CONVEYOR	
D	12	04 20298E	BELT GUARD FOR 42"UNDERDRV	
E	12	04 24585	BELT GUARD = 44W UNDERDRIVE	
F	12	04 20298	BELT GUARD FOR 48"CONVEYOR	
G	12	04 21977	UNDERDRV BELT GUARD-50W	

Underdrive Assemblies

Flat Belt Conveyors: CONVEY24/36/40/42/44/48/50/60

Parts List—Underdrive Assemblies (cont'd.)

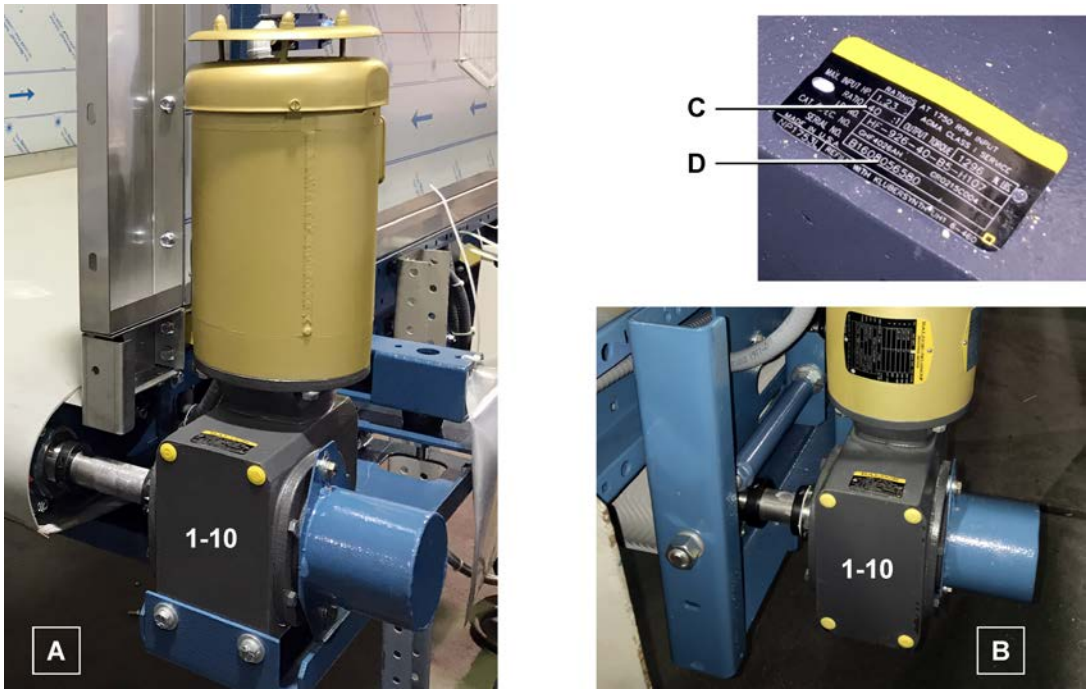
Find the assembly for your machine and the letter shown in the "Item" column. The components for your machine will show this letter or the word "all" in the "Used In" column. The numbers shown in the "Item" column are those shown in the illustrations.

Used In	Item	Part Number	Description/Nomenclature	Comments
H	12	04 20298D	BELT GUARD FOR 60"CONVEYOR	
all	13	54M010	GRSFIT 1/4-28NF90 ALEMITE1911B	
all	14	54AF1437	FLGEBRG.HUBCITY 3-BOLT FB150URX1-7/16	
all	15	56F1H2CSWC	FLG BRG=1.438 B.D.+COLLAR	
all	16	W4 24377	TIE ROD=UNDERDRIVE BELT ADJ	
all	17	04 20164T	UNDERDRIVE TORQ.ARM=RT #726	
all	18	04 20164D	TORQARM ANGLE-UNDERDR SIZE 726	
all	19	60B065	RUBBER MNT CTR BONDED 40 DURO	
all	20	04 20796	SLEEVE=TORQUE ARM BUSHING	
all	21	02 18571A	PISTON ROD WASHER-.25"TK	
all	22	15U312	HARD FWASH 3/4ODX33/64IDX.115	
all	23	15K144C	HEXCAPSCR 7/16-14UNC X 2.5 GR	
all	24	15G222	HXFINJAMNUT 7/16-14UNC2B ZINC	
all	25	15U271	LOKWASH INTOOTH 7/16ZN	
all	26	15G222C	HEXNUT 7/16-14UNC2B ZINC GR2	
all	27	15K095	HXCPSCR 3/8-16UNC2AX1 GR5 ZINC	
all	28	15U240	FLATWASHER(USS STD) 3/8" ZNC P	
all	29	15U255	LOCKWASHER MEDIUM 3/8 ZINCPL	
all	30	15G205	HXNUT 3/8-16UNC2B ZINC GR2	
all	31	15A012	CARBOLT 3/8-16UNC2AX1+1/4 ZNC	
all	32	15G198	HXFLGNUT 3/8-16 ZINC	
all	33	15A063	CARBOLT 1/2-13UNC2X1.50 ZINC G	
all	34	15G222B	HEXFLGNUT 1/2-13 ZINC SERRATED	
all	35	15K162	HXCAPSCR 1/2-13UNC2AX1.5 GR5 P	
all	36	15K128	HEXFLGSCR 1/2-13X1 ZN. GRD. 5	
all	37	15U286	FLATWASHER 2"0DX17/32"IDX1/4"	
all	39	17R026A10A	MCS BEARING CARRIER STUD 10"	
all	40	15U320	FLATWASHER(USS STD) 3/4" UNPLT	
all	41	15G240	HXNUT 3/4-10UNC2B SAE ZINC GR2	
all	42	15U340	LOCKWASH MEDIUM 3/4 ZINCPL	

Gear Reducers

BPVAUN03.R01 0000176245 A.6 4/25/18 10:26 AM In Work

Figure 1.



Legend

A. Gear reducer used on end drive
B. Gear reducer used on under-drive
C. Supply parts department with gear reducer ratio, an example shown here.
D. Supply parts department with gear reducer serial number, an example shown here.

Table 1 Parts List—

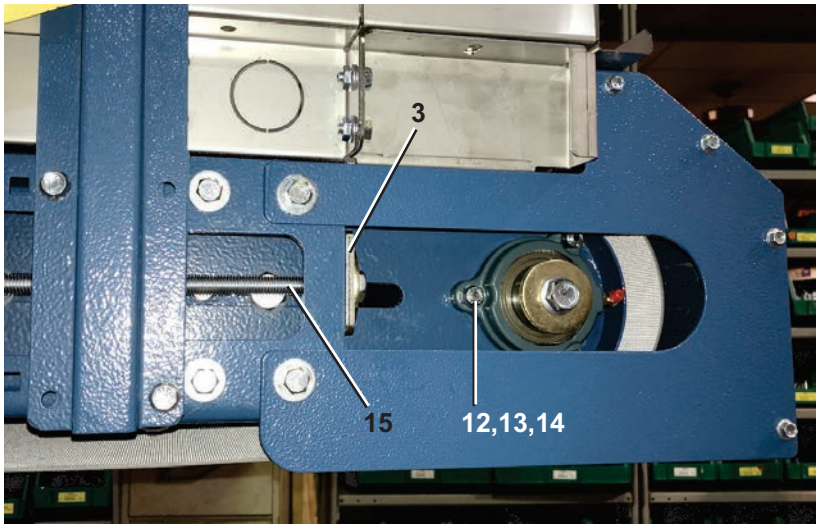
Find the assembly for your machine and the letter shown in the "Item" column. The components for your machine will show this letter or the word "all" in the "Used In" column. The numbers shown in the "Item" column are those shown in the illustrations.

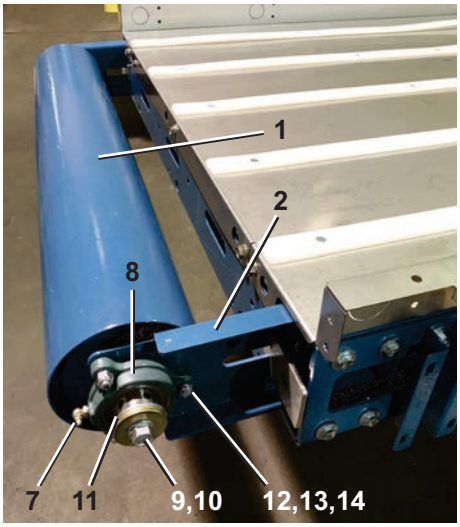
Used In	Item	Part Number	Description/Nomenclature	Comments
Assemblies				
none				
Components				
all	1	54STB32625	54STB32625 REDUCER 25:1 SF726-25T-B5-G	#726 RATIO 25:1
all	2	54STB32630	54STB32630 REDUCER 30:1 SF726-30T-B5-G	#726 RATIO 30:1
all	3	54STB32640	54STB32640 REDUCER 40:1 SF726-40T-B5-G	#726 RATIO 40:1
all	4	54STB32650	54STB32650 REDUCER 50:1 SF726-50T-B5-G	#726 RATIO 50:1
all	5	54STB32660	54STB32660 REDUCER 60:1 SF726-60T-B5-G	#726 RATIO 60:1
all	6	54STB33225	54STB33225 REDUCER 25:1 SF732-25T-B7-G	#732 RATIO 25:1
all	7	54STB3323A	54STB3323A REDUCER + 7/8-5/8 IN-ADAPTER	#732 RATIO 30:1
all	8	54STB3324A	54STB3324A REDUCER + 7/8-5/8 IN-ADAPTER	#732 RATIO 40:1
all	9	54STB3325A	54STB3325A REDUCER + 7/8-5/8 IN-ADAPTER	#732 RATIO 50:1
all	10	54STB3326A	54STB3326A REDUCER + 7/8-5/8 IN-ADAPTER	#732 RATIO 60:1

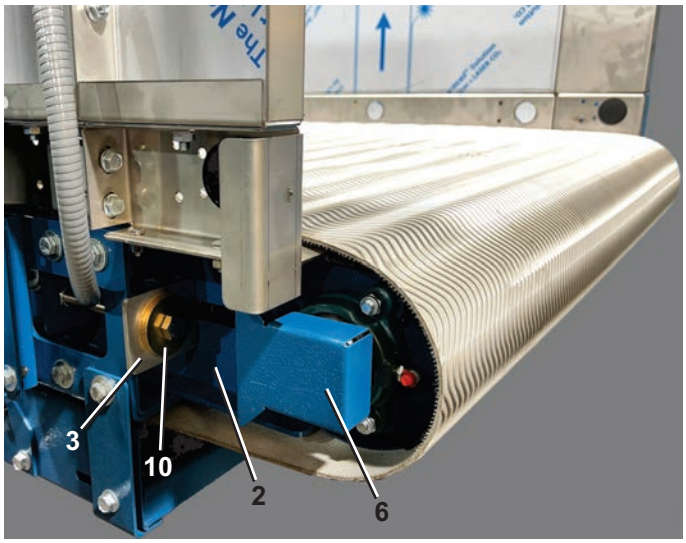
Idler Rollers 42 Inch Wide

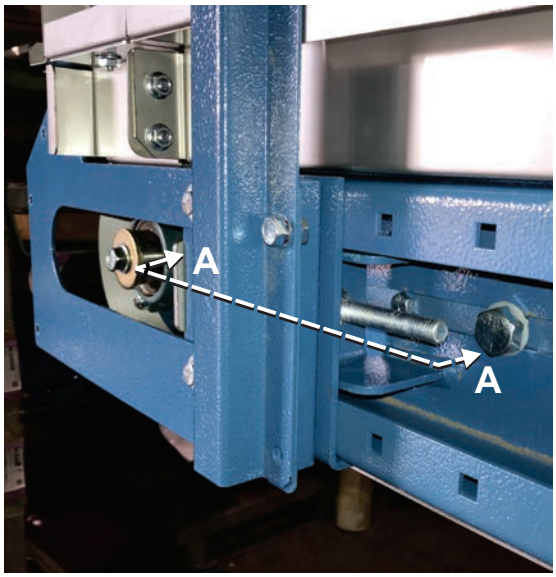
CONVEY40, CONVEY42, CONVEY44, CONVEY46, CONVEY48, CONVEY50

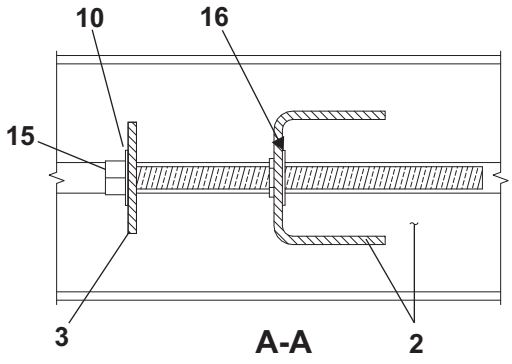
Idler Rollers & Bearing Carrier











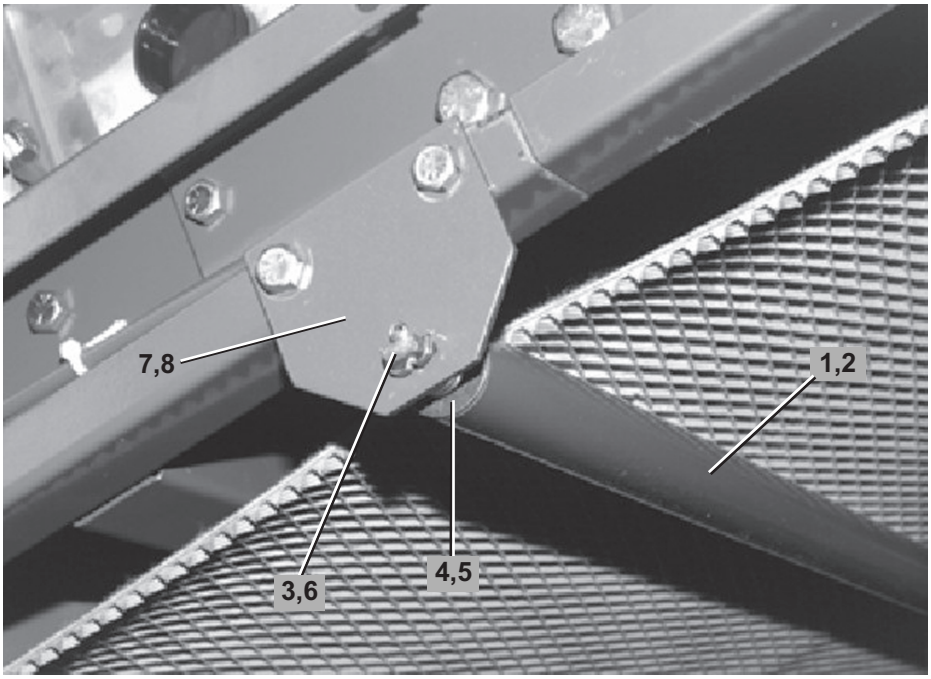
Idler Rollers 42 Inch Wide

Parts List

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
			----------COMPONENTS----------	
all	1	X4 22441	ROLLER 6X42W IDLER MACH	
all	2	W4 22389	BRNGCARR WLMT-LOADEND TRACKING	
all	3	04 22392	BRG CARRIER ADJUSTING BKT	
all	4	04 20023A	MCS MOD CONN BKT RIGHT END	
all	5	04 20023B	MCS MOD CONN BKT LEFT END	
all	6	04 23772	CONVEY ROLLER BRNG COVER	
all	7	54M010	GRSFIT 1/4-28NF90 ALEMITE1911B	
all	8	54AF1437	FLGEBRG.HUBCITY 3-BOLT	
all	9	15K128	HEXFLGSCR 1/2-13X1 ZN. GRD. 5	
all	10	15U286	FLATWASHER 2"0DX17/32"IDX1/4"	
all	11	15U202	FLATWSHR.50ID1.75OD11GA ZNC	
all	12	15A021	CARRBOLT 3/8-16 X1.5 ZNC GR 5	
all	13	15G205	HXNUT 3/8-16UNC2B ZINC GR2	
all	14	15U255	LOCKWASHER MEDIUM 3/8 ZINCPL	
all	15	15D122C	HEXTAPSCR 1/2-13UNC X 8.5 FLTHD	
all	16	15G222B	HEXFLGNUT 1/2-13 ZINC SERRATED	

1.5 Inch Idler Roller



Parts List

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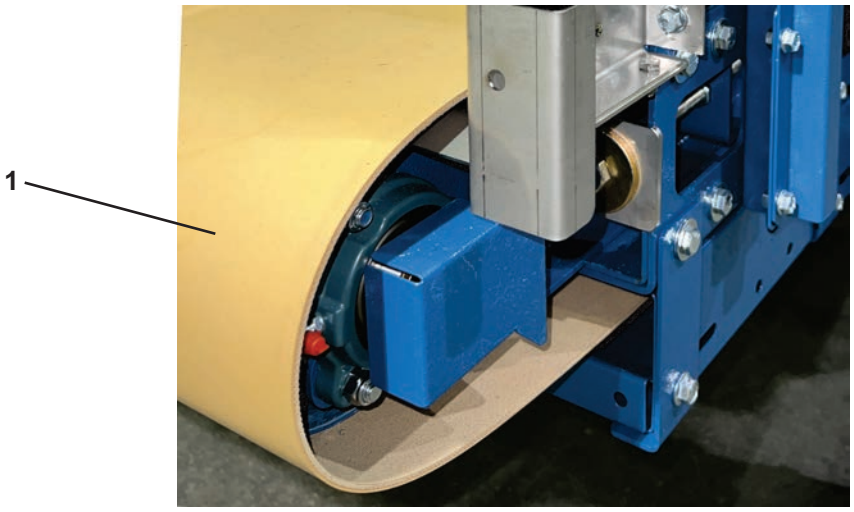
Used In	Item	Part Number	Description	Comments
all	1	AIC42005	MCS 42W IDLER ASSY	ASSEMBLY CONTAINS ITEMS 2-8
all	2	04 20035D	MCS 42" IDLER ROLLER	
all	3	04 20034D	MCS 45" IDLER SHAFT	
all	4	54A712	FLGBR 1/2"ID SCHATZ# AF3236	
all	5	15U312	HARD FWASH 3/4ODX33/64IDX.115	
all	6	15H040	STDCOTTERPIN 1/8X3/4 ZINCPL	
all	7	04 20032	MCS IDLER BKT RIGHT	
all	8	04 20033	MCS IDLER BKT LEFT	

Belt

CONVEY44



Parts List

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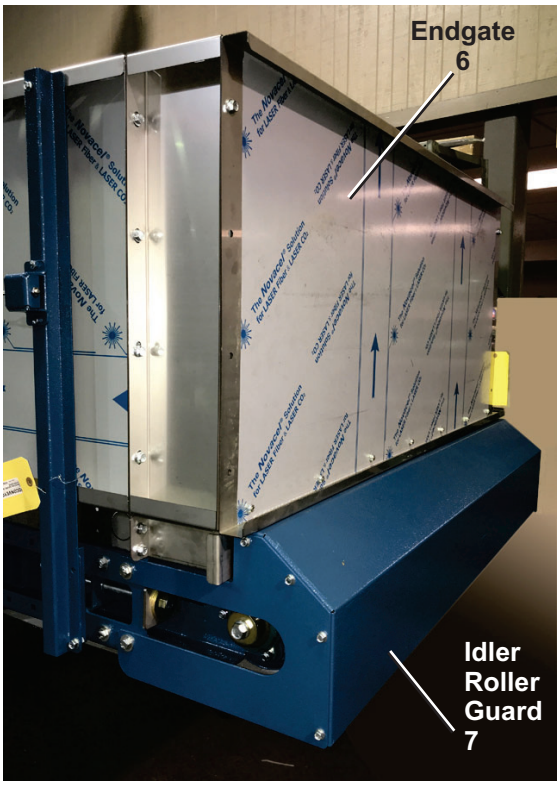
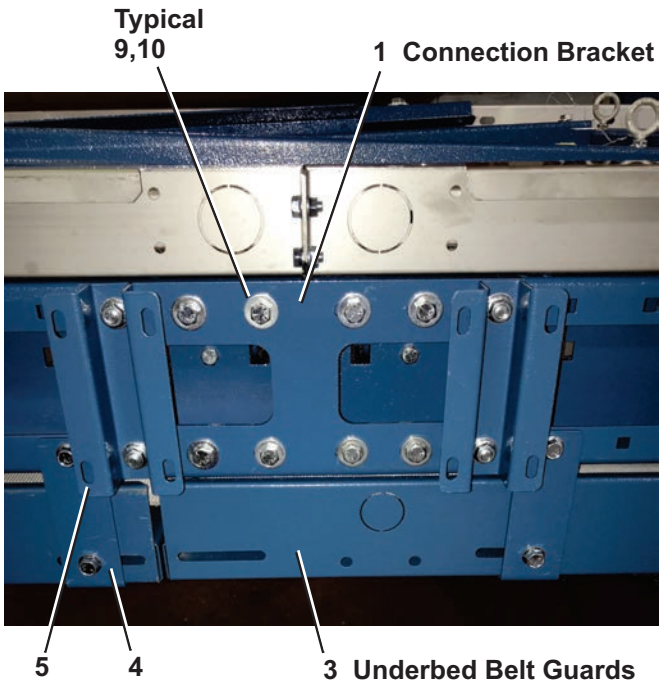
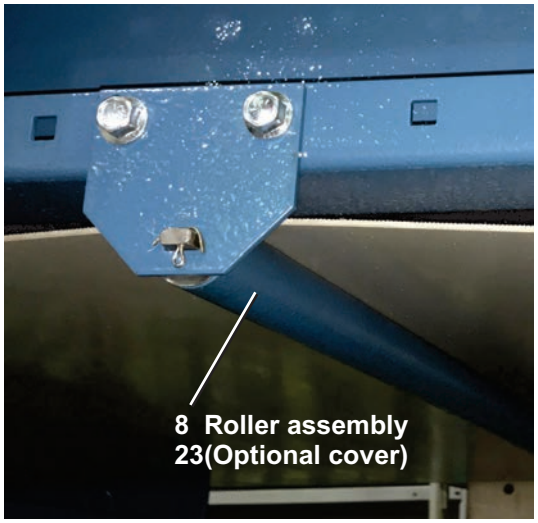
Used In	Item	Part Number	Description	Comments
			----------COMPONENTS----------	
all	1	54C440B	BELT 44"W SMTH FLAT TOP-TAN	SMOOTH TAN

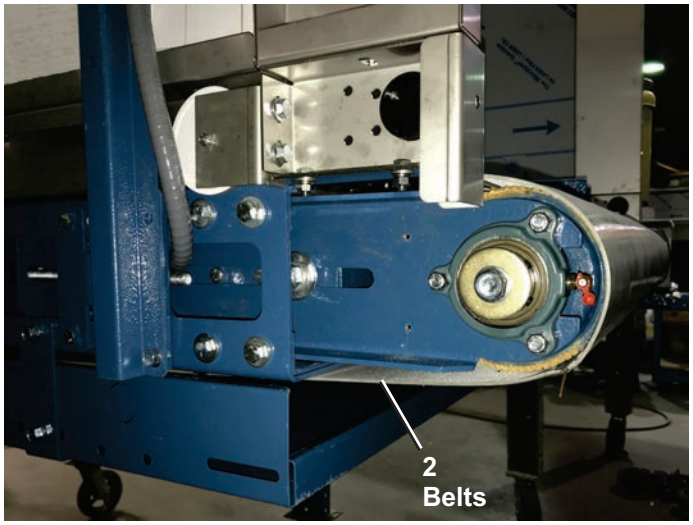
Conveyor Components

CONVEY24, CONVEY36, CONVEY40, CONVEY42, CONVEY44, CONVEY48, CONVEY50, CONVEY60





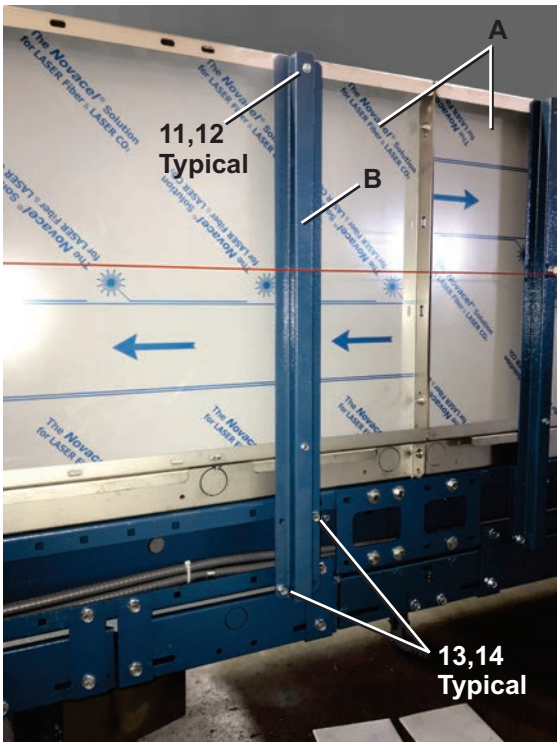


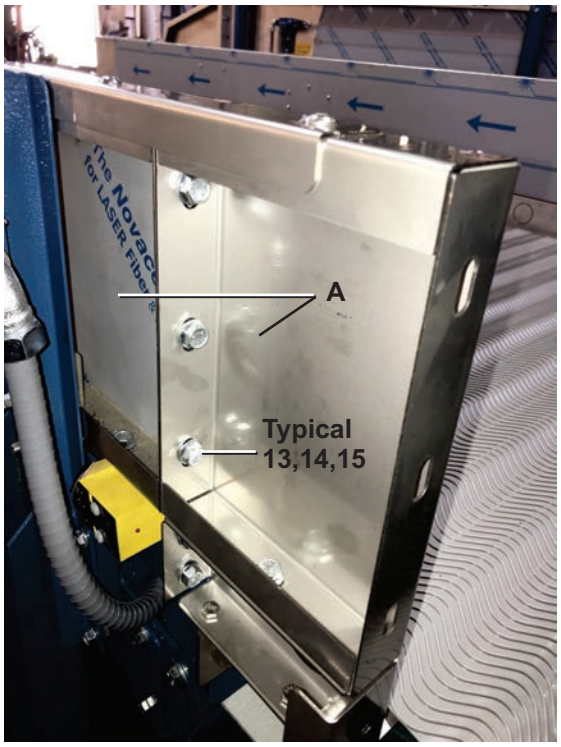


Conveyor Components

CONVEY24, CONVEY36, CONVEY40, CONVEY42, CONVEY44, CONVEY48, CONVEY50, CONVEY60

Conveyor Flat Side Panels



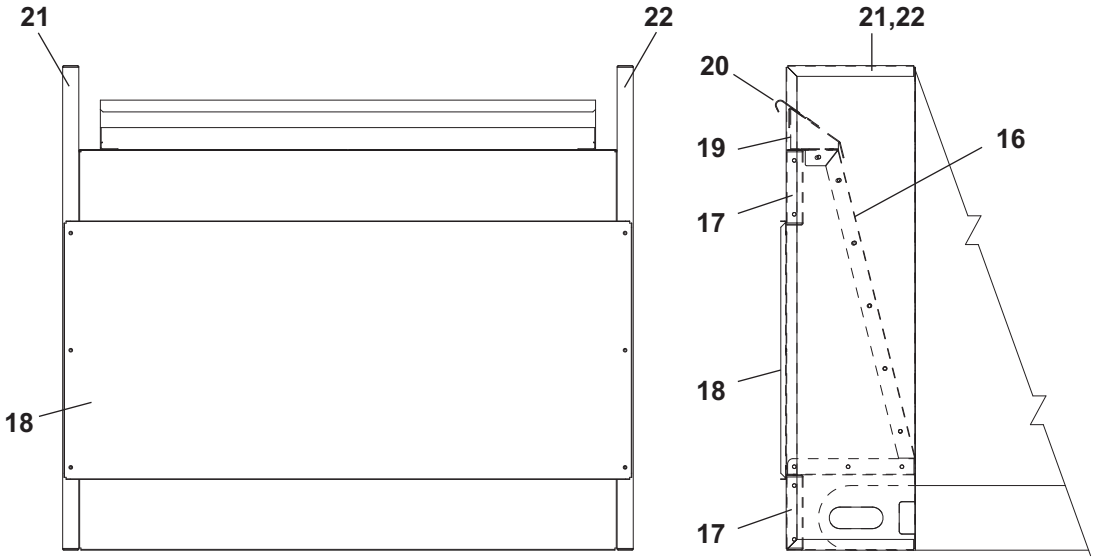


		A. Flat Side Member Panels								
		HEIGHT - Total Height of Side Panels								
		9"	**12"**	**18"**	**21"**	**24"**	**27"**	**30"**	**36"**	**48"**
LENGTH - Individual Side Panels	**18"**	04-20047	04-20047A	04-20047B	04-20047C	04-20047D	04-20047 + 04-20047B	04-20047A + 04-20047B	04-20047B + 04-20047B	04-20047D + 04-20047D
	24"	04-20014A	04-20014B	04-20014C	04-20014D	04-20014E	04-20014A + 04-20014C	04-20014B + 04-20014C	04-20014C + 04-20014C	04-20014E + 04-20014E
	48"	04-20012	04-20015	04-20646	04-20017B	04-20017E	04-20012 + 04-20012	04-20015 + 04-20646	04-20646 + 04-20646	04-20017E + 04-20017E
	60"	04-20012A	04-20015A	04-20015B	04-20015C	04-20015D	04-20012A + 04-20015B	04-20015A + 04-20015B	04-20015B + 04-20015B	04-20015D + 04-20015D
	84"	04-20013	04-20016	04-200645	04-20017C	04-20017F	04-20013 + 04-20645	04-20016 + 04-200645	04-200645 + 04-200645	04-20017F + 04-20017F
	108"	04-20014	04-20017	04-200644	04-20017D	04-20017G	04-20014 + 04-20644	04-20017 + 04-200644	04-200644 + 04-200644	04-20017G + 04-20017G
		B. Flat Side Support Brackets								
		04-20018A	04-20019A	04-20074A	04-20020A	04-20075A	04-23735	04-23735D	04-25735	04-20075E

Conveyor Components

CONVEY24, CONVEY36, CONVEY40, CONVEY42, CONVEY44, CONVEY48, CONVEY50, CONVEY60

48” NODRY Endgate



Parts List

Find the correct assembly first, then find the needed components. The item letters (A, B, C, etc.) assigned to assemblies are referred to in the "Used In" column to identify which components belong to an assembly. The item numbers (1, 2, 3, etc.) assigned to components relate the parts list to the illustration.

Used In	Item	Part Number	Description	Comments
			----------ASSEMBLIES----------	
	A		24” WIDE CONVEYORS	
	B		36” WIDE CONVEYORS	
	C		40” WIDE CONVEYORS	
	D		42” WIDE CONVEYORS	
	E		44” WIDE CONVEYORS	
	F		48” WIDE CONVEYORS	
	G		50” WIDE CONVEYORS	
	H		60” WIDE CONVEYORS	
			----------COMPONENTS----------	
all	1	04 20023	MCS MOD SECTION CONN BKT	
A	2	54C240B	BELT 24" X NNN" 100 TAN WEDGRIP/BARE	
A	2	54C241C	BELT 24" X 50' SMTH TOP FLAT CONV	
B	2	54C360B	BELT 36" X NNN" 100 TAN WEDGRIP/BARE	
B	2	54C361D	BELT 36"BLACK SMTHTOP FLAT CONV	
B	2	54C360GRY	BELT 36" X 250' GREY WEDGRIP/BARE	
B	2	54C360G	BELT 36" X 250' SMTH TOP FLAT-GREY	
C	2	54C401	BELT 40" X 250' GRAY WDGEGRIP/BARE	
C	2	54C402B	BELT 40" X 150' LACED SMTH TOP FLAT CONV	
C	2	54C401GR	BELT 40" X 250' SMTH TOP FLAT- GREY	
C	2	54C401GV	BELT 40" X 100' GREY WDGGRIP W/VGUIDE	
D	2	54C420B	BELT 42" X NNN" SMTH TOP FLAT-TAN	

Conveyor Components

CONVEY24, CONVEY36, CONVEY40, CONVEY42, CONVEY44, CONVEY48, CONVEY50, CONVEY60

Parts List

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Used In	Item	Part Number	Description	Comments
all	4	04 20563	UNDERBELT COVER MTG BRKT	
all	5	04 20021D	CONLO/CONWA SIDE SUPP BRKT	
all	6	04 20185	ENDGATE 44W X 24H SS	
all	7	ALC420241B	IDLER ROLLER GUARD ASSY-42W	
C	8	AIC40001	*MCS 40"IDLER ASSY	
D	8	AIC42005	MCS 42W IDLER ASSY	
E	8	AIC44001	MCS 44W IDLER ASSY	
F	8	AIC46001	MCS 46" IDLER ASSY	
G	8	AIC48001	*MCS 48" IDLER ASSY	
all	9	15K091H	HEXFLGSCR 3/8-16X3/4 ZN GRD.5	
all	10	15G198	HXFLGNUT 3/8-16 ZINC	
all	11	04 21899	CONV SIDE SUPPORT CLAMP	
all	12	15P149	1/4-14X3/4 SCRSELFDRIL+TAP ZC	
all	13	15K060	HXCAPSCR 5/16-18UNCAX3/4 GR5 Z	
all	14	15G196	HXFLGNUT 5/16-18 ZINC	
all	15	15U200	FLATWASHER(USS STD) 5/16"ZNC P	
F	16	04 22002	ENDGATE 48W-NODRY-MOD	
F	17	04 22003	BRACE-NODRY MOD	
F	18	04 22004	ENDGATE COVER-NODRY MOD	
F	19	04 22005	LOADSHELF-48W NODRY ENDGATE	
F	20	07 50125	DRYER DOOR SHELF EXTENDER	
F	21	04 22001	SIDE RT 12X45-NODRY MOD	
F	22	04 22001A	SIDE LF 12X45-NODRY MOD	
B	23B	04 23603	BELT SUPPORT ROLL COVER-36W	
C	23C	04 23604	BELT SUPPORT ROLL COVER-40W	
D	23D	04 23605	BELT SUPPORT ROLL COVER-42W	
E	23E	04 24586	BELT SUPPORT ROLL COVER-44W	
F	23F	04 23606	BELT SUPPORT ROLL COVER-48W	
G	23G	04 23607	BELT SUPPORT ROLL COVER-50W	
H	23H	04 23608	BELT SUPPORT ROLL COVER-60W	

Conveyor Components

CONVEY24, CONVEY36, CONVEY40, CONVEY42, CONVEY44, CONVEY48, CONVEY50, CONVEY60

Parts List

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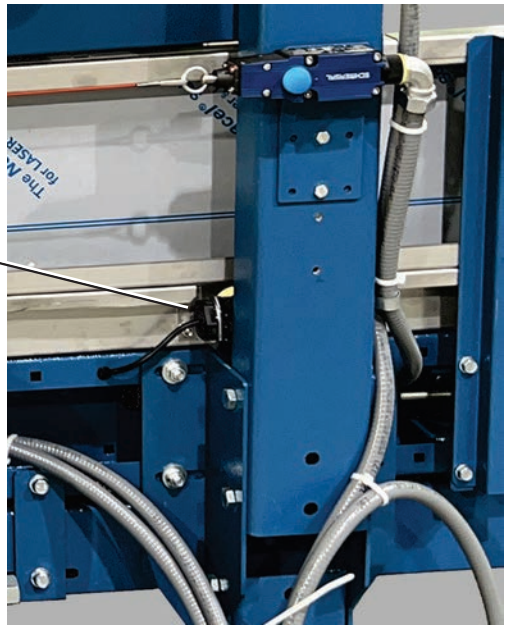
Used In	Item	Part Number	Description	Comments
D	2	54C420GV	BELT 42" X 200' GREY WDGEGRIP W/VGUIDE	
D	2	54C420G	BELT 42" X 300' SMTH TOP FLAT BLACK	
D	2	54C420GRY	BELT 42" X 250' GREY WDGEGRIP/BARE	
E	2	54C440A	BELT 44"X100' ROUGH TOP-GREY	
E	2	54C440	BELT 44"X100' SMTH TOP-GREY	
F	2	54C480B	BELT 48" X NNN" 100 TAN WDGEGRIP/BARE	
F	2	54C481C	BELT 48" X NNN" SMTH FLAT TOP CONV	
F	2	54C480GRY	BELT 48" X 250' GREY WDGEGRIP/BARE	
F	2	54C480G	BELT 48" X 250' SMTH TOP FLAT-GREY	
G	2	54C500SF	BELT 51" X CUT-TO-ORDER SMOOTH TOP FLAT-GREY	
G	2	54C500B	BELT 51" X 100' GREY WDGGRIP/BARE	
G	2	54C500V	BELT 51" X 100' GREY WDGGRIP W/VGUIDE	
H	2	54C601	BELT 60" X NNN" TAN WDGEGRIP/BARE	
H	2	54C600G	BELT 60" X CUT-TO-ORDER SMTH TOP FLAT-GREY	
H	2	54C600GRY	BELT 60" X CUT-TO-ORDER GREY WDGEGRIP/BARE	
all	3AA	04 24284	UNDERBELT COVER 24W X 12LG	
all	3AB	04 20542	UNDERBELT COVER 24W X 15LG	
all	3AC	04 20543	UNDERBELT COVER 24W X 48LG	
all	3BA	04 24285	UNDERBELT COVER 36W X 12LG	
all	3BB	04 23609	UNDERBELT COVER 36W X 15LG	
all	3BC	04 20547	UNDERBELT COVER 36W X 24LG	
all	3BD	04 20549	UNDERBELT COVER 36W X 48LG	
all	3CA	04 24286	UNDERBELT COVER 40W X 12LG	
all	3CB	04 23610	UNDERBELT COVER 40W X 15LG	
all	3CC	04 20551	UNDERBELT COVER 40W X 24LG	
all	3CD	04 20553	UNDERBELT COVER 40W X 48LG	
all	3DA	04 24287	UNDERBELT COVER 42W X 12LG	
all	3DB	04 23611	UNDERBELT COVER 42W X 15LG	
all	3DC	04 23450	UNDERBELT COVER 42W X 24LG	
all	3DD	04 20544	UNDERBELT COVER 42W X 48LG	
all	3EA	04 24587	UNDERBELT COVER 44WX 12"LG	
all	3EB	04 24588	UNDERBELT COVER 44WX 15"LG	
all	3EC	04 24589	UNDERBELT COVER 44WX 24"LG	
all	3ED	04 24590	UNDERBELT COVER 44WX 48"LG	
all	3FA	04 24288	UNDERBELT COVER 48W X 12LG	
all	3FB	04 23612	UNDERBELT COVER 48W X 15LG	
all	3FC	04 20555	UNDERBELT COVER 48W X 24LG	
all	3FD	04 20557	UNDERBELT COVER 48W X 48LG	
all	3GA	04 24289	UNDERBELT COVER 50W X 12LG	
all	3GB	04 23613	UNDERBELT COVER 50W X 15LG	
all	3GC	04 23445	UNDERBELT COVER 50W X 24LG	
all	3GD	04 20545	UNDERBELT COVER 50W X 48LG	
all	3HA	04 24290	UNDERBELT COVER 60W X 12LG	
all	3HB	04 23614	UNDERBELT COVER 60W X 15LG	
all	3HC	04 20559	UNDERBELT COVER 60W X 24LG	
all	3HD	04 20561	UNDERBELT COVER 60W X 48LG	

Photoeyes

CONVEY44



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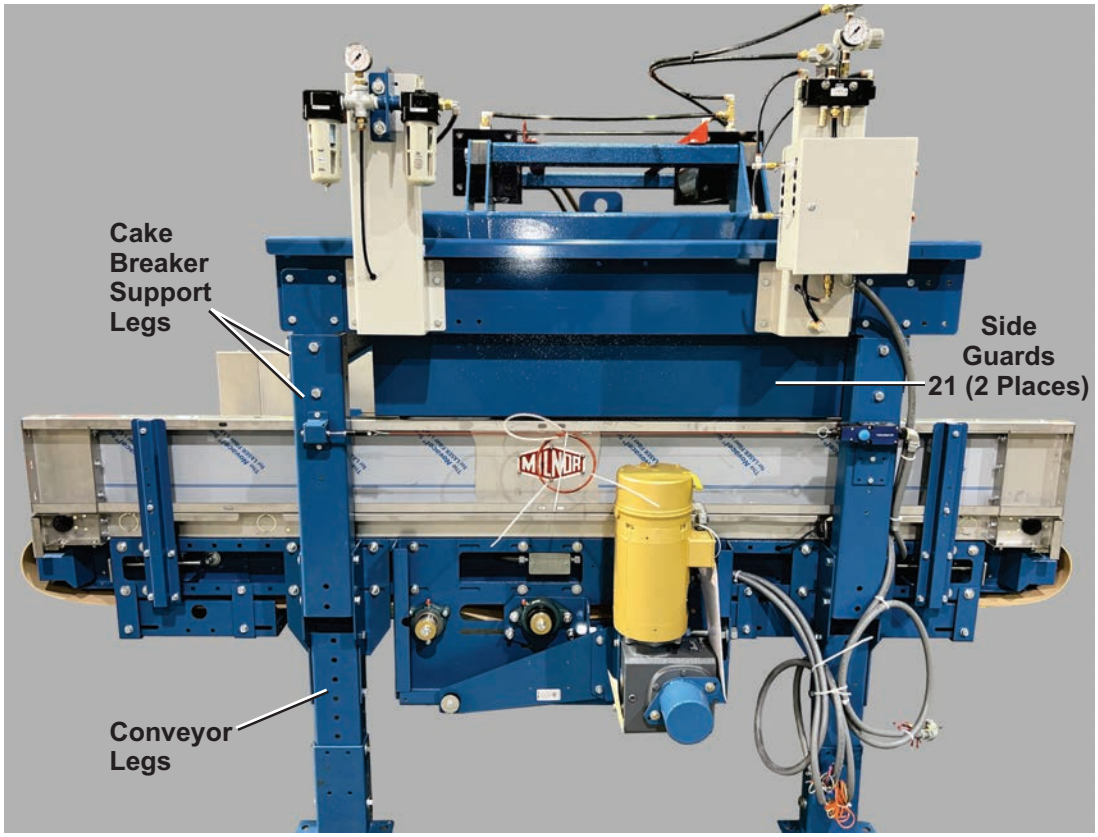
Used In	Item	Part Number	Description	Comments
			----------COMPONENTS----------	
all	1	09RPE011	PHOTOEYE VALU-BEAM 10-30DC	
all	2	03 BL1X2V	BRKT:Q40 SERIES PHOTOEYE MNT	
all	3	09RPE001A	REFLECTOR 3"DIA CLEAR	
all	4	04 20124	MCS TARGET DISC BRKT.	

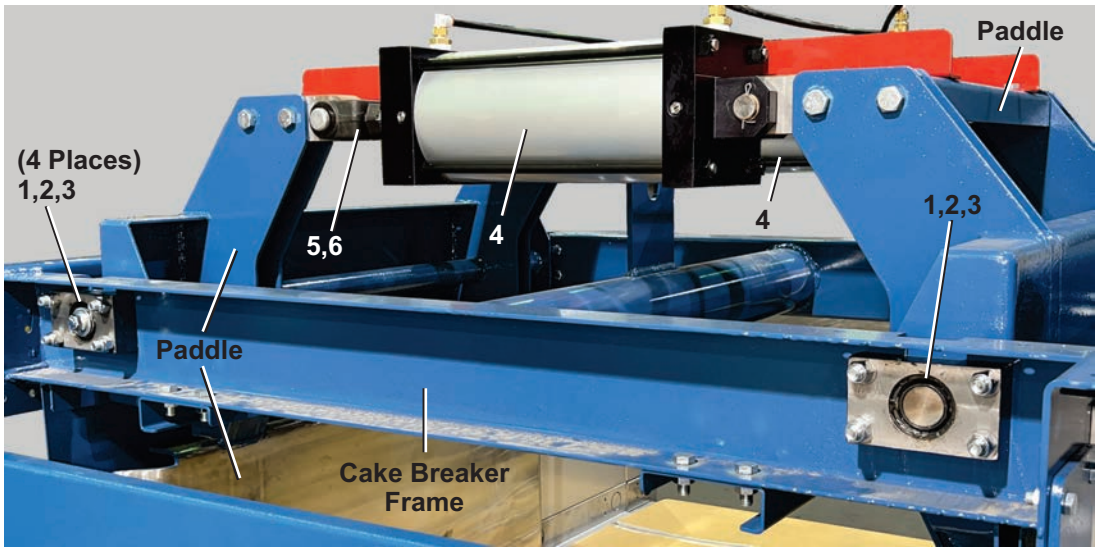
2

Cake Breaker 2.2

Cake Breaker

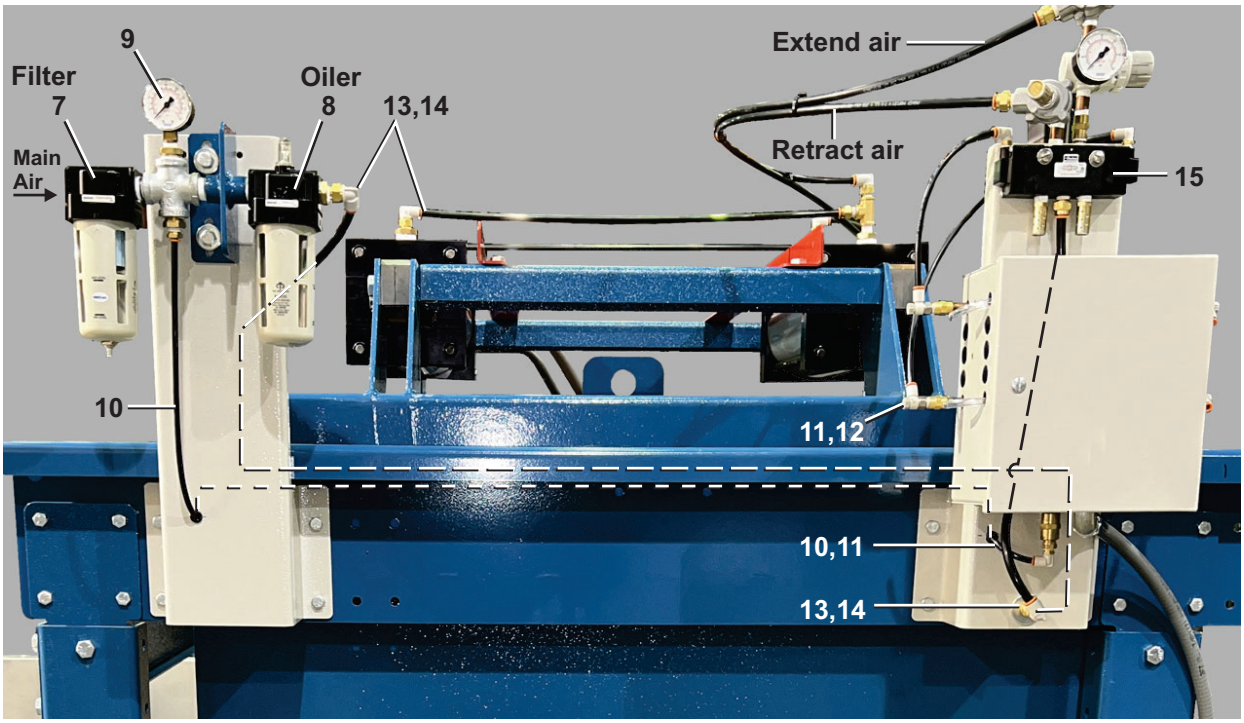
CONVEY44

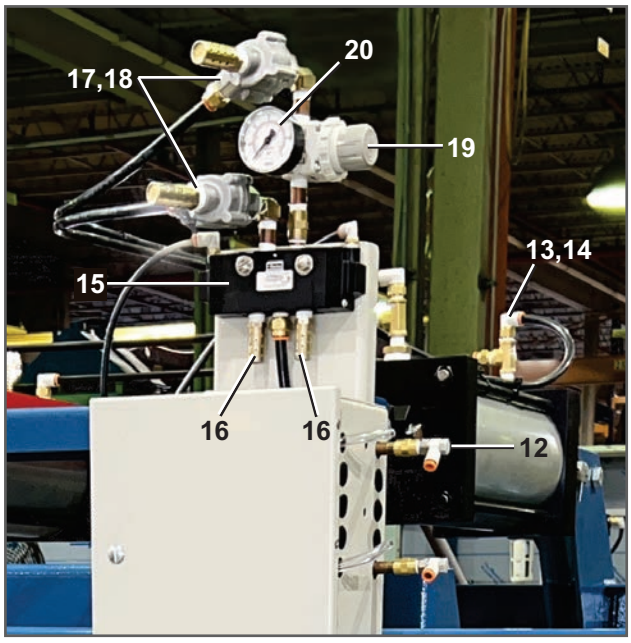




Cake Breaker

CONVEY44





Cake Breaker

CONVEY44

Parts Lis

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Used In	Item	Part Number	Description	Comments
			----------REFERENCE ASSEMBLIES----------	
	A	ALC44005	CAKE BREAKER 44W ASSY	
	B	ALC420094	AIR CYL LUBRICATOR ASSY	
			----------COMPONENTS----------	
all	1	X4 24612	BALL BUSHING BLOCK B22-L	
all	2	54A704	BALLBUSHING 1+3/8" NO SEALS-SKF#GEZ-106-ES	
all	3	17B182	INTRETRING 2+3/16 ENDRIES#QGCG	
all	4	27C612	AIRCYL 6"BOREX12"STK 1-14THD CLEVIS MNT	
all	5	17A066	ROD CLEVIS 1"-14 X 3-1/8 ZINC	
all	6	17A101	CLEVIS PIN 1"X3+1/2"DRILLED ZI	
all	7	30N601	1/2"AIRLINE FILTER FABCO MODEL##FA4-F4PM	
all	8	30N600C	1/2"AIRLINE LUBE FA4-L4P W/ MTG BRKT	
all	9	30N102	PRESSGAUGE 1/4BOTCON.0-150PSI	
all	10	60E004NT	TUBING (NYL.)CLR.1/4"ODX1/8"	
all	11	96PVQC18249	QUICK CONNECT 1/8" NPT X 1/4" TUBING 90	
all	12	96PVQC18249F	QUICK CONNECT 1/8" NPT X 1/4" TUBING 90 FLOW CONTROL	
all	13	60E005B	TUBING NYL.3/8"OD X.275"ID	
all	14	96PVQC24389	QUICK CONNECT 1/4"" NPT X 3/8" TUBING 90	
all	15	96N0013HU	SHUTLVLV 1/4"4WAY CENTER-OFF	
all	16	27A005A	MUFFLER 1/4"ALLIED B-28 BANTAM	
all	17	96M055	DELTROL QUICK EXHAUST VLV.1/4"	
all	18	27A005	MUFFLER 3/8" BANTAM B38	
all	19	96J019E	1/4" REG 7-100 PSI #AR20-N02H-Z-A	
all	20	30N101	PRESSGAUGE 1/8"BACKCN.0-60PSI	
all	21	04 24645	CAKE BREAKER SIDE GUARD	