



7400 Series Nose Bar Conveyors

Installation, Maintenance and Parts Manual



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Introduction

CAUTION

Some illustrations may show guards removed. DO NOT operate equipment without guards.

Upon receipt of shipment:

- Compare shipment with packing slip. Contact factory regarding discrepancies.
- Inspect packages for shipping damage. Contact carrier regarding damage. Accessories may be shipped loose.
- See accessory instructions for installation.

The Dorner Limited Warranty applies.

Dorner 7400 Series conveyors have patents pending.

Dorner reserves the right to make changes at any time without notice or obligation.

Dorner has convenient, pre-configured kits of Key Service Parts for all conveyor products. These time saving kits are easy to order, designed for fast installation, and guarantee you will have what you need when you need it. Key Parts and Kits are marked in the Service Parts section of this manual with the Performance Parts Kits logo .

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Warnings – General Safety

⚠ DANGER



SEVERE HAZARD!

KEEP OFF CONVEYORS. Climbing, sitting, walking or riding on conveyor will result in death or serious injury.

⚠ DANGER



EXPLOSION HAZARD!

- **DO NOT OPERATE CONVEYORS IN AN EXPLOSIVE ENVIRONMENT.** The electric gearmotor generates heat and could ignite combustible vapors.
- Failure to comply will result in death or serious injury.

⚠ WARNING



CRUSH HAZARD!

- **DO NOT** place hands or fingers inside the conveyor while it is running.
- **DO NOT** wear loose garments while operating the conveyor. Loose garments can become caught up in the conveyor.
- Failure to comply could result in serious injury.

⚠ WARNING



CRUSH HAZARD!

- **SUPPORT CONVEYOR SECTIONS PRIOR TO LOOSENING STAND HEIGHT OR ANGLE ADJUSTMENT SCREWS.**
- Loosening stand height or angle adjustment screws may cause conveyor sections to drop down, causing serious injury.

⚠ WARNING



SEVERE HAZARD!

LOCK OUT POWER before removing guards or performing maintenance. Exposed moving parts can cause serious injury.

⚠ WARNING



BURN HAZARD!

DO NOT TOUCH the motor while operating, or shortly after being turned off. Motors may be **HOT** and can cause serious burn injuries.

⚠ WARNING



PUNCTURE HAZARD!

Handle drive shaft keyway with care. It may be sharp and could puncture the skin, causing serious injury.

⚠ WARNING



SEVERE HAZARD!

- Dorner cannot control the physical installation and application of conveyors. Taking protective measures is the responsibility of the user.
- When conveyors are used in conjunction with other equipment or as part of a multiple conveyor system, **CHECK FOR POTENTIAL PINCH POINTS** and other mechanical hazards before system start-up.
- Failure to comply could result in serious injury.

Product Description

Refer to **(Figure 1)** for typical conveyor components.

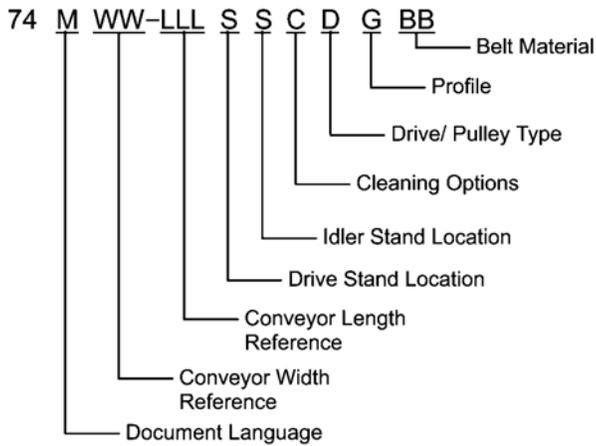
Typical Components	
1	Conveyor
2	Gearmotor
3	Belt
4	Return
5	Support Stands
6	Motor Controller
7	Drive End
8	Tension End



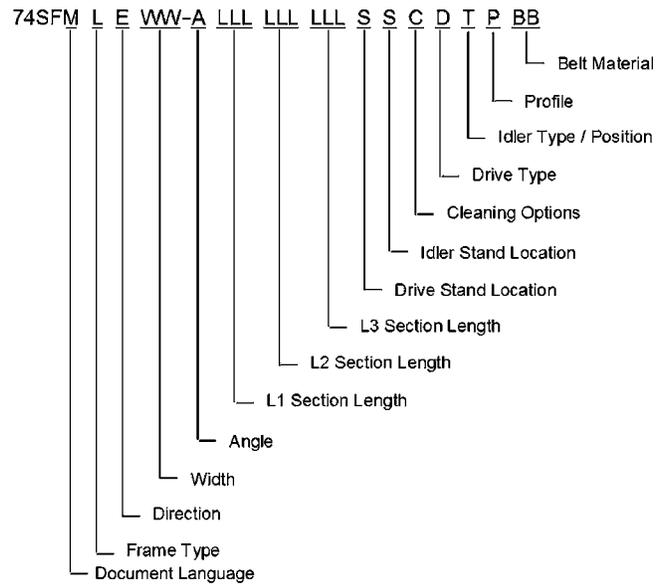
Figure 1

Specifications

Flat Belt 7400 Series Conveyor



Flat Belt 7400 Series LPZ Conveyor



Conveyor Supports

Maximum Distances:

1 = 3 ft (914 mm)

2 = 8 ft (2438 mm)**

3 = 3 ft (914 mm)

** For conveyors longer than 10 ft (3.05 m), install support at frame joint.

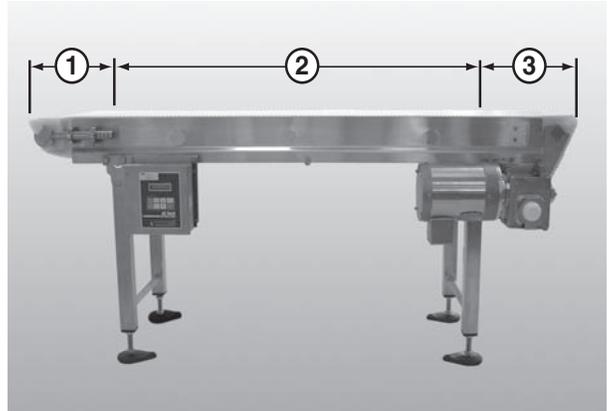


Figure 2

Specifications

Conveyor Width Reference (WW)	06 – 60 in 02 increments
Conveyor Belt Width	6" (152 mm) – 60" (1524 mm) in 2" (51 mm) increments
Maximum Conveyor Load	20 lb / ft ² (97 kg / m ²) with a maximum of 1000 lb / ft ² (4882 kg / m ²)
Belt Travel	12" (305 mm) per revolution of pulley
Maximum Belt Speed	233 ft / minute (71 m / minute)
Belt Take-up	2" (51 mm)
Conveyor Length Reference (LLL)	036 – 999 in 001 increments
Conveyor Length	36" (914 mm) – 999" (25.4 m) in 1" (25 mm) increments
LPZ Section Lengths (LLL)	024 – 252 in 001 increments
LPZ Section Length	24" (610 mm) – 252" (6401 mm) in 1" (25 mm) increments
Total LPZ Conveyor Length	(L1 + L2 + L3) = Maximum 38' (11.6 m) long conveyor

IMPORTANT

Maximum conveyor loads are based on:

- Non-accumulating product
- Product moving toward gearmotor
- Conveyor being mounted horizontally
- Conveyor being located in a dry environment
- Conveyor equipped with standard belt only

Installation

⚠ CAUTION

Dorner recommends cleaning all the “food zones” prior to placing conveyor into service. Ensure adequate access is provided for cleaning and servicing equipment so that the required level of hygiene can be maintained.

⚠ CAUTION

Conveyor **MUST** be mounted straight, flat, and level within confines of conveyor. Use a level (Figure 3, item 1), during setup.

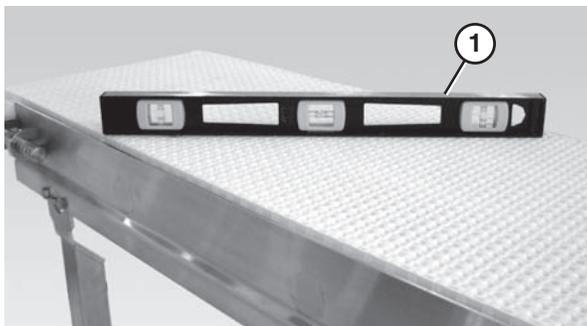


Figure 3

Required Tools

- 17 mm wrench (for hexagonal head fasteners)
- 4 mm hex wrench (for bearing shaft assembly fasteners)
- Level
- Torque wrench

Recommended Installation Sequence

1. Attach the stands to the conveyor. Refer to “Stand Installation” on page 8.
2. Attach the tail assemblies to the frame. Refer to “Tail Assembly Installation” on page 9.
3. Attach the lifters, if applicable. Refer to “Lifter Installation” on page 12.
4. Install the gearmotor, if applicable. Refer to the “7400 Series Drive Package Installation, Maintenance and Parts Manual.”
5. Attach the wearstrips. Refer to “Wear Strip Installation” on page 12.
6. Install the belt. Refer to “Belt Installation” on page 13.
7. Attach the belt returns. Refer to “Belt Return Installation” on page 14.
8. Attach any guides / accessories. Refer to the “Service Parts” section starting on page 26.

Conveyors Longer than 10 ft (3048 mm)

Typical Connection Components (Figure 4).

- | | |
|---|---------------------------------------|
| 1 | M10 x 1.5 mm hex head cap screws (x4) |
| 2 | Connector hex rods (x2) |
| 3 | Conveyor frames |

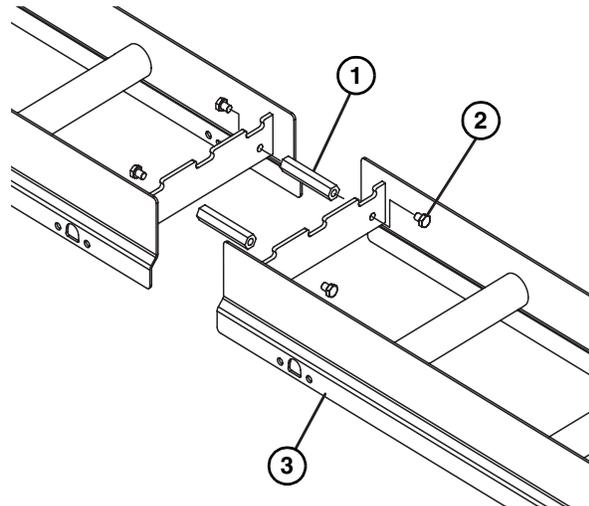


Figure 4

1. Locate the section number sequence etched on each section of frame (Figure 5, item 1).

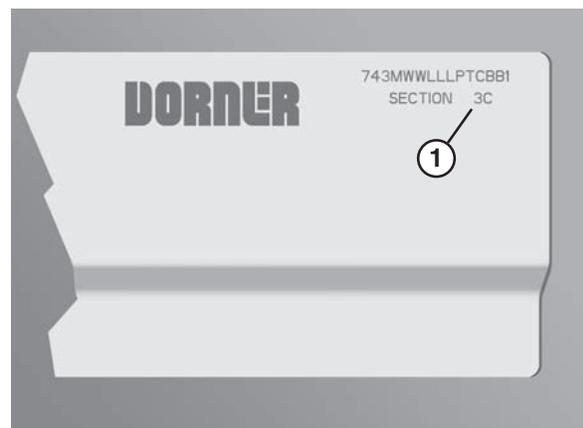


Figure 5

2. Position the frame sections in the correct order.

3. Connect the frame sections by bolting the hex post connectors (**Figure 6, item 1**) the sections of frame.

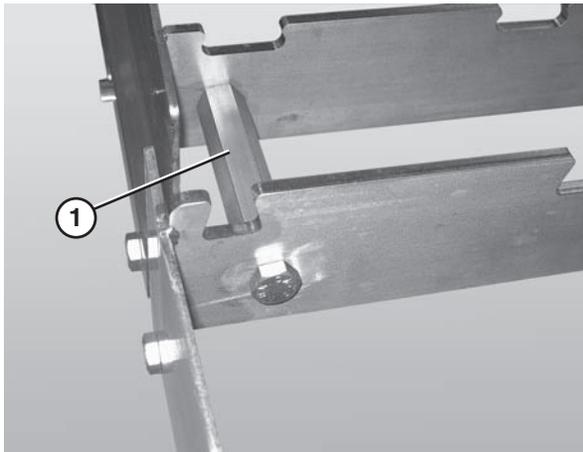


Figure 6

LPZ Conveyors

Knuckles

1. Attach upper knuckle (**Figure 7, item 1**) to frame (**Figure 7, item 2**) with hex rods (**Figure 7, item 3**) and bolts (**Figure 7, item 4**).

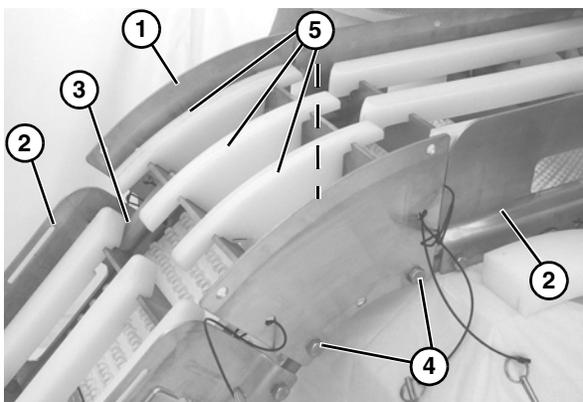


Figure 7

2. Install wear strips (**Figure 7, item 5**).

3. Attach lower knuckle (**Figure 8, item 1**) to frame (**Figure 8, item 2**) with hex rods (**Figure 8, item 3**) and bolts (**Figure 8, item 4**).

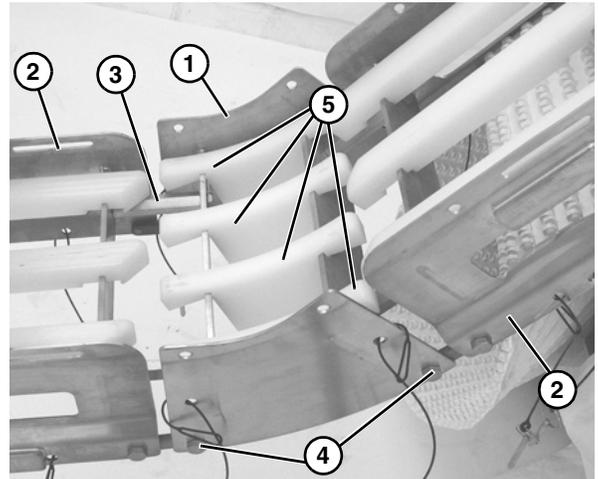


Figure 8

4. Install wear strips (**Figure 8, item 5**).

Belt

- Slide belt (**Figure 9, item 1**) over knuckles on top of the wear strips.



Figure 9

Installation

Guides

1. Slide guides (**Figure 10, item 1**) on to the knuckle frame, and secure with pull pins (**Figure 10, item 2**).

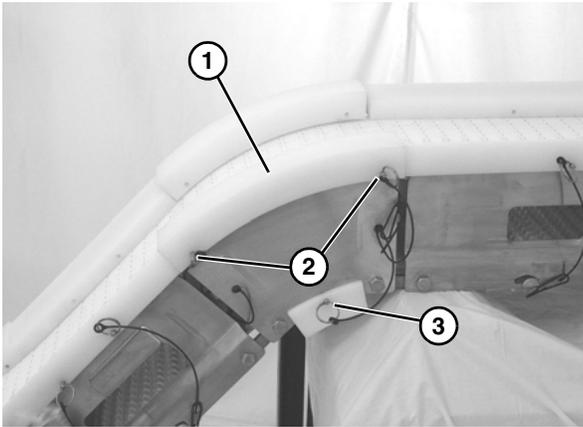


Figure 10

2. Install return guides and secure with pull pin (**Figure 10, item 3**).
3. Slide guides (**Figure 11, item 1**) onto lower knuckle frame, and secure with pull pins (**Figure 11, item 2**).

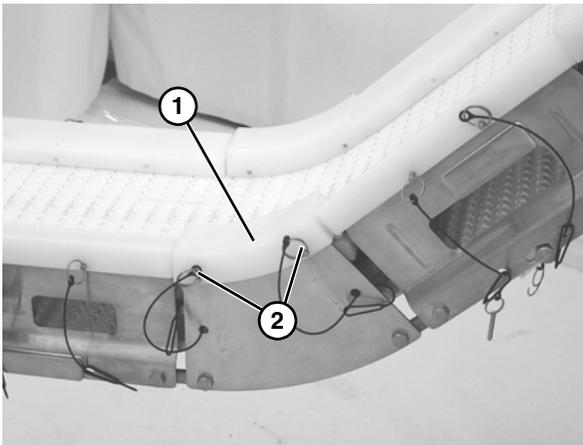


Figure 11

All Conveyors

Stand Installation

Typical Stand Components (**Figure 12**)

1	Conveyor frame
2	Stand
3	M10 - 1.5 x 12 mm hex head cap screws (x4)

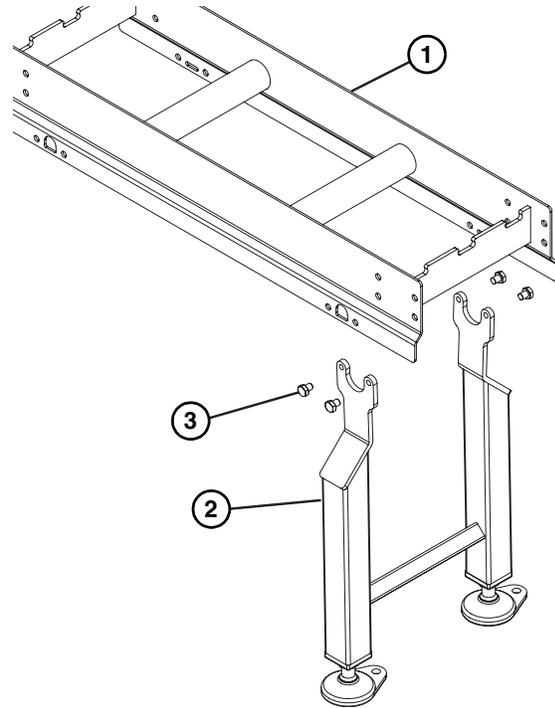


Figure 12

1. Position the stands on a flat, level surface.
2. Attach the stands to the frame (**Figure 13**).



Figure 13

Tail Assembly Installation

Nose Bar Drive Tail

Typical Nose Bar Drive Tail Components (**Figure 14**)

1	Nose bar drive tail assembly
2	M10 x 1.5 x 12mm hex head cap screws (x4)
3	Conveyor frame

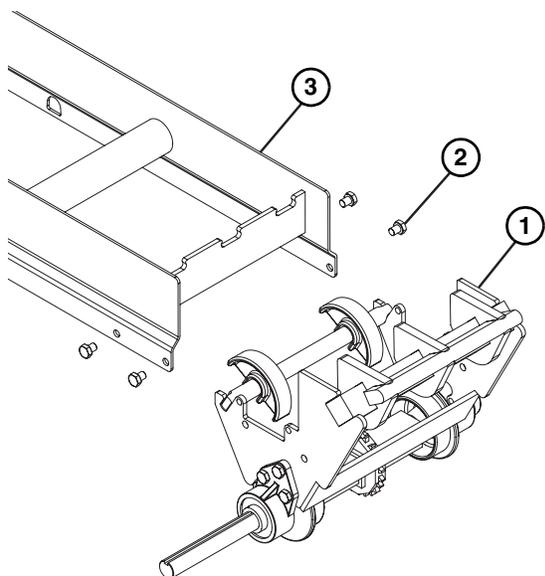


Figure 14

1. Bolt the nose bar drive tail assembly to the conveyor frame (**Figure 15**).

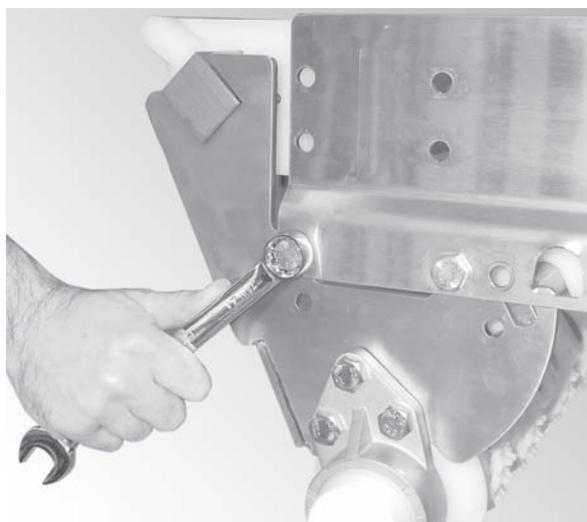


Figure 15

2. Install the drive package, if applicable. Refer to the "7400 Series Drive Package Installation, Maintenance and Parts Manual."

Tip Up Assembly

Typical Tip Up Assembly Components (**Figure 16**)

1	Hex Bar
2	Stop Key (x2)
3	Tip Up Sleeve (x2)

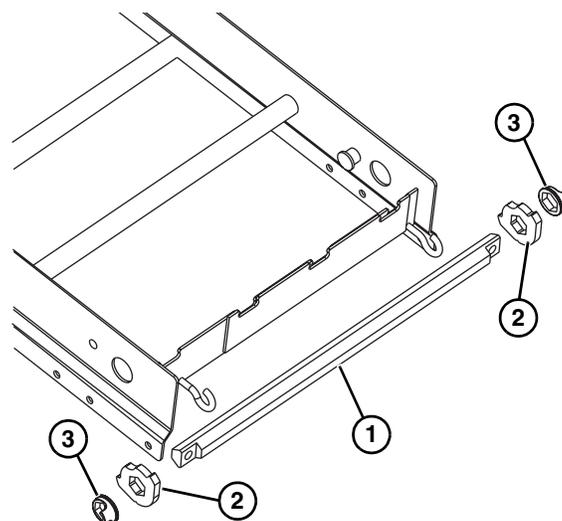


Figure 16

1. Slide stop keys (**Figure 17, item 1**) and tip up sleeves (**Figure 17, item 2**) onto hex shaft (**Figure 17, item 3**). The tabs on the tip up sleeves face outward and align with the slotted ends of the hex shaft as shown.

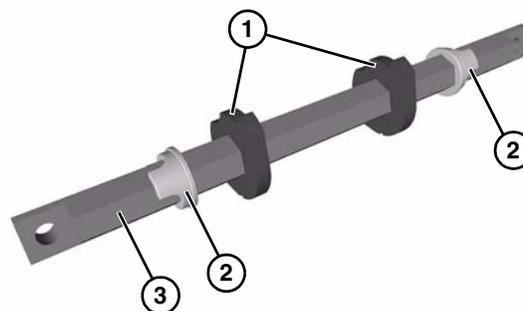


Figure 17

Installation

- Place hex shaft assembly (**Figure 18, item 1**) through the conveyor frame tip up holes (**Figure 18, item 2**) and center with conveyor.

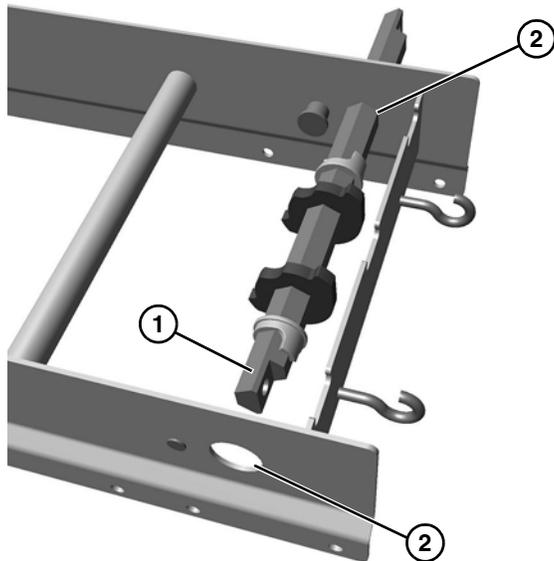


Figure 18

- Hex shaft assembly will need to be rotated (**Figure 19**) for stop keys (**Figure 19, item 1**) to pass by the frame stops (**Figure 19, item 2**).

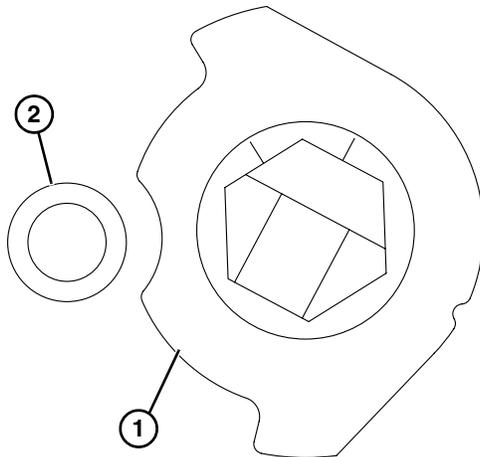


Figure 19

- Slide the tip up sleeves (**Figure 20, item 1**) and stop keys (**Figure 20, item 2**) outward on hex shaft assembly (**Figure 20, item 3**) until the sleeves seat in the holes of the frame and stop keys are seated against frame stops (**Figure 20, item 4**).

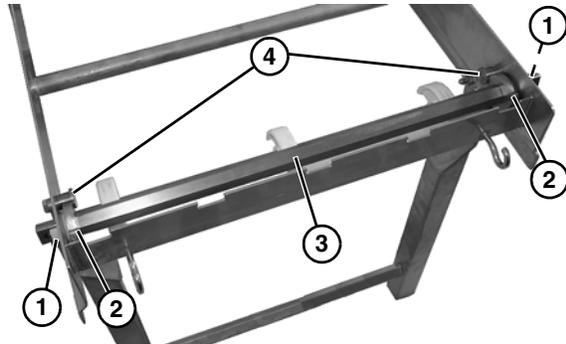


Figure 20

Nose Bar Idler Tail

Typical Nose Bar Idler Tail Components (**Figure 21**)

1	Nose bar idler tail assembly
2	Bolt (x2)
3	Conveyor frame

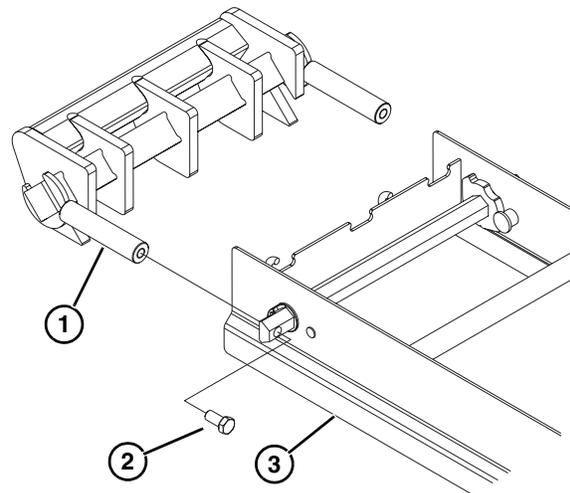


Figure 21

1. Place the nose bar idler shafts (**Figure 22, item 1**) against the holes in the hex shaft assembly (**Figure 22, item 2**) and secure each with a bolt (**Figure 22, item 3**).

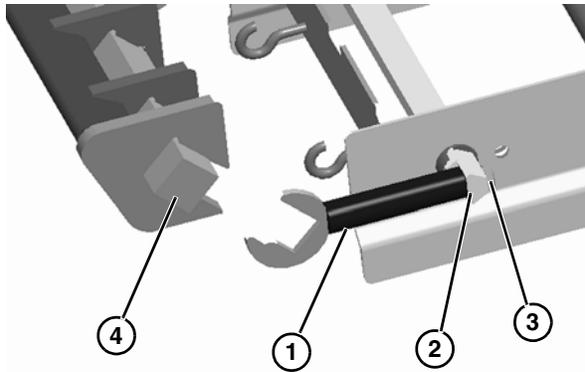


Figure 22

2. Attach the nose bar transfer post (**Figure 22, item 4**) to the nose bar idler shafts.
3. Ensure that the nose bar pucks (**Figure 23, item 1**) are in line with the conveyor frame (**Figure 23, item 2**).

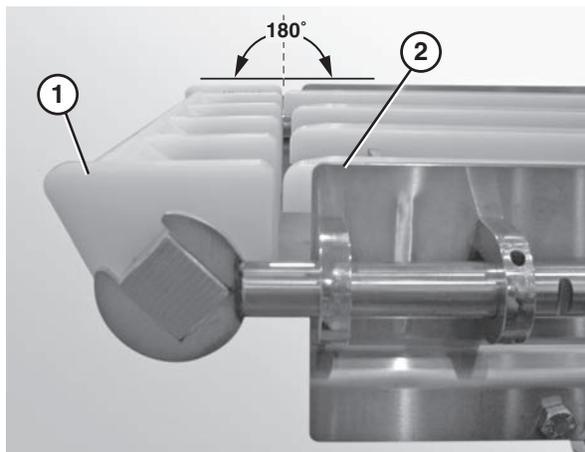


Figure 23

Idler Tail

Typical Idler Tail Components (**Figure 24**)

1	Conveyor Frame
2	Bolt (x2)
3	Idler tail assembly

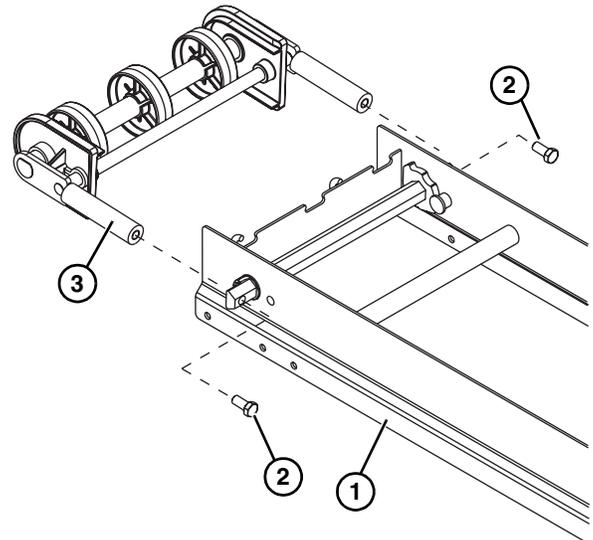


Figure 24

⚠ CAUTION

To avoid injury and damage to parts, have an assistant hold opposite end of idler tail when removing or installing it.

1. Place the idler tail assembly (**Figure 25, item 1**) against the holes in the tip up hex shaft assembly (**Figure 25, item 2**) and secure with a bolt (**Figure 25, item 3**) on each side.

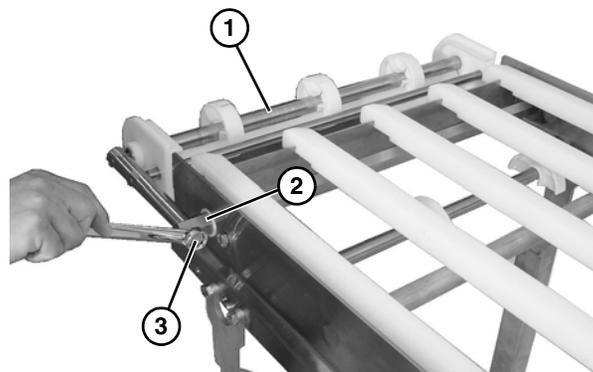


Figure 25

Installation

Lifter Installation

Typical Lifter Components (Figure 26)

1	Belt lift pivot bar
2	Lifter bars
3	Belt lift handle
4	M8 - 1.25 x 16 mm hex head cap screw

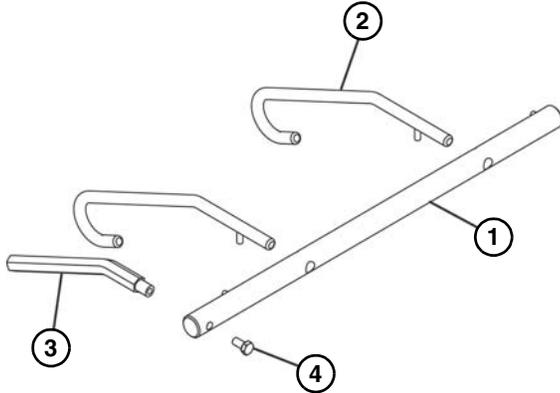


Figure 26

1. Slide the belt lift pivot bar (Figure 27, item 1) through the designated holes in the frame.

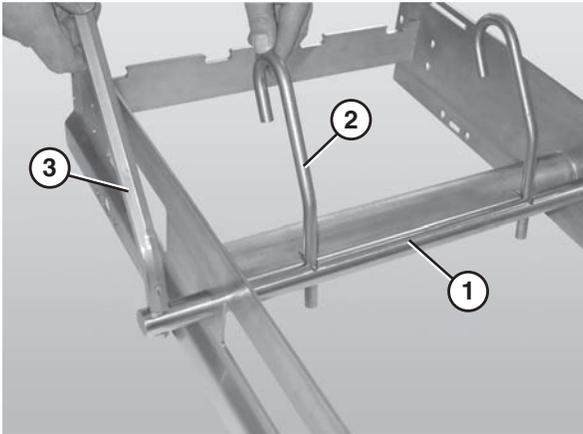


Figure 27

2. Attach the lifter bars (Figure 27, item 2) to the belt lift pivot bar (Figure 27, item 1). Make sure the hooked ends of the lifter bars are facing down when resting against the frame.
3. Attach the lifter handle (Figure 27, item 3) to the belt lift pivot rod.

Wear Strip Installation

Typical Wear Strip Components (Figure 28)

1	Wear strip
---	------------

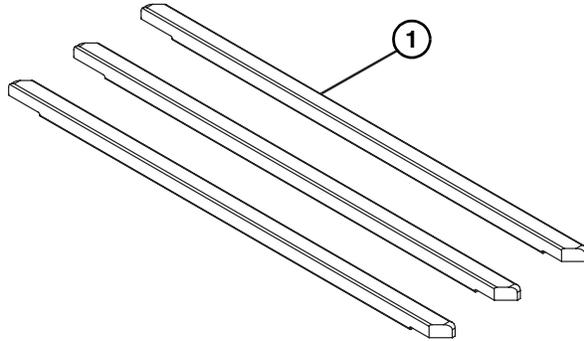


Figure 28

1. Position the wear strips (Figure 29, item 1) on the frame.

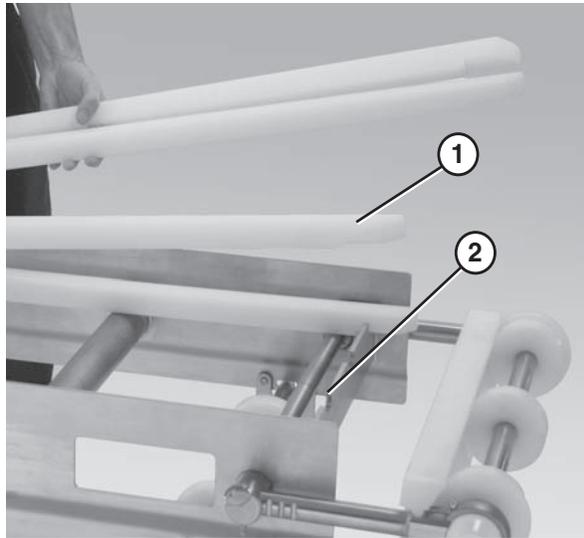


Figure 29

2. Make sure the wear strips are situated securely in the frame slots (Figure 29, item 2).

Belt Installation

Typical Belt Components (Figure 30)

1	Chain belt
2	Belt rod

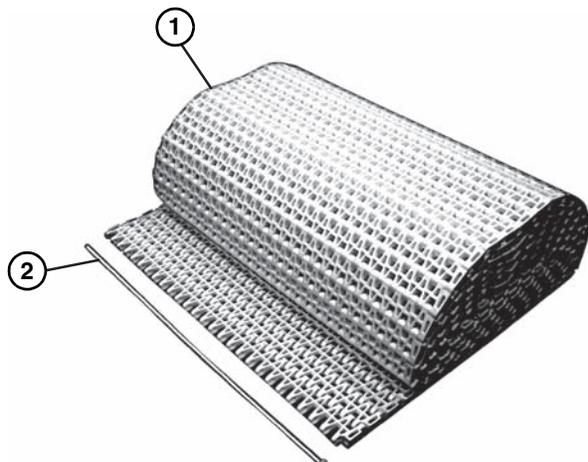


Figure 30

1. Position the belt on the conveyor frame (Figure 31).



Figure 31

2. Wrap the belt around the conveyor, making sure the sprocket teeth have engaged the belt.
3. Bring the ends of the belt together (Figure 32).



Figure 32

4. Insert the belt rod (Figure 33, item 1).

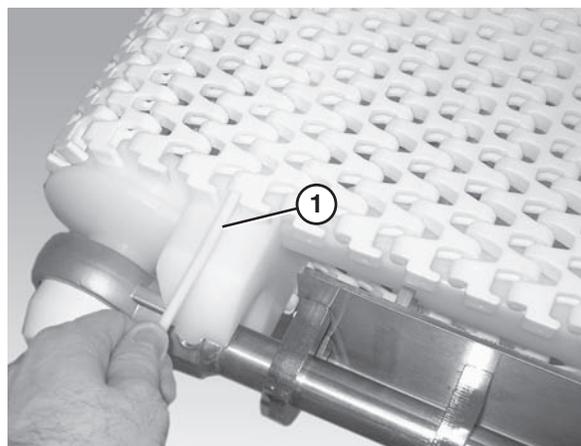


Figure 33

5. Push the belt rod in as far as possible.
6. Lightly tap the head of the rod with a hammer until it snaps into position.
7. Check belt sag by measuring from the top of the return (Figure 34).

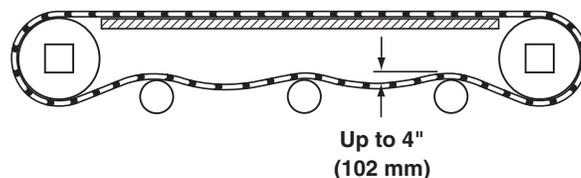


Figure 34

CAUTION

Belt sag should not exceed 4" (102 mm) from the top of the returns.

Installation

Belt Return Installation

Typical Belt Return Components (Figure 35)

1	Return shaft
2	Chain return shoe

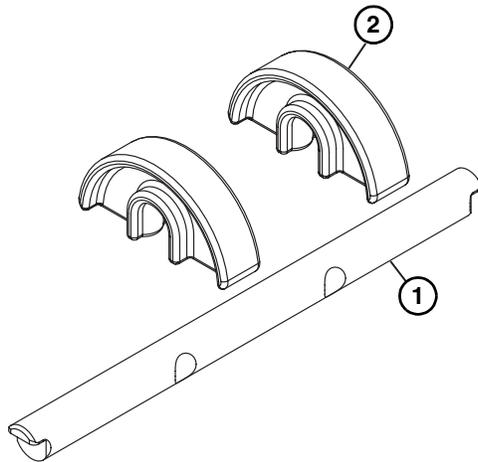


Figure 35

1. Attach the chain return shoes (Figure 36, item 1) to the return shaft (Figure 36, item 2).

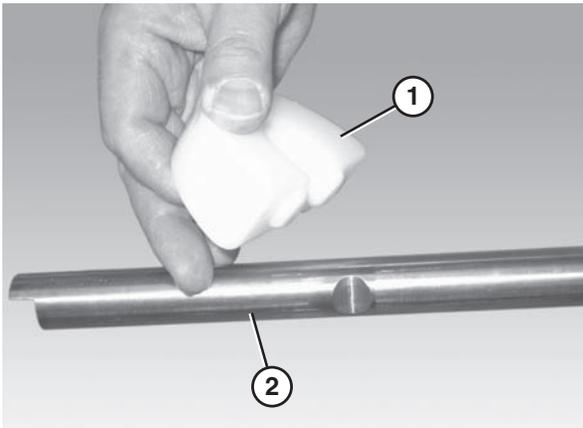


Figure 36

2. Slide the return shaft (Figure 37, item 1) up and through the large slot (Figure 37, item 2) in the frame (picture shown without the belt or wear strips).

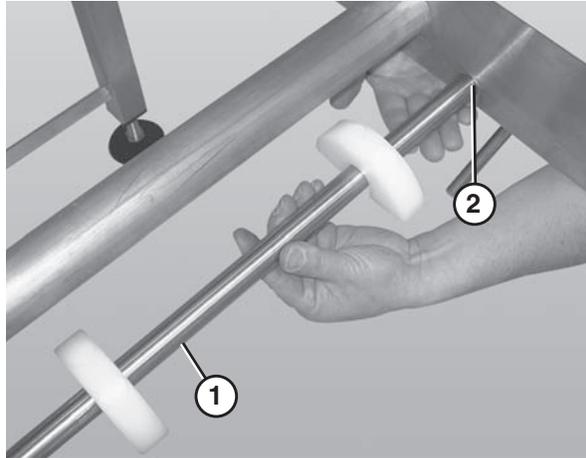


Figure 37

3. Push up on the return shaft (Figure 37, item 1) and slide the notched end of the shaft through the small slot on the opposite side of the frame.
4. See step 7 of Belt Installation to check for proper belt sag.

Preventive Maintenance and Adjustment

Required Tools

- 17 mm wrench (or adjustable wrench)
- 4 mm hex wrench (for bearing shaft assembly fasteners)
- 3 mm hex wrench
- Punch and hammer (to remove belt rod)

Checklist

- Keep service parts on hand. Refer to the "Service Parts" section starting on page 26 for recommendations.
- Replace any worn or damaged parts.

Cleaning

NOTE
<i>Proper conveyor application, cleaning, and sanitation are the responsibility of the end user.</i>

⚠ CAUTION
Dorner recommends cleaning all the "food zones" prior to placing conveyor into service. Ensure adequate access is provided for cleaning and servicing equipment so that the required level of hygiene can be maintained.

Routine Cleaning

⚠ WARNING

SEVERE HAZARD! LOCK OUT POWER before removing guards or performing maintenance. Exposed moving parts can cause serious injury.

Dorner recommends cleaning the inside and the outside of the conveyor on a daily basis. Refer to the following steps to access the inside of the conveyor.

1. Remove the guides, if applicable, by removing the pull pins (**Figure 38, item 1**) that connect the guide (**Figure 38, item 2**) to the frame.

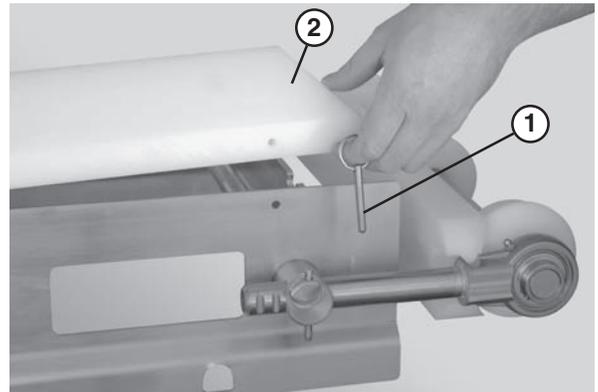


Figure 38

2. Use the lifter handle (**Figure 39, item 1**) to raise the lifters (**Figure 39, item 2**) and raise the tip up tail (**Figure 39, item 3**).

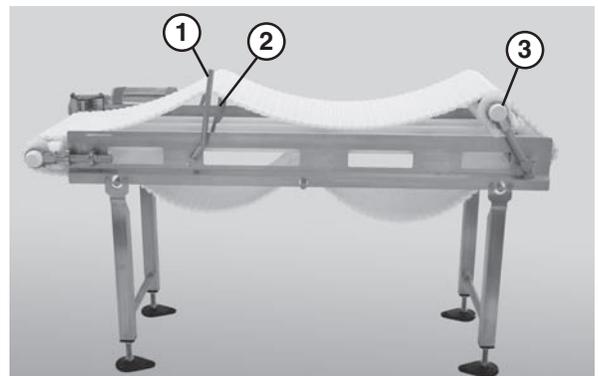


Figure 39

3. Lift up on the belt (**Figure 40**).

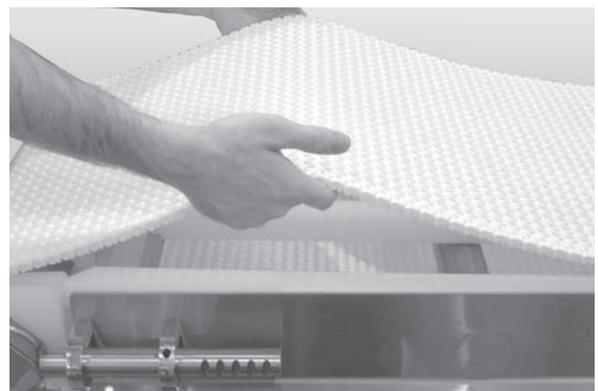


Figure 40

⚠ CAUTION
DO NOT submerge or soak bearing assemblies. This will reduce the life of the bearing.

Preventive Maintenance and Adjustment

Periodic Cleaning

Dorner recommends complete disassembly of the conveyor periodically for thorough cleaning.

For conveyor disassembly and reassembly instructions:

- Refer to “Conveyor Belt Replacement” on page 17.
- Refer to “Sprocket and Puck Removal” on page 19.
- Refer to “Slide the nose bar pucks (Figure 60, item 1) off the nose bar shaft (Figure 60, item 2).” on page 21.

Lubrication

Conveyor Bearings

Conveyor bearing lubrication is required. Dorner recommends using an H-1 food grade grease.

NOTE

Although bearings are sealed, re-greasing is recommended to increase bearing life. An H-1 food grade grease is recommended. The frequency of bearing re-greasing is dependent upon the application in which the conveyor is being used. Frequency of re-greasing will increase with the frequency of conveyor washing.

1. Add grease to the bearing using the zerk fitting (Figure 41, item 1) on the exterior of the bearing shaft assembly.

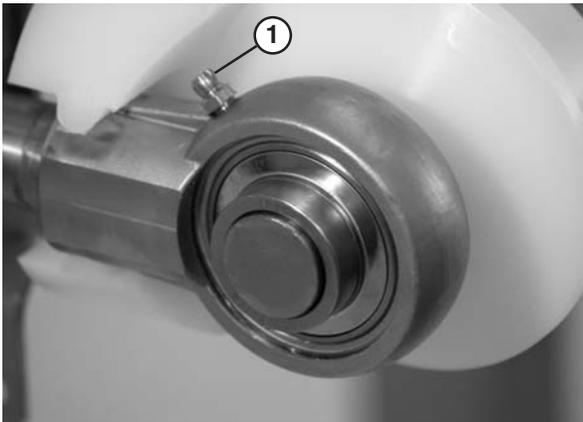


Figure 41

2. Replace the bearings if they become worn.

Wearstrips and Belt Returns

Replace the wearstrips and belt returns if they become worn.

For wearstrip and belt return installation instructions:

- Refer to “Wear Strip Installation” on page 12.
- Refer to “Belt Return Installation” on page 14.

Maintaining the Conveyor Belt

Troubleshooting

NOTE

Visit www.dorner.com for complete list of troubleshooting solutions.

Inspect conveyor belt for:

- Surface cuts or wear
- Skipping

Damage to belt links or rods, surface cuts and / or wear indicate:

- Sharp or heavy parts impacting belt
- Jammed parts
- Accumulated dirt
- Foreign material inside the conveyor
- Improperly positioned accessories

Skipping indicates:

- Excessive load on belt
- Worn sprockets or impacted dirt on drive pulley

Damage to belt links or rods indicate:

- Excessive load on belt
- Dirt impacted on sprockets
- Excessive or improper side loading
- Improperly positioned accessories

Preventive Maintenance and Adjustment

Conveyor Belt Replacement

 WARNING

SEVERE HAZARD! LOCK OUT POWER before removing guards or performing maintenance. Exposed moving parts can cause serious injury.

Conveyors with Guides

1. Remove the pull pins (Figure 42, item 1) that connect the guide (Figure 42, item 2) to the frame.

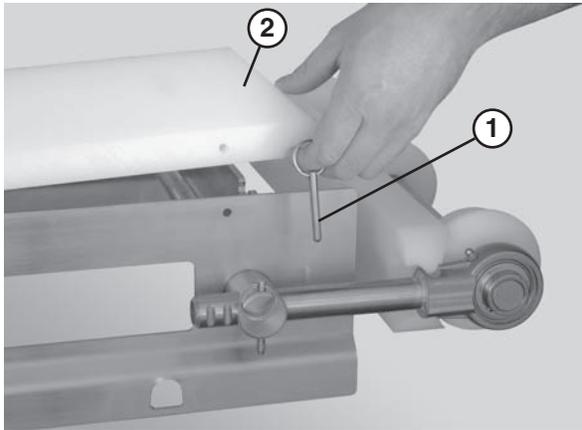


Figure 42

2. Remove the guide (Figure 43, item 1).

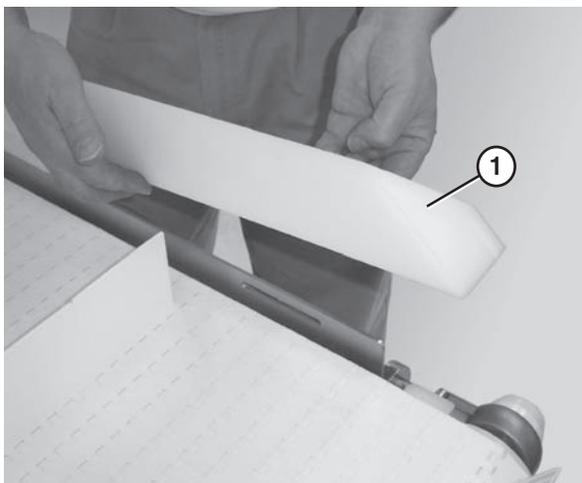


Figure 43

3. Follow the belt replacement procedures described in “Standard Belts” on page 17, “Specialty Intralox 1100 Series Belts” on page 18, or “Specialty Intralox 1600 Series Belts” on page 18.

Standard Belts

Replacing a Section of Belt

 CAUTION
Secure the retaining head side of the belt prior to removing a belt rod in order to prevent damaging the belt.

1. Secure the retaining head side of the belt. Use the belt removal tool (Figure 44, item 1) for 1" pitch belts. For all other belts, position the section of belt so that it is braced by the flanged puck (Figure 44, item 2).

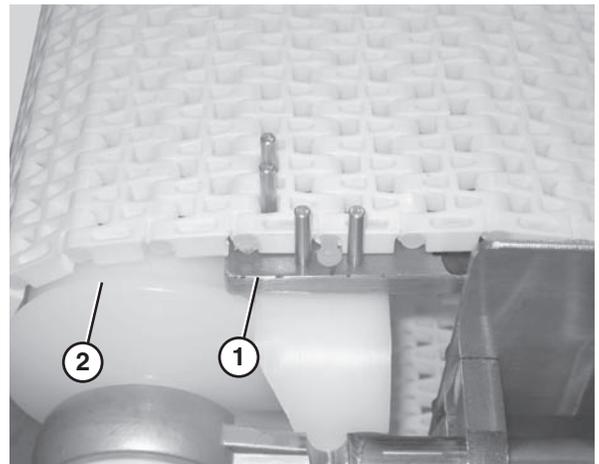


Figure 44

2. Use a punch and hammer to push the belt rod out by striking the rod end opposite the retaining head (Figure 45).



Figure 45

3. Remove the belt rods on both sides of the section of belt being replaced.
4. Replace the old section with a new section of belt.

Preventive Maintenance and Adjustment

⚠ CAUTION

DO NOT reuse belt rods that are damaged or show signs of wear.

Replacing the Entire Belt

1. Remove the belt returns by pushing up on the return shaft (**Figure 46, item 1**) and sliding it through the large hole (**Figure 46, item 2**) in the frame.

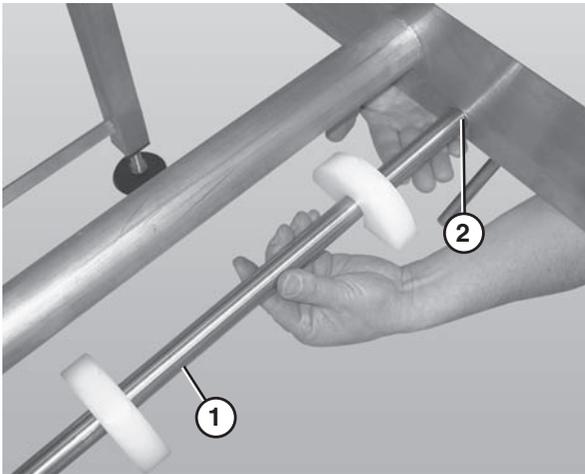


Figure 46

2. Lower the opposite end of the return shaft (**Figure 46, item 1**) and slide it out of the frame.
3. Follow steps 1 – 3 in "Standard Belts: Replacing a Section of Belt" on page 17.
4. Remove the belt.
5. Replace the damaged or worn belt. Refer to "Belt Installation" on page 13 and "Belt Return Installation" on page 14.

Specialty Intralox 1100 Series Belts

Replacing a Section of Belt

1. Place the edge of a flat head screwdriver between the two belt links and turn clockwise (**Figure 47**).

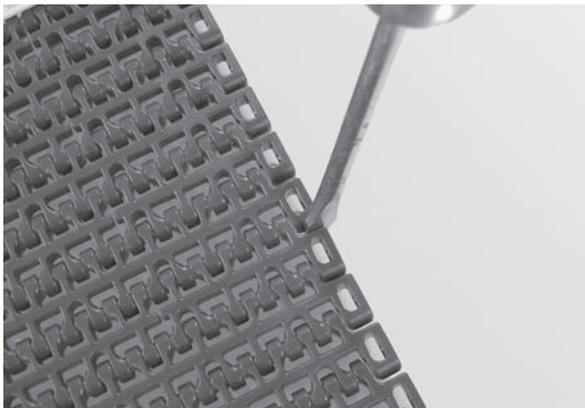


Figure 47

2. Use a second belt rod of the same size to push on the opposite end of the belt rod. (**Figure 48**).

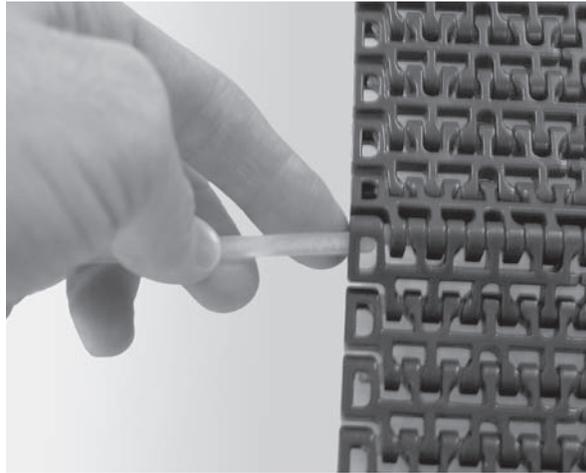


Figure 48

3. Remove the belt rods on both sides of the section of belt being replaced.
4. Replace the old section with a new section of belt.

⚠ CAUTION

DO NOT reuse belt rods that are damaged or show signs of wear.

Replacing the Entire Belt

1. Remove the belt returns.
2. Follow steps 1 – 2 in "Specialty Intralox 1100 Series Belts: Replacing a Section of Belt" on page 18.
3. Remove the belt.
4. Replace the damaged or worn belt. Refer to "Belt Installation" on page 13 and "Belt Return Installation" on page 14.

Preventive Maintenance and Adjustment

Conveyor Belt Tensioning

 WARNING

SEVERE HAZARD! LOCK OUT POWER before removing guards or performing maintenance. Exposed moving parts can cause serious injury.

 CAUTION
Belt sag should not exceed 4" (102 mm) from the top of the returns.

1. Check belt for proper sag. Refer to step 7 of "Belt Installation" on page 13.
2. If belt has excessive sag, remove one or more belt links to take up the tension. Refer to "Replacing a Section of Belt" on page 17.

Sprocket and Puck Removal

 WARNING

SEVERE HAZARD! LOCK OUT POWER before removing guards or performing maintenance. Exposed moving parts can cause serious injury.

1. Remove the conveyor belt to access the sprockets / pucks. Refer to "Conveyor Belt Replacement" starting on page 17.
2. Remove the desired sprocket / puck by following these instructions:
 - A - Drive Sprocket Removal
 - B - Nose Bar Puck Removal
 - C - Idler Puck Removal

A - Drive Sprocket Removal

 WARNING

PUNCTURE HAZARD! Handle drive shaft keyway with care. It may be sharp and could puncture the skin, causing serious injury.

1. Loosen the fasteners (**Figure 49, item 1**) that connect the gearmotor to the drive spindle using a hex wrench (**Figure 49, item 2**).

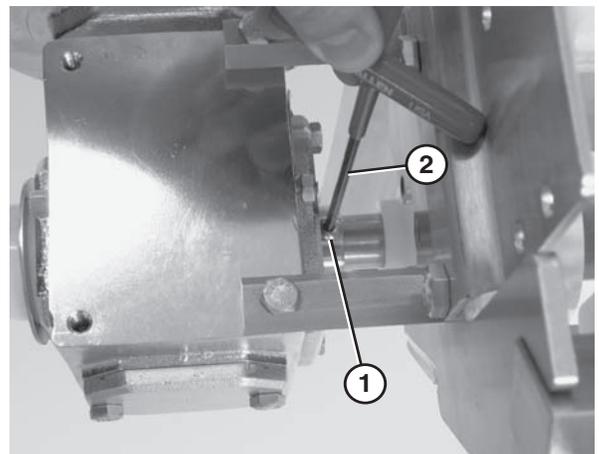


Figure 49

2. Remove the bolts that connect the motor to the drive assembly (**Figure 50**).
3. Remove the motor (**Figure 50, item 1**) from the drive assembly (**Figure 50, item 2**).

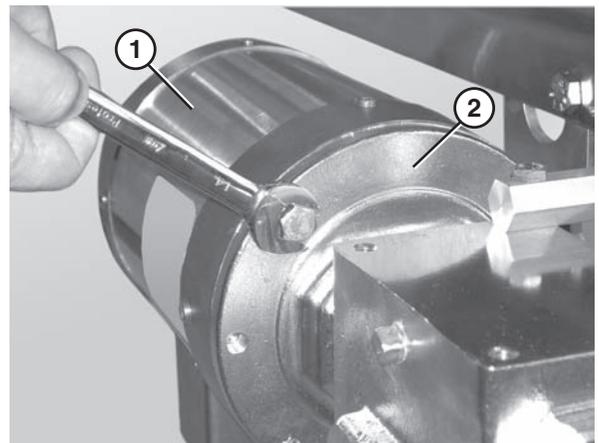


Figure 50

Preventive Maintenance and Adjustment

4. Unbolt the drive assembly and slide it off the bearing spindle (**Figure 51**).

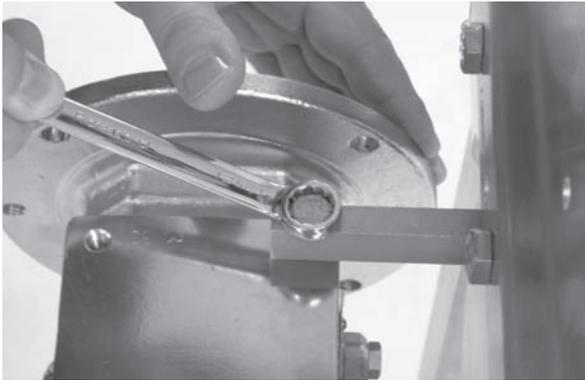


Figure 51

5. Remove the bearing cover.
6. Loosen the 3 hole flange (**Figure 52, item 1**) with bearing fasteners using a hex wrench (**Figure 52, item 2**).

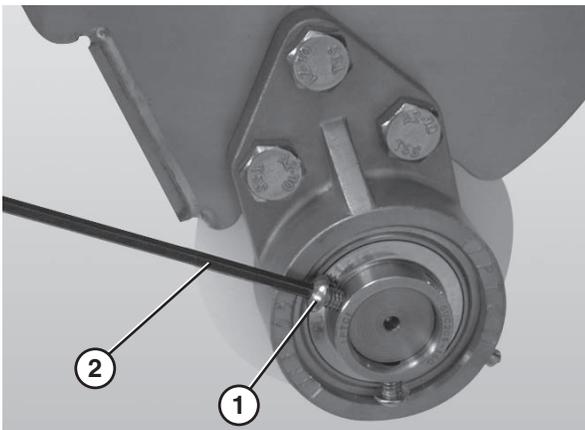


Figure 52

7. Disconnect the 3 hole flange bearing (**Figure 53, item 1**) from the nose bar drive weldment (**Figure 53, item 2**).

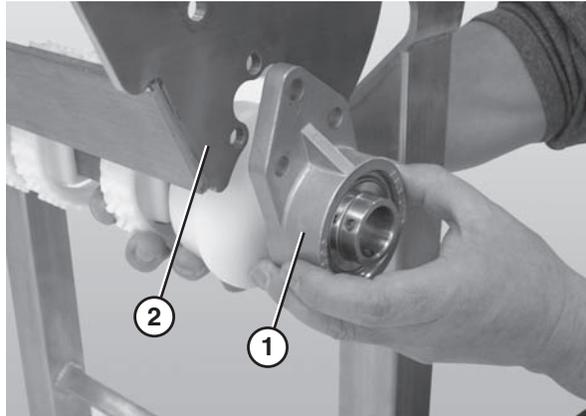


Figure 53

8. Lower the entire drive assembly.
9. Slide the 3 hole flange with bearing (**Figure 54, item 1**) and flanged puck (**Figure 54, item 2**) off the drive spindle.

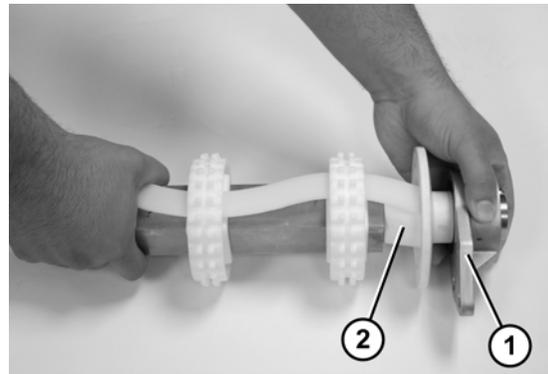


Figure 54

10. Slide the sprockets (**Figure 55, item 1**) and the sprocket alignment bar (**Figure 55, item 2**) off the drive spindle (**Figure 55, item 3**).

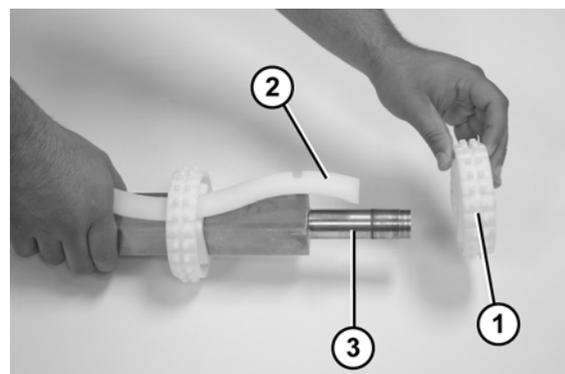


Figure 55

Preventive Maintenance and Adjustment

B - Idler Puck Removal

1. Remove bolt (**Figure 56, item 1**) from each side, and remove idler tail assembly (**Figure 56, item 2**) from take up blocks (**Figure 56, item 3**).

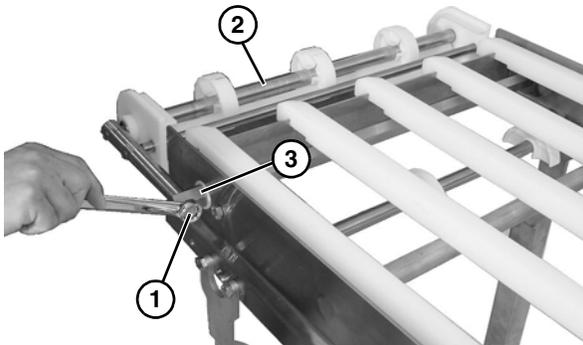


Figure 56

2. Remove the bearing end rod (**Figure 57, item 1**) from idler shaft (**Figure 57, item 2**) and pinch guard shaft (**Figure 57, item 3**).

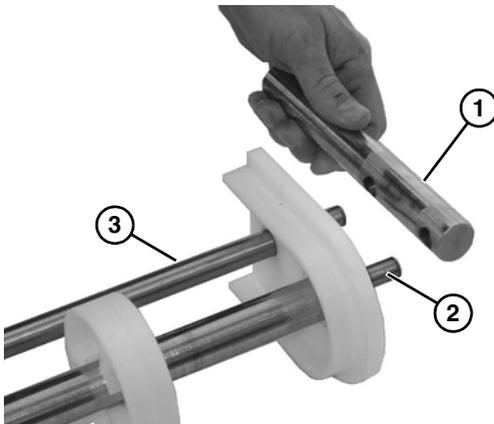


Figure 57

3. Remove pinch guard (**Figure 58, item 1**) from idler shaft (**Figure 58, item 2**) and pinch guard shaft (**Figure 58, item 3**).

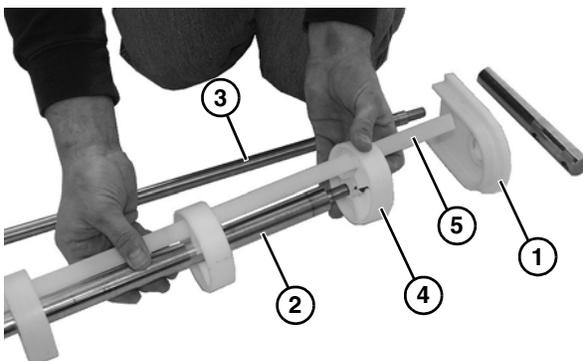


Figure 58

4. Slide the pucks (**Figure 58, item 4**) and alignment bar (**Figure 58, item 5**) off the idler shaft (**Figure 58, item 2**).

C - Nose Bar Puck Removal

1. Slide the nose bar drive or transfer post (**Figure 59, item 1**) out of the nose bar drive weldment or idler hands (**Figure 59, item 2**).

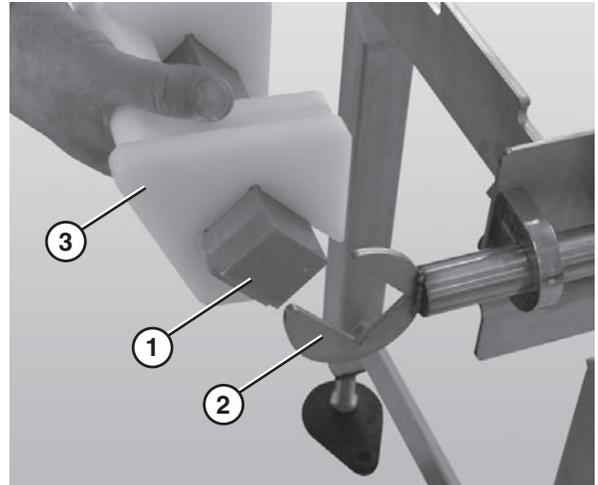


Figure 59

2. Remove the nose bar tracking pucks (**Figure 59, item 3**), if applicable.
3. Remove the nose bar wear strip (**Figure 60, item 3**).

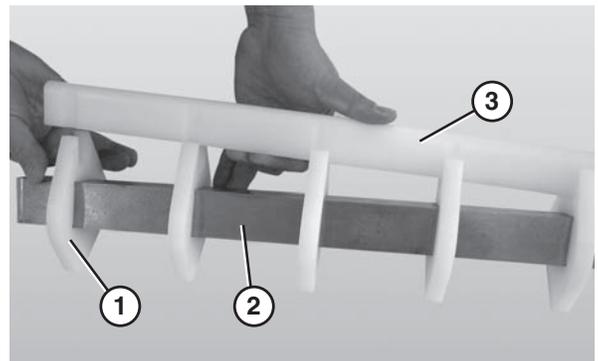


Figure 60

4. Slide the nose bar pucks (**Figure 60, item 1**) off the nose bar shaft (**Figure 60, item 2**).

Preventive Maintenance and Adjustment

Reassembling Tail Assemblies

Refer to the "Service Parts" section starting on page 26 for complete diagrams and lists of all tail assembly components.

Nose Bar Idler

1. Slide the nose bar pucks (Figure 61, item 1) onto the nose bar drive post (Figure 61, item 2).

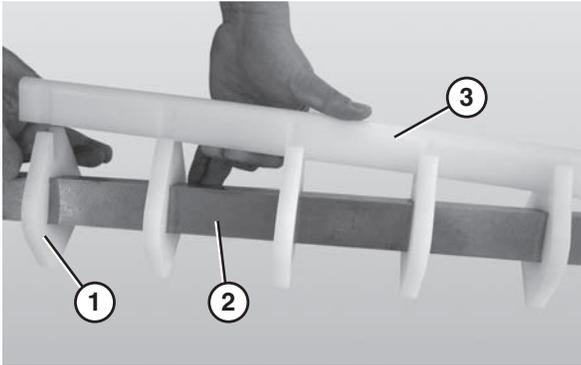


Figure 61

2. Attach the nose bar wear strip (Figure 61, item 3).
3. Attach the nose bar tracking pucks (Figure 62, item 1) to the nose bar drive post (Figure 62, item 2).

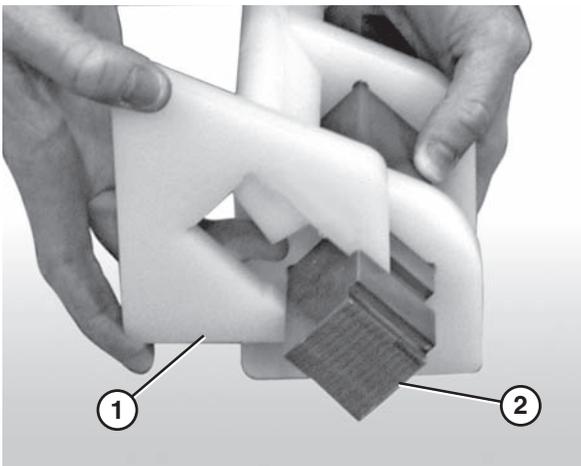


Figure 62

4. After all tracking pucks (Figure 63, item 3) are installed, slide the nose bar drive or transfer post (Figure 63, item 1) into the nose bar drive weldment or idler hands (Figure 63, item 2).

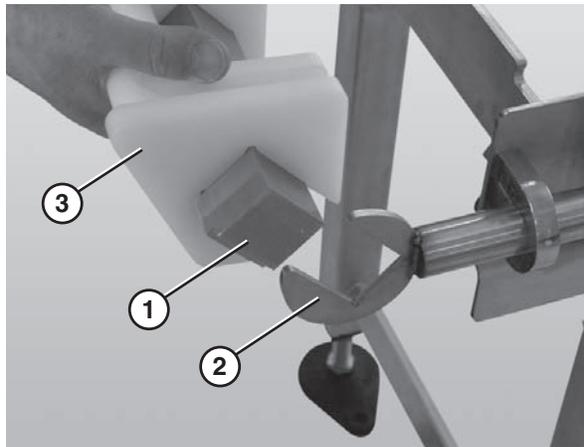


Figure 63

Idler Tail

1. Place the pucks (Figure 64, item 1) into the slots (Figure 64, item 2) of alignment bar (Figure 64, item 3), and install onto the idler shaft (Figure 64, item 4).

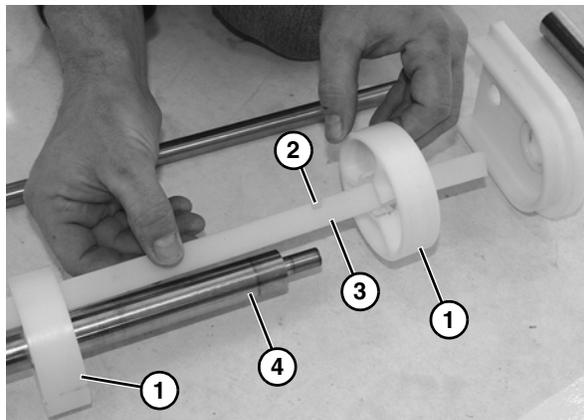


Figure 64

Preventive Maintenance and Adjustment

- Slide all the idler pucks (Figure 65, item 1) along with alignment bar onto idler shaft (Figure 65, item 2).

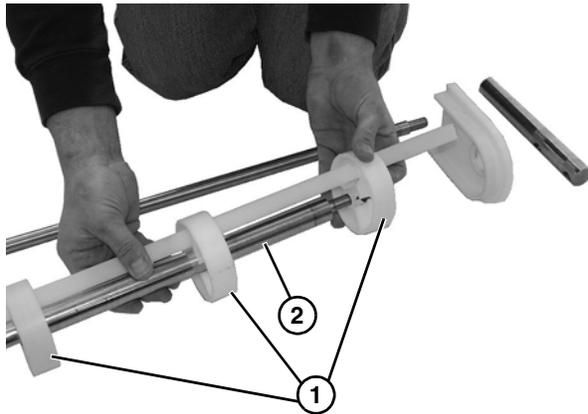


Figure 65

- Install the pinch guard (Figure 66, item 1) to each side onto idler shaft (Figure 66, item 2) and pinch guard shaft (Figure 66, item 3).

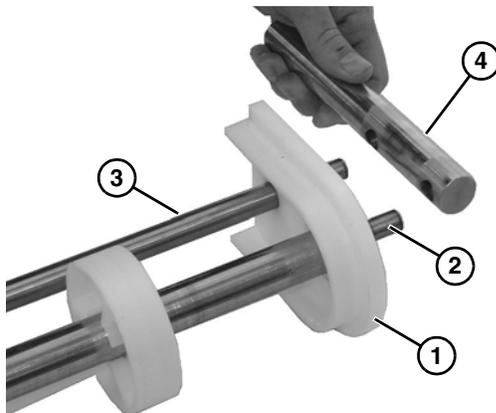


Figure 66

- Install the bearing end rod (Figure 66, item 4) onto idler shaft (Figure 66, item 2) and rod (Figure 66, item 3).

Drive Tail Assembly

- Slide the first sprocket (Figure 67, item 1) onto the drive spindle (Figure 67, item 2).

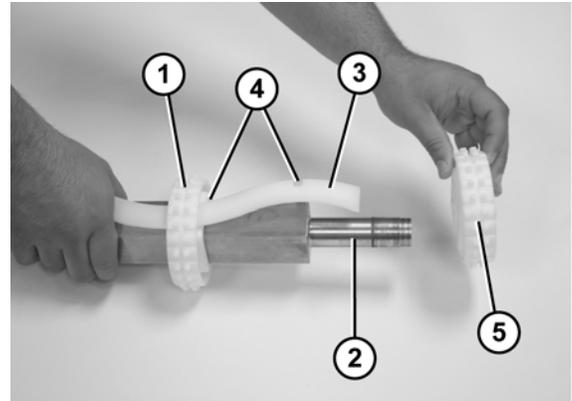


Figure 67

- Insert the sprocket alignment bar (Figure 67, item 3) into the first sprocket and align the sprocket with the notch (Figure 67, item 4) in the sprocket alignment bar.
- Slide the remaining sprockets (Figure 67, item 5) onto drive spindle and align each sprocket with the notches (Figure 67, item 4) in the sprocket alignment bar.
- Attach the flanged pucks (Figure 68, item 1) and the 3 hole flange with bearing (Figure 68, item 2) to the drive spindle.

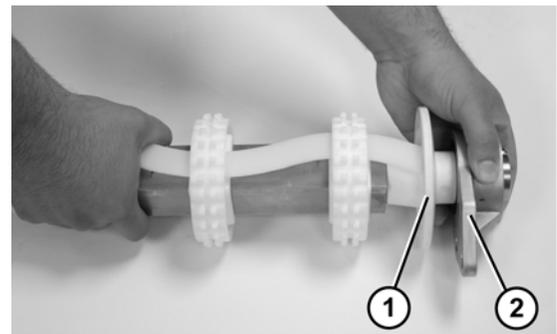


Figure 68

Preventive Maintenance and Adjustment

5. Tighten the 3 hole flange with bearing fasteners (**Figure 69, item 1**) using a hex wrench (**Figure 69, item 2**) to 6 N•m (54 in•lbs). Check after 24 hours of conveyor use.

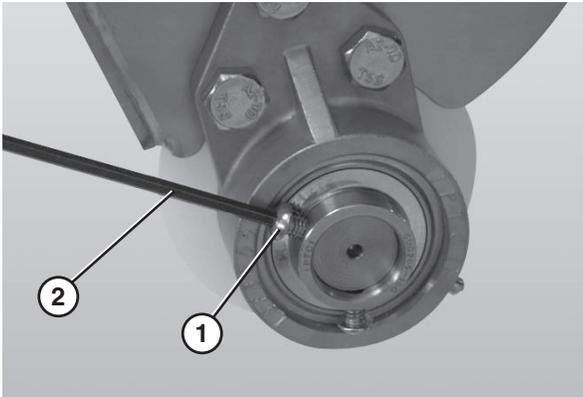


Figure 69

Bearing Replacement

1. Secure the bearing shaft in the take up blocks.
2. Insert the rod end of a second bearing shaft through the bearing (**Figure 70**).

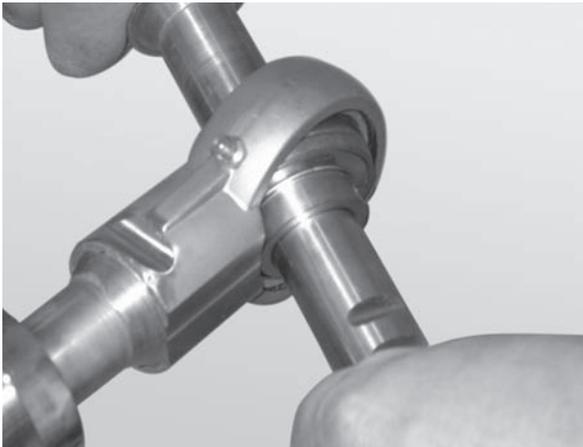


Figure 70

3. Apply lateral pressure to the rod until the bearing comes loose.

4. Remove the worn or damaged bearing (**Figure 71**).

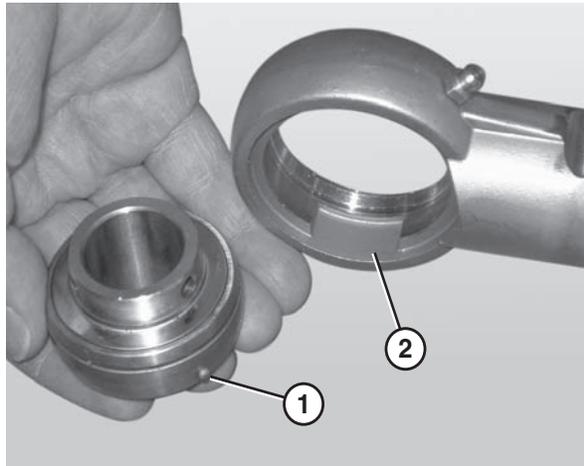


Figure 71

5. Replace the bearing.

NOTE

*When inserting the new bearing, make sure the anti-rotation notch (**Figure 71, item 1**) on the bearing lines up with the groove inside the housing (**Figure 71, item 2**).*

LPZ Knuckles

Wearstrips and Belt Returns

Replace the wearstrips and belt returns if they become worn.

For wearstrip and belt return installation instructions:

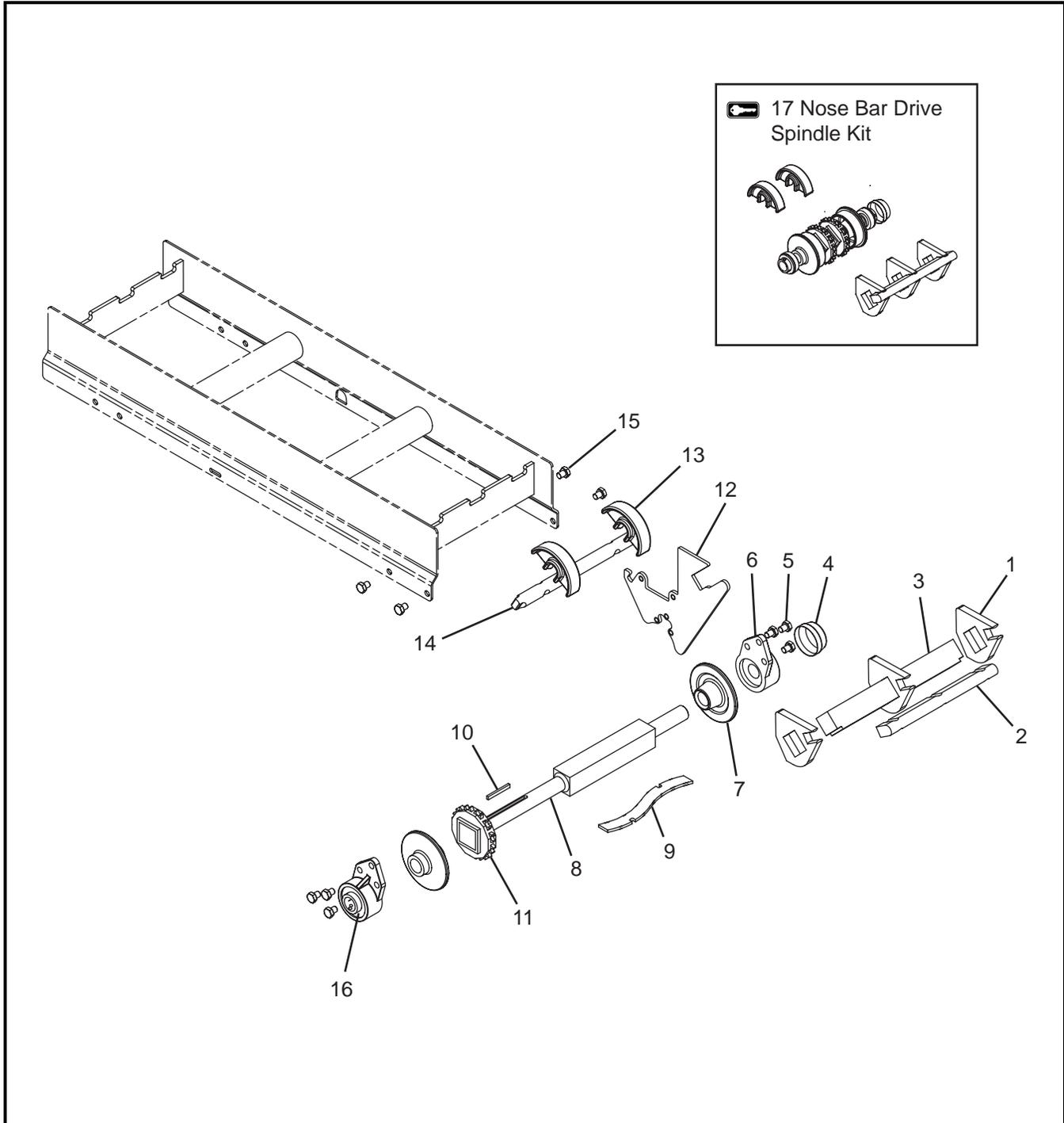
- For wearstrips, replace as needed, making sure wear strips are situated securely in the frame slots.
- For belt returns, Refer to “Belt Return Installation” on page 14.

Service Parts

NOTE

For replacement parts other than those shown in this section, contact an authorized *Dorner Service Center* or the factory. Key Service Parts and Kits are identified by the Performance Parts Kits logo . Dorner recommends keeping these parts on hand.

Nose Bar Drive End Components



Service Parts

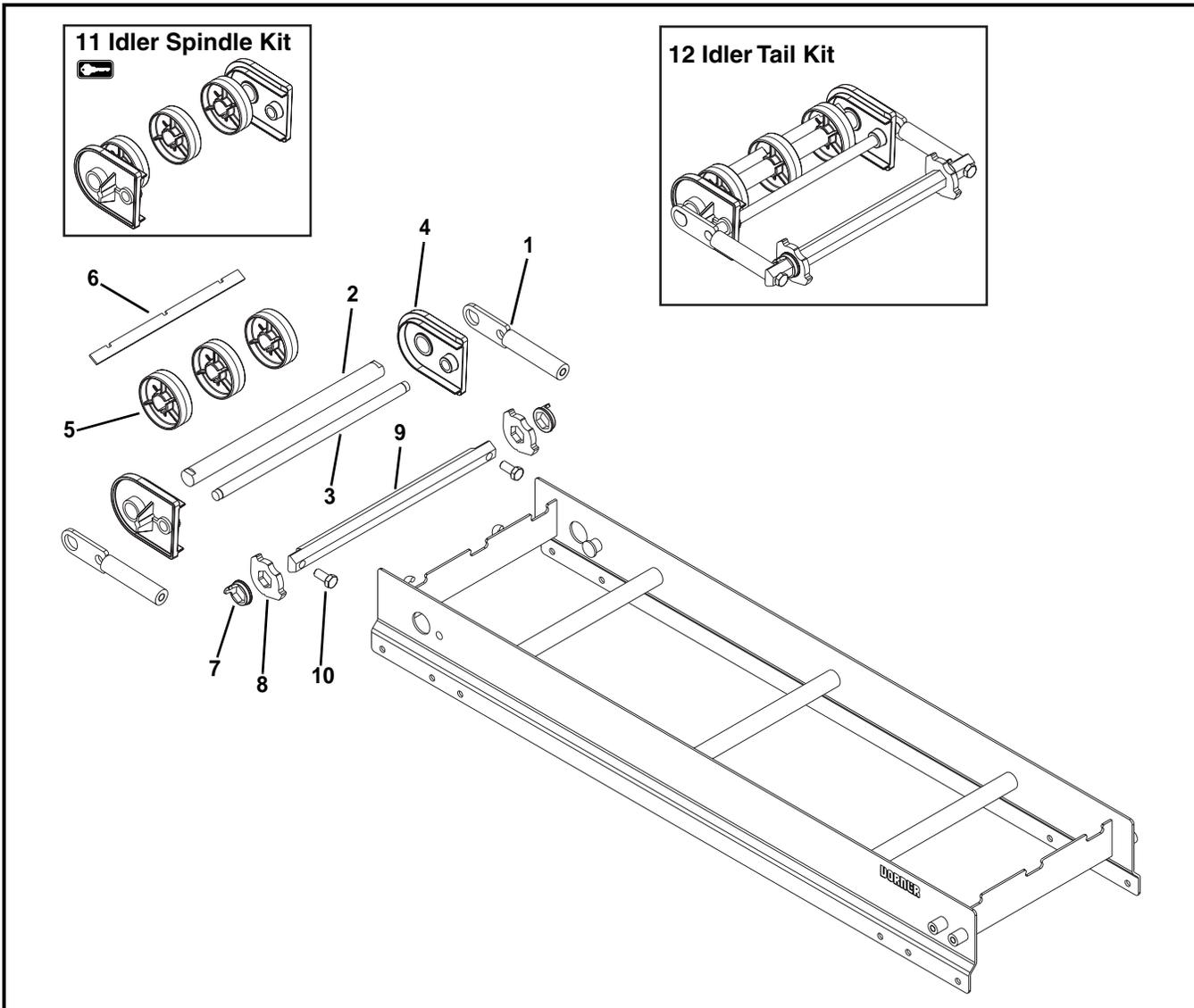
Item	Part Number	Description
1	500278	Nose Bar Puck
2	<u>5055WW</u>	.5" Pitch Nose Bar Wear Strip
	<u>5057WW</u>	1" Pitch Nose Bar Wear Strip
3	<u>5038WW</u>	Nose Bar Drive Post
4	807-1454	Cover
5	961016MSS	Hex Head Cap Screw M10-1.5x16mm
6	500288	3 Hole Flange with Bearing
7	<u>5053WW</u>	Flange Puck for Standard Belt
	<u>5071WW</u>	Flange Puck for Specialty Intralox Belt
8	<u>5015WW</u>	Drive Spindle for Standard Belt
	<u>5070WW</u>	Drive Spindle for Specialty Intralox Belt
	<u>5295WW</u>	CE Drive Spindle for Standard Belt
	<u>5294WW</u>	CE Drive Spindle for Specialty Intralox Belt
9	<u>5086WW</u>	Sprocket Alignment Bar for Standard .50" Pitch Belt
	<u>5087WW</u>	Sprocket Alignment Bar for Specialty Intralox .60" Pitch Belt
10	912-111SS	Square Key .25" x 2.50"
11	807-1443	Sprocket for Standard .50" Pitch Belt
	807-1446	Sprocket for Specialty Intralox .60" Pitch Belt
12	500279	Nose Bar Drive Plate
13	500075	Chain Return
14	<u>5039WW</u>	Return Shaft
15	961012MSS	Hex Head Cap Screw M10-1.5x12mm
16	802-162	Bearing
17	<u>74NBDD12-WW</u>	Nose Bar Drive Spindle Kit with a Dorner Gearmotor Mounting Package for Standard .50" Pitch Belt (Includes Items 1, 2, 4, 7, 11, 13 and 16)
	<u>74NBDD11-WW</u>	Nose Bar Drive Spindle Kit with a Dorner Gearmotor Mounting Package for Specialty Intralox .60" Pitch Belt (Includes Items 1, 2, 4, 7, 11, 13 and 16)
	<u>74NBDC12-WW</u>	Nose Bar Drive Spindle Kit without a Dorner Gearmotor Mounting Package for Standard .50" Pitch Belt (Includes Items 1, 2, 4, 7, 11, 13 and 16)
	<u>74NBDC11-WW</u>	Nose Bar Drive Spindle Kit without a Dorner Gearmotor Mounting Package for Specialty Intralox .60" Pitch Belt (Includes Items 1, 2, 4, 7, 11, 13 and 16)

WW = Conveyor width ref: 06 - 60 in 02 increments

Sprocket Quantity (Item 11)	
Width	Sprocket Quantity
6" (152mm)	2
8" (203mm)	2
10" (254mm)	3
12" (305mm)	3
14" (356mm)	4
16" (406mm)	4
18" (457mm)	5
20" (508mm)	5
22" (559mm)	6
24" (610mm)	6
26" (660mm)	7
28" (711mm)	7
30" (762mm)	8
32" (813mm)	8
34" (864mm)	9
36" (914mm)	9
38" (965mm)	10
40" (1016mm)	10
42" (1067mm)	11
44" (1118mm)	11
46" (1168mm)	12
48" (1219mm)	12
50" (1270mm)	13
52" (1321mm)	13
54" (1372mm)	14
56" (1422mm)	14
58" (1473mm)	15
60" (1524mm)	15

Service Parts

Tension End Components

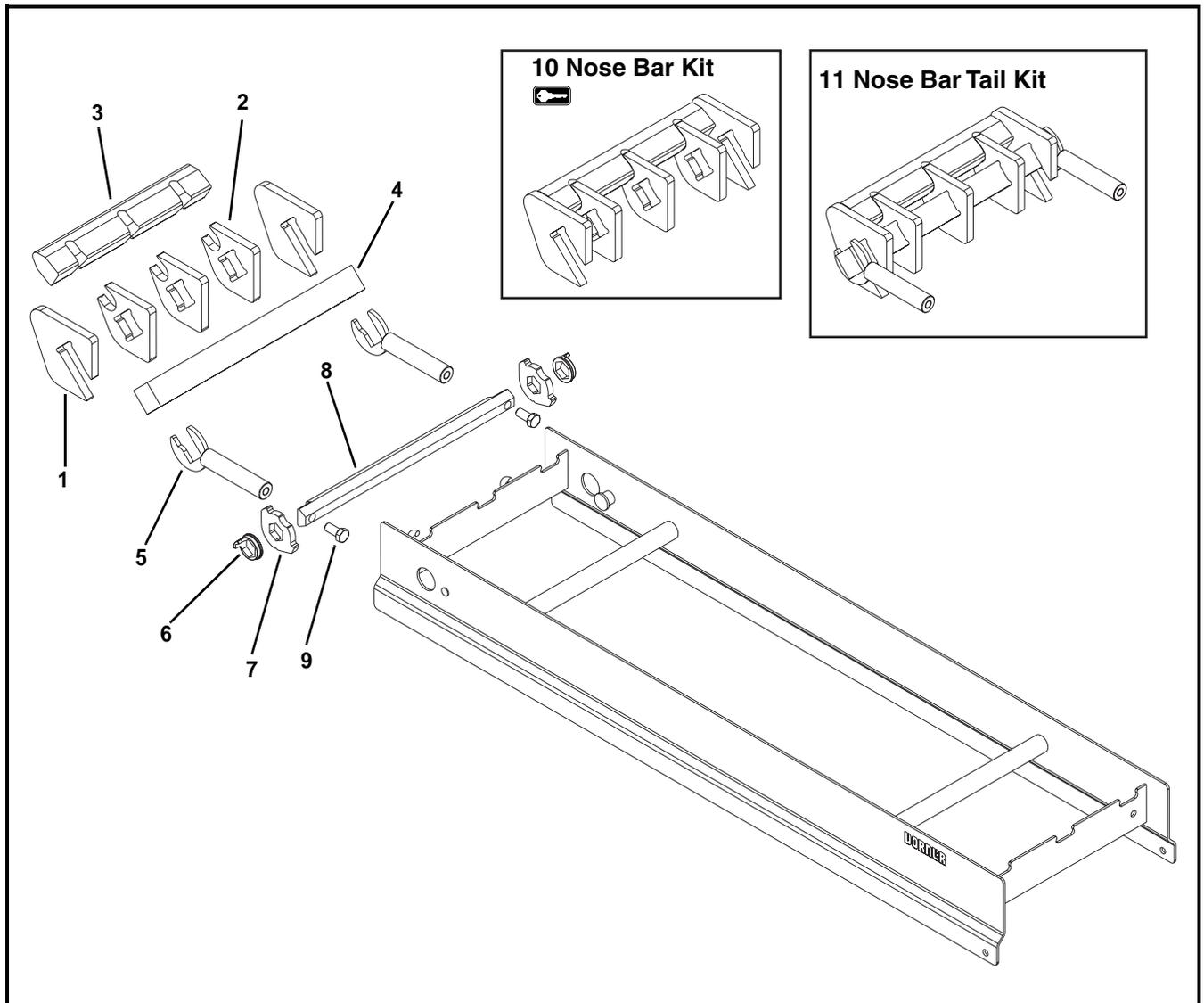


Item	Part Number	Description
1	506801	Shaft Assembly
2	506397- <u>WW</u>	Idler Shaft
3	506396- <u>WW</u>	Pinch Guard Shaft
4	506327- <u>WW</u>	Tracking Plate for Standard Belt
	506332- <u>WW</u>	Tracking Plate for Specialty Intralox Belt
5	506297	Idler Puck
6	506313- <u>WW</u>	Alignment Bar for Standard Belt
	506314- <u>WW</u>	Alignment Bar for Specialty Intralox Belt

Item	Part Number	Description
7	506307	Tip Up Sleeve
8	506356	Stop Key
9	506328- <u>WW</u>	Hex Bar
10	961225MSS	Hex Head Cap Screw M12-1.75 x 25mm
11	74IX- <u>WW</u>	Idler Spindle Tail Kit for Standard Belt (Includes Items 4 and 5)
	74ISX- <u>WW</u>	Idler Spindle Tail Kit for Specialty Intralox Belt (Includes Items 4 and 5)
12	74ITX- <u>WW</u>	Idler Tail Kit for Standard Belt (Includes Items 1 through 10)
	74ITSX- <u>WW</u>	Idler Tail Kit for Specialty Intralox Belt (Includes Items 1 through 10)

WW = Conveyor width ref: 06 - 60 in 02 increments

Nose Bar Tension End



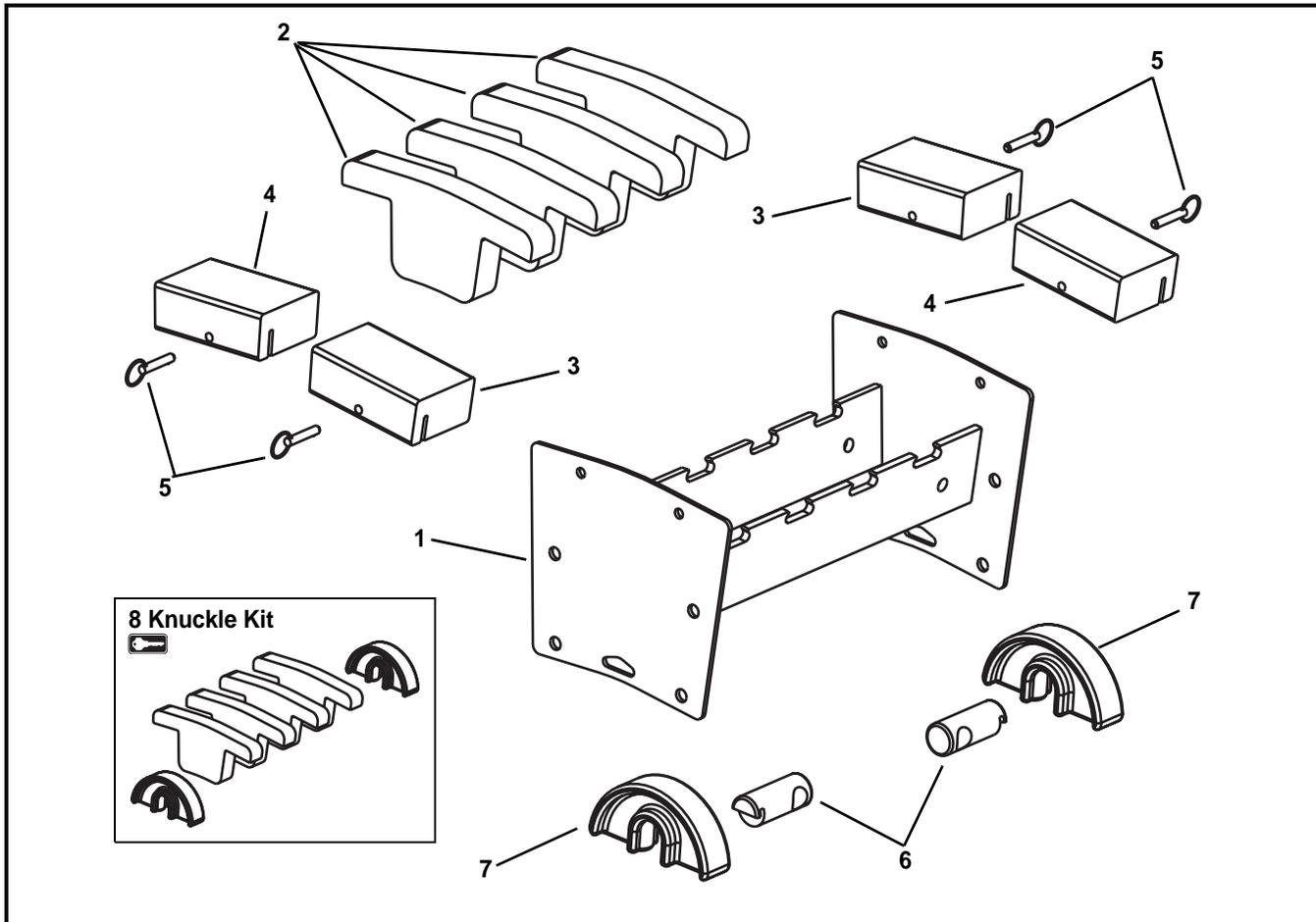
Item	Part Number	Description
1	500490	Nose Bar Tracking Puck
2	500278	Nose Bar Puck
3	5056WW	.5" Pitch Nose Bar Wear Strip
	5058WW	1" Pitch Nose Bar Wear Strip
4	5037WW	Nose Bar Transfer Post for Standard Belt
	5076WW	Nose Bar Transfer Post for Specialty Intralox Belt
5	506363	Nose Bar Idler Shaft
6	506307	Tip Up Sleeve
7	506356	Stop Key
8	506328-WW	Hex Bar
9	961225MSS	Hex Head Cap Screw M12-1.75 x 25mm

Item	Part Number	Description
10	74NB5X-WW	.5" Nose Bar Kit (Includes Items 1 through 3)
	74NB1X-WW	1" Nose Bar Kit (Includes Items 1 through 3)
11	74NBT5X-WW	.5" Nose Bar Tail Kit, for Standard Belt (Includes Items 1 through 5)
	74NBT1X-WW	1" Nose Bar Tail Kit, for Standard Belt (Includes Items 1 through 5)
	74NBT5X-WW	.5" Nose Bar Tail Kit, for Specialty Intralox Belt (Includes Items 1 through 5)
	74NBT1SX-WW	1" Nose Bar Tail Kit, for Specialty Intralox Belt (Includes Items 1 through 5)

WW = Conveyor width ref: 06 - 60 in 02 increments

Service Parts

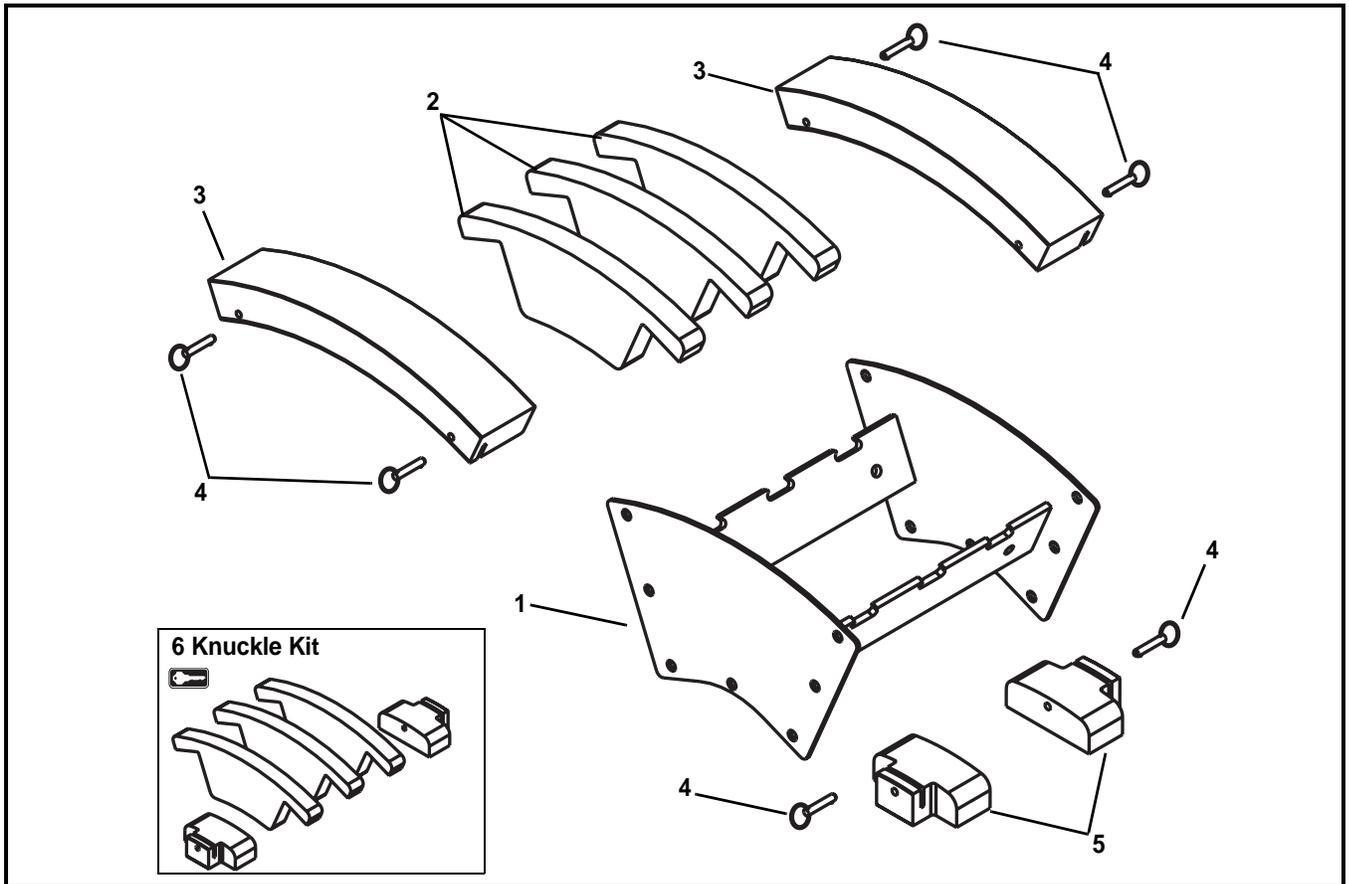
Upper Knuckle for 5° - 15°



Item	Part Number	Description
1	5224WW	Frame Assembly for 5° Knuckle
	5225WW	Frame Assembly for 10° Knuckle
	5226WW	Frame Assembly for 15° Knuckle
2	501695-AA	Wear Strips for 5° - 15° Knuckle
3	501893-AA	1.5" Hold Down Guide for 5° - 15° Knuckle Right Hand 6"-16" wide
	501685-AA	1.5" Hold Down Guide for 5° - 15° Knuckle Right Hand 18"-24" wide
	501883-AA	3" Hold Down Guide for 5° - 15° Knuckle Right Hand 6"-16" wide
	501684-AA	3" Hold Down Guide for 5° - 15° Knuckle Right Hand 18"-24" wide

Item	Part Number	Description
4	501699-AA	1.5" Hold Down Guide for 5° - 15° Knuckle Left Hand 6"-16" wide
	501687-AA	1.5" Hold Down Guide for 5° - 15° Knuckle Left Hand 18"-24" wide
	501698-AA	3" Hold Down Guide for 5° - 15° Knuckle Left Hand 6"-16" wide
	501686-AA	3" Hold Down Guide for 5° - 15° Knuckle Left Hand 18"-24" wide
5	807-1553	Pull Pin
6	500196	Return Shaft
7	500075	Return Shoe
8	74UKL-WW-AA	Upper Knuckle Kit (Includes items 2 and 7)
WW = Conveyor width ref: 06 - 24 in 02 increments		
AA = Angle 05, 10 or 15		

Upper Knuckle for 30°

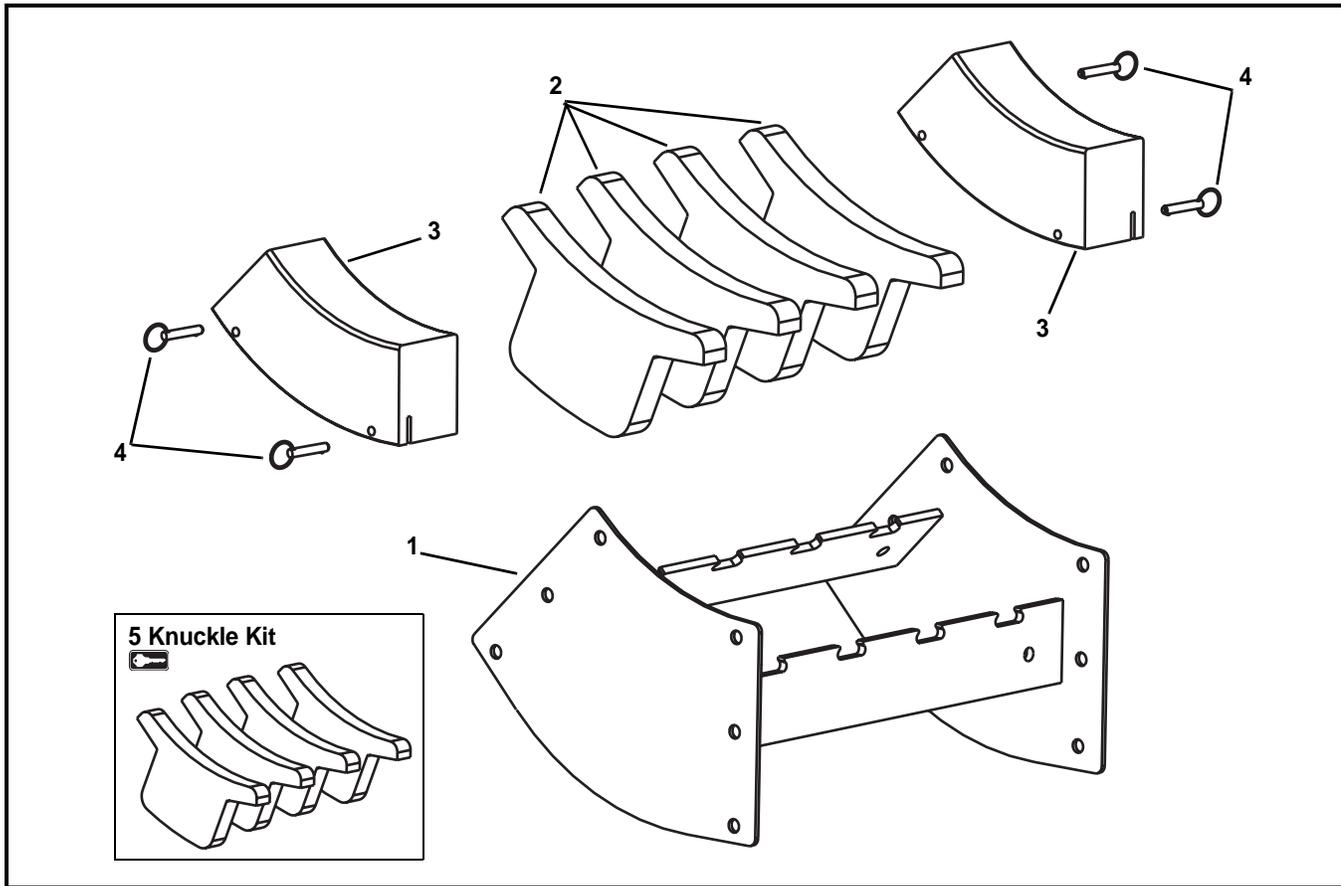


Item	Part Number	Description
1	5227 \overline{WW}	Frame Assembly for 30° Knuckle
2	501693-30	Wear Strips for 30° Knuckle
3	501697-30	1.5" Hold Down Guide for 30° Knuckle
	501879-30	3" Hold Down Guide for 30° Knuckle

Item	Part Number	Description
4	807-1553	Pull Pin
5	501683	Return Guide
6	74UKH- \overline{WW} -30	Upper Knuckle Kit (Includes items 2 and 5)
\overline{WW} = Conveyor width ref: 06 - 24 in 02 increments		

Service Parts

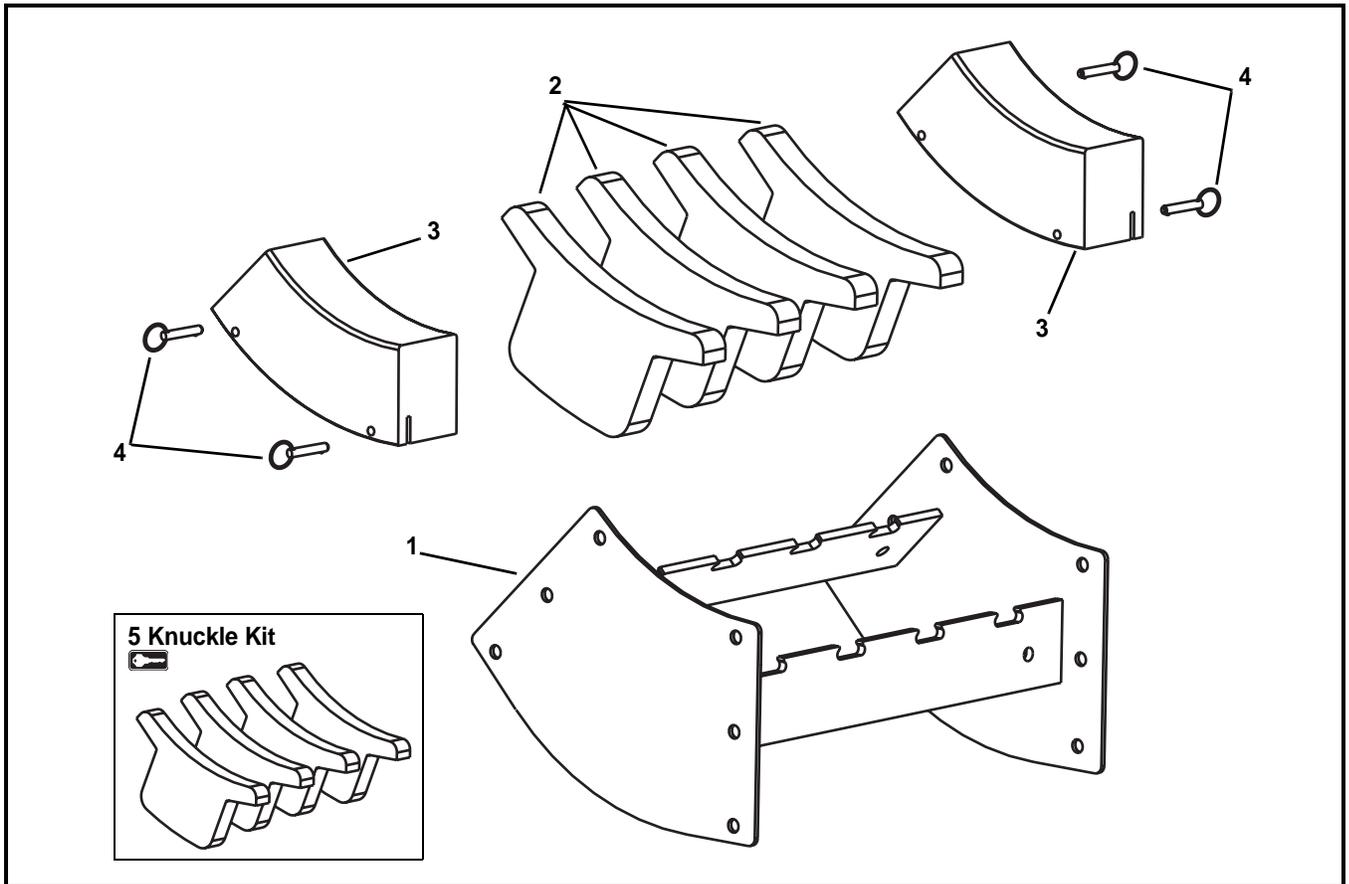
Lower Knuckle for 5° - 15°



Item	Part Number	Description
1	5218 <u>WW</u>	Frame Assembly for 5° Knuckle
	5219 <u>WW</u>	Frame Assembly for 10° Knuckle
	5220 <u>WW</u>	Frame Assembly for 15° Knuckle
2	501694- <u>AA</u>	Wear Strips for 5° - 15° Knuckle
3	501692- <u>AA</u>	1.5" Hold Down Guide for 5° - 15° Knuckle 6"-16" wide
	501974- <u>AA</u>	1.5" Hold Down Guide for 5° - 15° Knuckle 18"-24" wide
	501878- <u>AA</u>	3" Hold Down Guide for 5° - 15° Knuckle 6"-16" wide
	501973- <u>AA</u>	3" Hold Down Guide for 5° - 15° Knuckle 18"-24" wide

Item	Part Number	Description
4	807-1553	Pull Pin
5	74LKL- <u>WW</u> - <u>AA</u>	Lower Knuckle Kit (Includes item 2)
<u>WW</u> = Conveyor width ref: 06 - 24 in 02 increments		
<u>AA</u> = Angle 05, 10 or 15		

Lower Knuckle for 30°

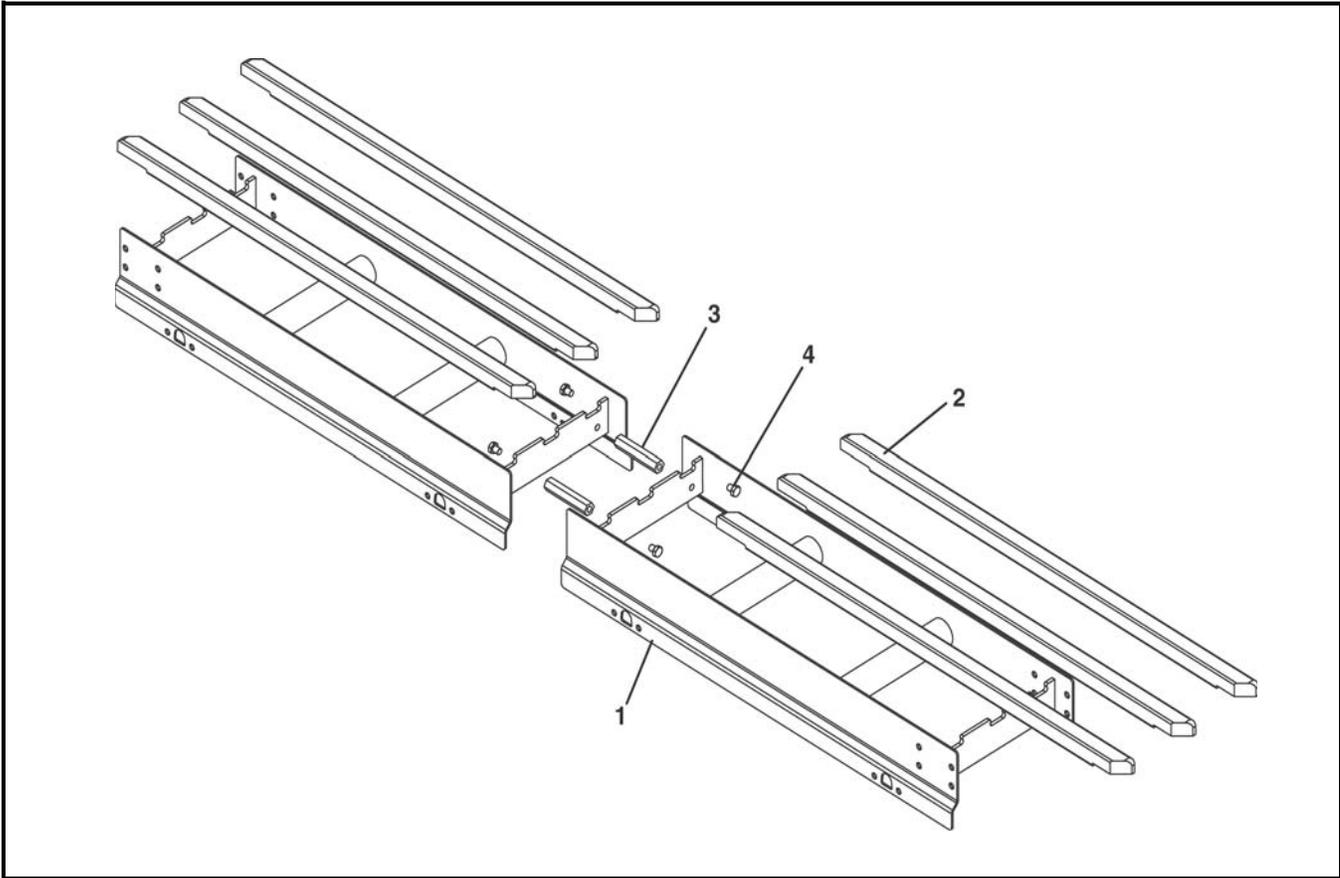


Item	Part Number	Description
1	5221 \underline{WW}	Frame Assembly for 30° Knuckle
2	501691-30	Wear Strips for 30° Knuckle
3	501692-30	1.5" Hold Down Guide, for 30° Knuckle
	501878-30	3" Hold Down Guide, for 30° Knuckle

Item	Part Number	Description
4	807-1553	Pull Pin
5	74LKH- \underline{WW} -30	Lower Knuckle Kit (Includes item 2)
\underline{WW} = Conveyor width ref: 06 - 24 in 02 increments		

Service Parts

Conveyor Frame and Extension



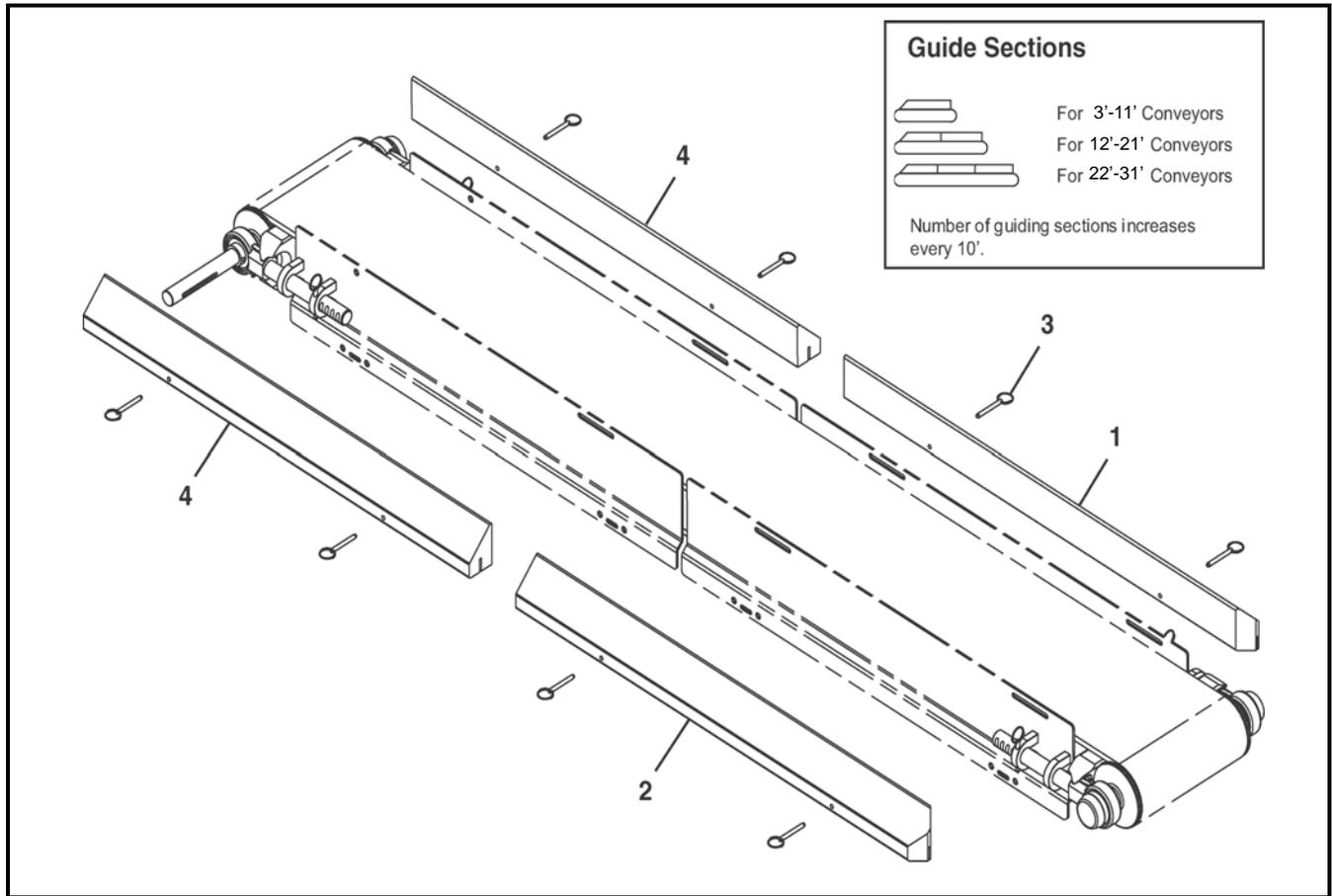
Item	Part Number	Description
1	-----	Consult Factory for Frame Part Number
2	501800-LLL	Straight Wear Strip
3	500193	Hex Post Connector
4	961016MSS	Hex Head Cap Screw M10-1.5x16mm

LLL = Conveyor length ref: 036 - 999 in 001 increments

		Wear Strip Quantity (Item 2)							
		Conveyor Length (LLL)							
		036-132	133-252	253-372	373-492	493-612	613-732	733-852	853-999
Conveyor Width (WWW)	06	2	4	6	8	10	12	14	16
	08	2	4	6	8	10	12	14	16
	10	3	6	9	12	15	18	21	24
	12	3	6	9	12	15	18	21	24
	14	3	6	9	12	15	18	21	24
	16	4	8	12	16	20	24	28	32
	18	4	8	12	16	20	24	28	32
	20	5	10	15	20	25	30	35	40
	22	5	10	15	20	25	30	35	40
	24	5	10	15	20	25	30	35	40

		Wear Strip Quantity (Item 2)							
		Conveyor Length (LLL)							
		036-132	133-252	253-372	373-492	493-612	613-732	733-852	853-999
Conveyor Width (WWW)	26	6	12	18	24	30	36	42	48
	28	6	12	18	24	30	36	42	48
	30	6	12	18	24	30	36	42	48
	32	7	14	21	28	35	42	49	56
	34	7	14	21	28	35	42	49	56
	36	8	16	24	32	40	48	56	64
	38	8	16	24	32	40	48	56	64
	40	8	16	24	32	40	48	56	64
	42	9	18	27	36	45	54	63	72
	44	9	18	27	36	45	54	63	72
	46	9	18	27	36	45	54	63	72
	48	10	20	30	40	50	60	70	80
	50	10	20	30	40	50	60	70	80
	52	11	22	33	44	55	66	77	88
	54	11	22	33	44	55	66	77	88
	56	11	22	33	44	55	66	77	88
58	12	24	36	48	60	72	84	96	
60	12	24	36	48	60	72	84	96	

3" (76 mm) High Sides

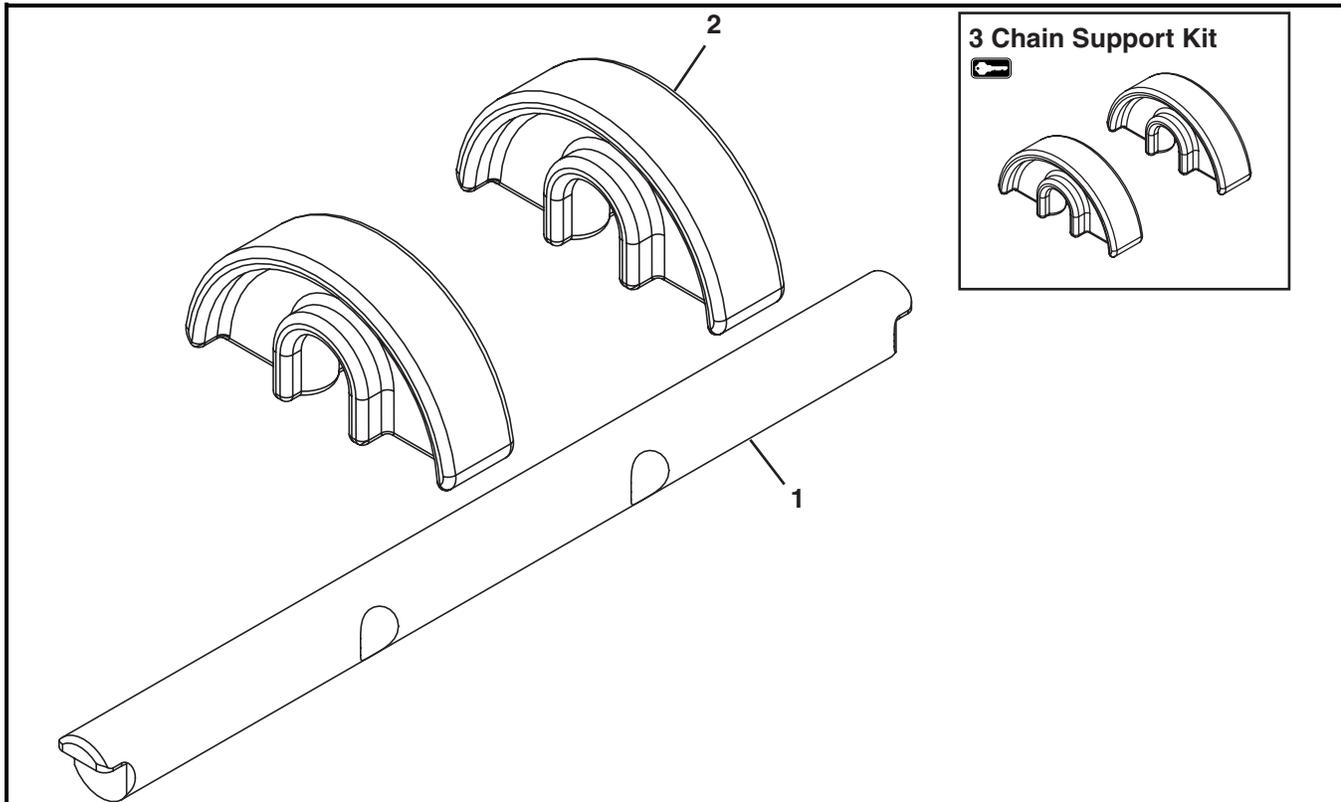


Item	Part Number	Description
1	503501- <u>LLLLL</u>	Right Hand High Side Guide
2	503601- <u>LLLLL</u>	Left Hand High Side Guide
3	807-1553	Pull Pin

Item	Part Number	Description
4	503401- <u>LLLLL</u>	Square End High Side Guide
<u>LLLLL</u> = Guide Length in inches with 2 decimal places.		
Example: Guide Length = 95.25" <u>LLLLL</u> = 09525		

Service Parts

Flat Belt Returns



Item	Part Number	Description
1	5032 <u>WW</u>	Return Shaft
2	500075	Chain Return Shoe

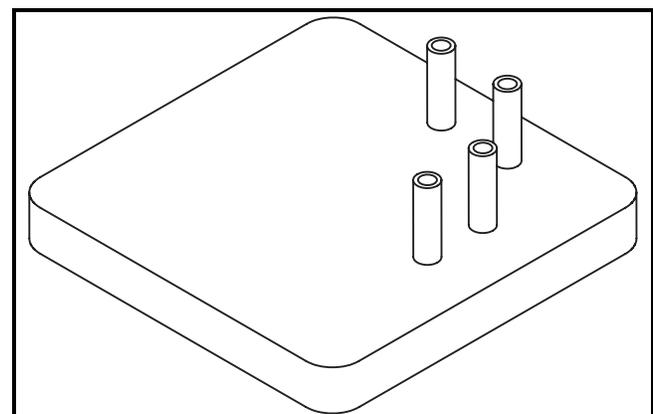
Item	Part Number	Description
3	74R- <u>WW</u>	Chain Support Kit (Includes Item 2)
<u>WW</u> = Conveyor width ref: 06 - 60 in 02 increments		

Flat Belt Chain Repair Kit



Item	Part Number	Description
1	74 <u>BB</u> - <u>WW</u>	Flat Belt Chain Repair Kit (Includes 1 ft (305 mm) of flat belt chain and assembly pins)
<u>BB</u> = Chain Reference Number		
<u>WW</u> = Conveyor width ref: 06 - 60 in 02 increments		

Belt Removal Tool



Item	Part Number	Description
1	500582	Tool Rod Removal for 1" Pitch Flush Grid Belt
	500494	Tool Rod Removal for 1/2" Pitch Flush Grid Belt

Ordering a Replacement Chain

Determine the length of chain required for the conveyor and round up to the nearest foot length. Order the proper number of chain repair kits (1' long each) for your conveyor. Dorner will ship chain kits that are of a reasonable length fully assembled.

Example:

Overall chain length = 42' 5" (rounded up = 43')

Order: Qty (43) of 74BB-WW

BB = Chain reference number

WW = Conveyor width ref: 06 - 60 in 02 increments

Configuring a Conveyor Part Number

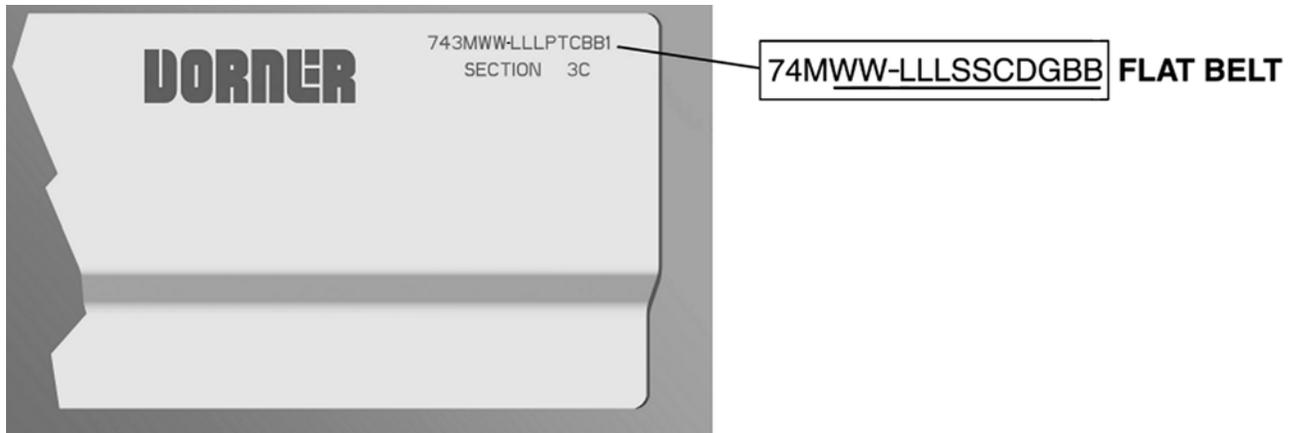


Figure 72

Flat Belt Conveyor

Refer to the model number on the conveyor frame (Figure 72). From the model number, determine conveyor width (WW), length (LLL), drive stand location (S), idler stand location (S), cleaning options (C), drive/pulley type (D), profile (G) and belt material (BB).

Example:

74M12-072CC1NA10

7400 Series end drive, cleated belt conveyor, 12" (305 mm) wide x 72" (1829 mm) long, stands located 18" (457 mm) from each end, frame cutout cleaning option, NA cleated belt material, side drive with standard pulleys on each end, and 10 link spacing for cleats.

Return Policy

Returns must have prior written factory authorization or they will not be accepted. Items that are returned to Dorner without authorization will not be credited nor returned to the original sender. When calling for authorization, please have the following information ready for the Dorner factory representative or your local distributor:

1. Name and address of customer.
2. Dorner part number(s) of item(s) being returned.
3. Reason for return.
4. Customer's original order number used when ordering the item(s).
5. Dorner or distributor invoice number (if available, part serial number).

A representative will discuss action to be taken on the returned items and provide a Returned Goods Authorization (RMA) number for reference. RMA will automatically close 30 days after being issued. To get credit, items must be new and undamaged. There will be a return charge on all items returned for credit, where Dorner was not at fault. It is the customer's responsibility to prevent damage during return shipping. Damaged or modified items will not be accepted. The customer is responsible for return freight.

Conveyors and conveyor accessories

Standard catalog conveyors	30%
MPB, 7200, 7300 Series, cleated and specialty belt	50%
AquaGard & AquaPruf Series conveyors	non-returnable items
Engineered to order products	case by case
Drives and accessories	30%
Sanitary stand supports	non-returnable items

Parts

Standard stock parts	30%
Plastic chain, cleated and specialty belts	non-returnable items

Returns will not be accepted after 60 days from original invoice date. The return charge covers inspection, cleaning, disassembly, disposal and reissuing of components to inventory. If a replacement is needed prior to evaluation of returned item, a purchase order must be issued. Credit (if any) is issued only after return and evaluation is complete.

Dorner has representatives throughout the world. Contact Dorner for the name of your local representative. Our Customer Service Team will gladly help with your questions on Dorner products.

For a copy of Dorner's Warranty, contact factory, distributor, service center or visit our website at www.dorner.com.

For replacement parts, contact an authorized Dorner Service Center or the factory.



Dorner Mfg. Corp. reserves the right to change or discontinue products without notice. All products and services are covered in accordance with our standard warranty. All rights reserved. © Dorner Mfg. Corp. 2009

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