



7400 Series Curved 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.

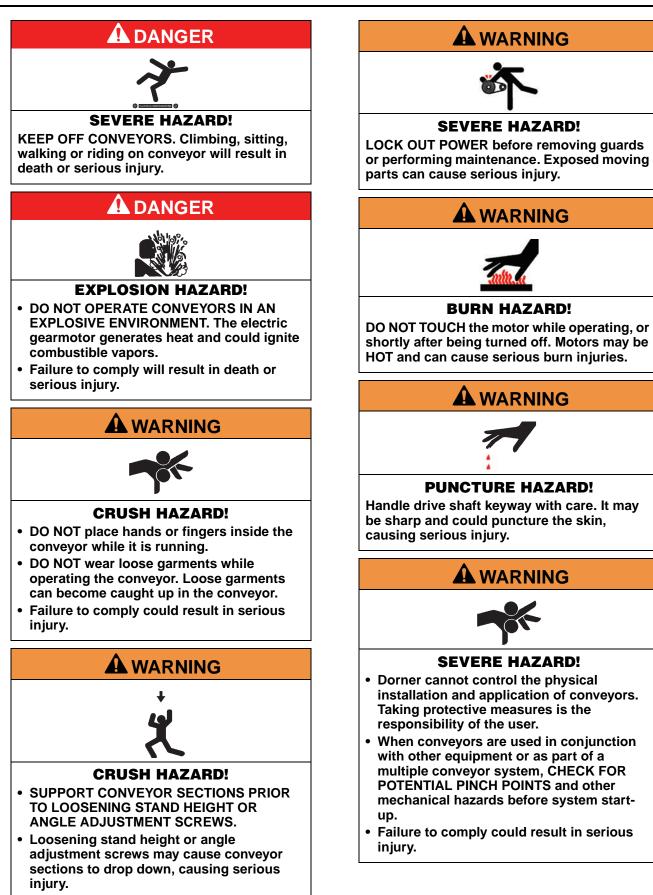
Dorner 7400 Series conveyors have patents pending.

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



Product Description

Refer to (Figure 1) for typical conveyor components.

Typical Components

- Conveyor
 Gearmotor
 Belt
 Return
 Support Stands
 Motor Controller
- 7 Drive End
- 8 Tension End



Specifications

Specifications

Conveyor Width Reference (WW)	08 – 36 in 02 increments
Conveyor Belt Width	8" (203 mm) – 36" (914 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	150 ft / minute (45 m / minute)
Belt Take-up	2" (51 mm)
Conveyor Length Reference (LLL)	020 – 999 in 001 increments

Conveyor Length

20" (508 mm) – 999" (25.4 mm) in 1" (25 mm) increments

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

Specifications

Conveyor Supports

Maximum Distances:

- 1 (Infeed) = 3 ft (914 mm)
- 2 (Outfeed) = 3 ft (914 mm)
- ** Stand positions will be determined by the factory.

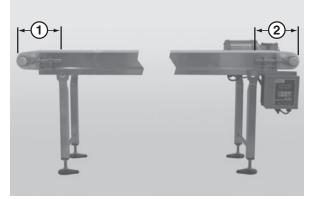
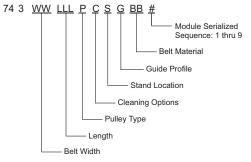


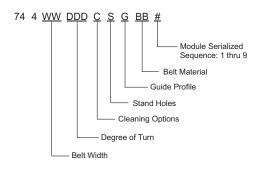
Figure 2

7400 Series Frame Section Numbers

Straight Infeed / Idler Module

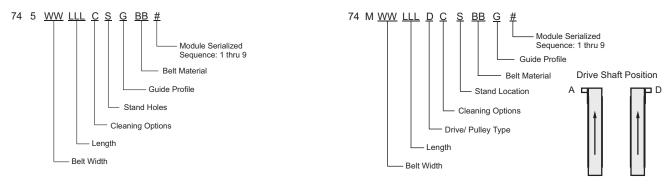


Curve Module



Straight Exit / Drive Module

Straight Intermediate Module



* Refer to "Ordering and Specifications" Catalog for details.

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. Connect the frame sections together. "Frame Section Connection" on page 6.
- 2. Attach the stands to the conveyor. Refer to "Stand Installation" on page 7.
- 3. Attach the tail assemblies to the frame. Refer to "Tail Assembly Installation" on page 8.
- 4. Attach the lifters, if applicable. Refer to "Lifter Installation" on page 12.
- 5. Install the gearmotor, if applicable. Refer to the "7400 Series Drive Package Installation, Maintenance and Parts Manual."
- 6. Attach the wear strips. Refer to "Wear Strip Installation" on page 12.
- 7. Attach the belt returns. Refer to "Belt Return Installation - Straight Frame Sections" on page 16.
- 8. Install the belt. Refer to "Belt Installation" on page 14.

9. Attach any guides / accessories. Refer to the "Service Parts" section starting on page 30.

Conveyor Installation

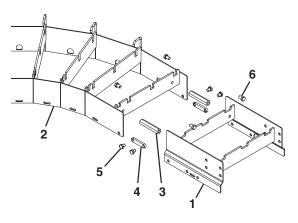
Frame Section Connection

Typical Connection Components (Figure 4)

- 1 Conveyor frame section
- Curved conveyor frame section 2
- 3 Hex post connector (x2)
- 4 Flat connector (x2)*
- 5 M10 - 1.5 x 12 mm hex head cap screw (x4)*
- 6 M10 - 1.5 x 16 mm hex head cap screw (x4)

* For connections not supported by stands.

Figure 4





1. Locate the section number sequence etched on each section of frame (Figure 6, item 1).

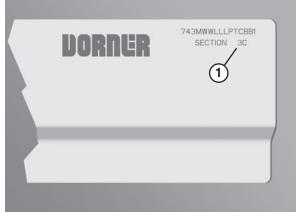


Figure 6

2. Position the frame sections in the correct order (**Figure 7**).

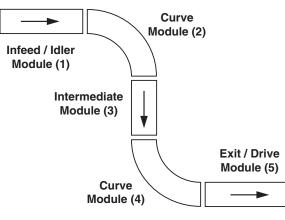
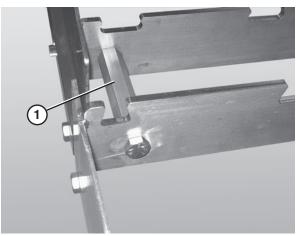


Figure 7

3. Connect the frame sections by bolting the hex post connectors (**Figure 8, item 1**) to the cross member supports of each frame section.





4. Attach the flat connectors (**Figure 9**, item 1), if applicable, to the inside of the frame sections.

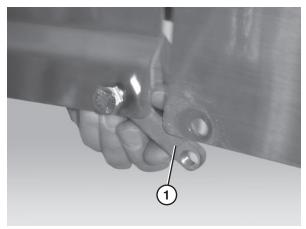


Figure 9

Stand Installation

Typical Stand Components (Figure 10)

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

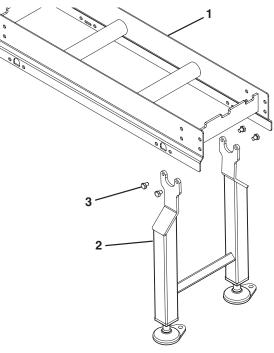


Figure 10

- 1. Position the stands on a flat, level surface.
- 2. Attach the stands to the frame (Figure 11).



Figure 11

Tail Assembly Installation

Nose Bar Drive Tail

Typical Nose Bar Drive Tail Components (Figure 12)

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

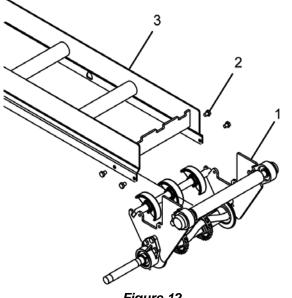


Figure 12

1. Bolt the nose bar drive tail assembly to the conveyor frame (Figure 13).

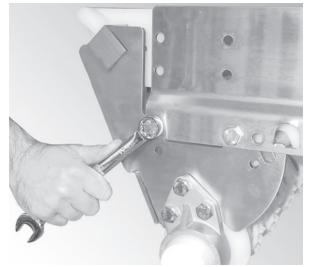


Figure 13

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

Nose Bar Idler Tail

Typical Nose Bar Idler Tail Components (Figure 14)

- 1 Nose bar idler tail assembly
- 2 Pull pin (x2)
- 3 Conveyor frame

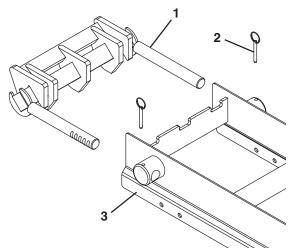


Figure 14

- 1. Slide the nose bar idler shaft hands (Figure 15, item 1) into the take up blocks (Figure 15, item 2).
- 2. Attach the nose bar transfer post (Figure 15, item 3) to the nose bar idler shaft hands.

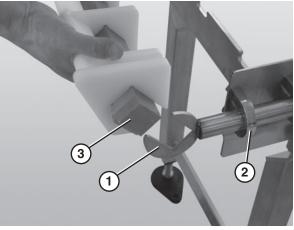


Figure 15

3. Ensure that the nose bar pucks (Figure 16, item 1) are in line with the conveyor frame (Figure 16, item 2).

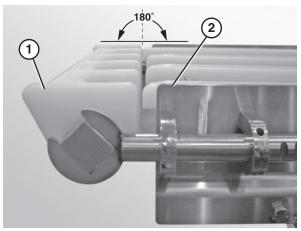


Figure 16

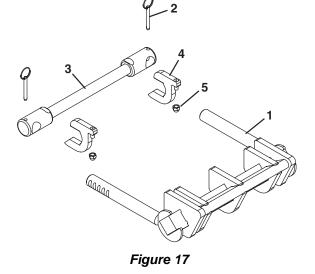
NOTE

Do not insert the pull pins on the tension end of the conveyor until the belt has been installed.

Nose Bar Tip Up Tail

Typical Nose Bar Tip Up Tail Components (Figure 17)

- 1 Tip up tail assembly
- 2 Pull pin (x2)
- 3 Tip up shaft
- 4 Key stops (x2)
- 5 M10 1.5 mm acorn nut (x2)



1. Slide the tip up shaft (**Figure 18, item 1**) through the designated slots in the frame.

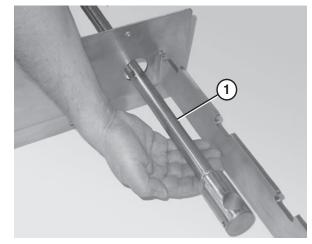


Figure 18

2. Attach the key stops (**Figure 19, item 1**) to the tip up shaft (**Figure 19, item 2**). The rounded end of the key stop should face the tail.

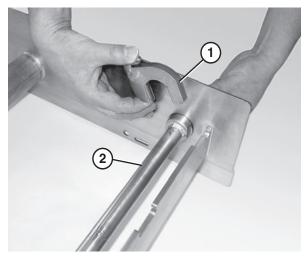


Figure 19

 Attach the nose bar idler shaft hands (Figure 20, item 1) to the tip up shaft (Figure 20, item 2).

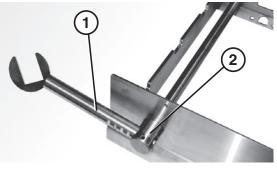


Figure 20

4. Attach the nose bar transfer post (**Figure 21, item 1**) to the nose bar idler shaft hands (**Figure 21, item 2**).

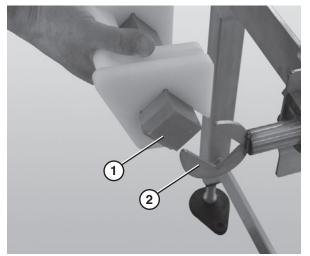


Figure 21

5. Ensure that the nose bar pucks (**Figure 22, item 1**) are in line with the conveyor frame (**Figure 22, item 2**).

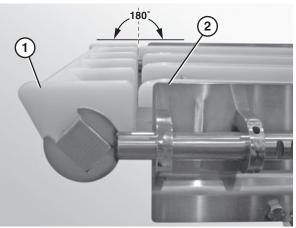


Figure 22

NOTE

Do not insert the pull pins on the tension end of the conveyor until the belt has been installed.

NOTE

Adjust the acorn nuts (Figure 17, item 5) on the key stops (Figure 17, item 4) to raise or lower the tip up tail assembly.

Idler Tail

Typical Idler Tail Conponents (Figure 23)

- 1 Idler tail assembly
- 2 Pull pin (x2)
- 3 Conveyor frame

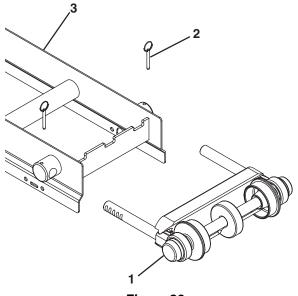


Figure 23

1. Slide the bearing shafts (Figure 24, item 1) into the take up blocks (Figure 24, item 2).

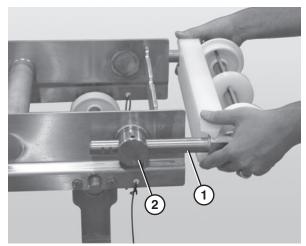


Figure 24

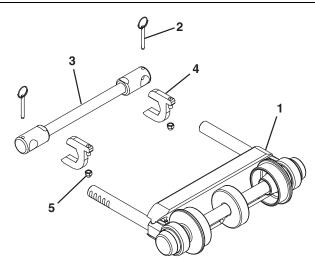
NOTE

Do not insert the pull pins on the tension end of the conveyor until the belt has been installed.

Tip Up Tail

Typical Tip Up Tail Components (Figure 25)

- 1 Tip up tail assembly
- 2 Pull pin (x2)
- 3 Tip up shaft
- 4 Key stops (x2)
- 5 M10 1.5 mm acorn nut (x2)



2. Attach the key stops (**Figure 27, item 1**) to the tip up shaft (**Figure 27, item 2**). The rounded end of the key stop should be facing the tail.

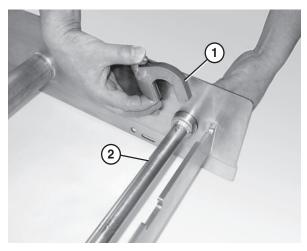


Figure 27

3. Slide the bearing shafts (**Figure 28, item 1**) into the holes in the tip up shaft (**Figure 28, item 2**).

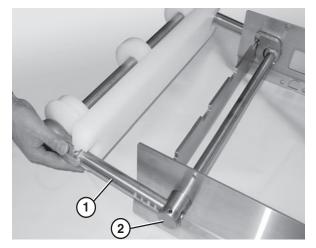


Figure 28

NOTE

Do not insert the pull pins on the tension end of the conveyor until the belt has been installed.

NOTE

Adjust the acorn nuts (Figure 25, item 5) on the key stops (Figure 25, item 4) to raise or lower the tip up tail assembly.

Figure 25

1. Slide the tip up shaft (**Figure 26, item 1**) through the designated slots in the frame.

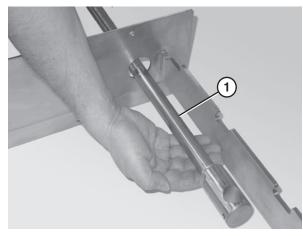


Figure 26

Lifter Installation

Typical Lifter Components (Figure 29)

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

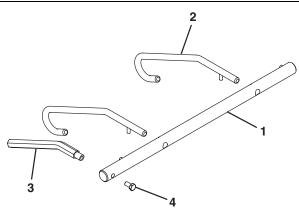


Figure 29

1. Slide the belt lift pivot bar (**Figure 30, item 1**) through the designated holes in the frame.

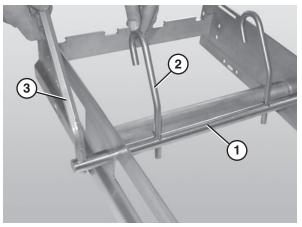


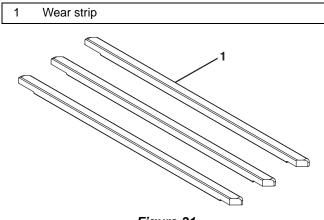
Figure 30

- 2. Attach the lifter bars (**Figure 30, item 2**) to the belt lift pivot bar (**Figure 30, 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 30, item 3**) to the belt lift pivot rod.

Wear Strip Installation

Straight Frame Sections

Typical Wear Strip Components (Figure 31)





1. Position the wear strips (Figure 32, item 1) on the frame.

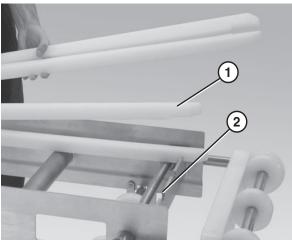


Figure 32

2. Make sure the wear strips are situated securely in the frame slots (**Figure 32, item 2**).

Curved Frame Sections

Typical Curved Wear Strip Components (Figure 33)

- 1 Hold down wear strip
- 2 Wear strip
- 3 Inside curve top wear strip

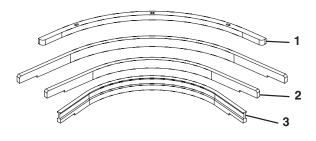


Figure 33

 Insert the inside curve top wear strip (Figure 34, item 1) into the innermost slot (Figure 34, item 2) on the inside of the frame.

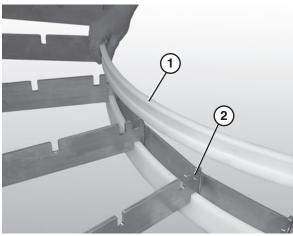


Figure 34

2. Attach the hold down wear strip (**Figure 35, item 1**) to the frame hooks (**Figure 35, item 2**) on the outside of the frame.

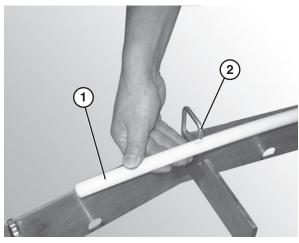


Figure 35

3. Insert the wear strips (**Figure 36, item 1**) into the appropriate slots in the frame (**Figure 36, item 2**), starting with the shortest wear strip on the inside of the curved section and working outward to the longest.

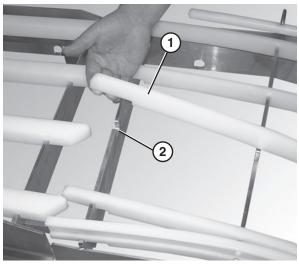


Figure 36

Belt Return Installation – Curved Frame Sections

Typical Curved Belt Return Components (Figure 37)

- 1 Return bottom wear strip
- 2 Curve return shaft
- 3 Chain return shoe
- 4 Inside return bottom wear strip

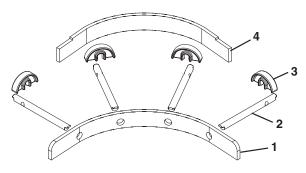


Figure 37

Insert the inside return bottom wear strip
 (Figure 38, item 1) into the slots (Figure 38, item 2) on
 the lower inside section of the frame (figure shown
 without the belt or wear strips).

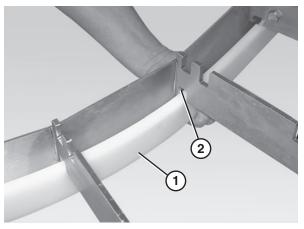
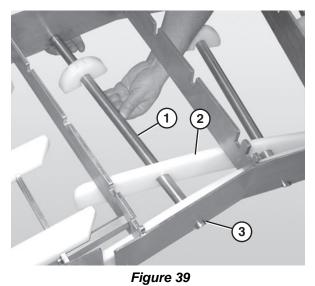


Figure 38

2. Attach the chain return shoes (Figure 38, item 1) to the curve return shafts (Figure 38, item 2).

 Slide the long end of the curve return shaft (Figure 39, item 1) through the center hole in the return bottom wear strip (Figure 39, item 2).

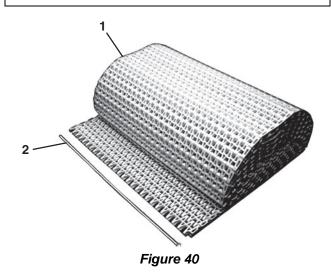


- 4. Slide the return shaft up and through the large slot in the frame. Make sure the holes in the return bottom wear strip match up with the holes in the conveyor frame.
- 5. Push up on the return shaft and slide the notched end of the shaft through the small slot on the opposite side of the frame (**Figure 39, item 3**).
- 6. Repeat steps 4-5 with the remaining returns.

Belt Installation

Typical Belt Components (Figure 40)

- 1 Chain belt
- 2 Belt rod



1. Position the belt on the conveyor frame (Figure 41).



Figure 41

NOTE

Ensure the belt is running in the correct direction (*Figure 42*).

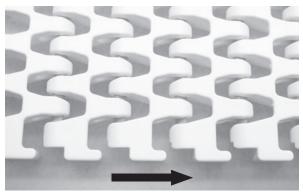


Figure 42

- 2. Wrap the belt around the conveyor, making sure the sprocket teeth have engaged the belt.
- 3. Feed the ends of the belt through the top and bottom of the curved frame sections.
- 4. Bring the ends of the belt together (**Figure 43**).



Figure 43

5. Insert the belt rod (Figure 44, item 1).

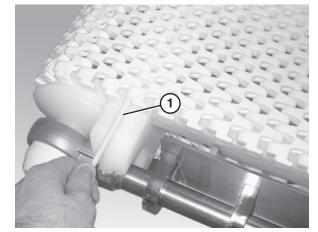


Figure 44

- 6. Push the belt rod in as far as possible.
- 7. Lightly tap the head of the rod with a hammer until it snaps into position.
- 8. Extend the tension end to remove excess slack in the belt (Figure 45).

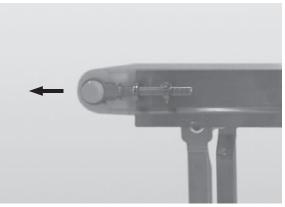


Figure 45

9. Insert the pull pins (**Figure 46, item 1**) on the tension end of the conveyor.

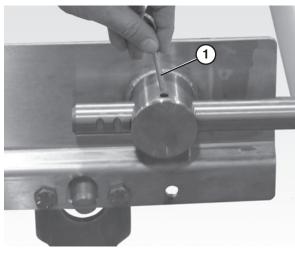


Figure 46

 If no more travel is available, remove one or more belt links to take up the tension. Refer to "Standard Belts: Replacing a Section of Belt" on page 20.

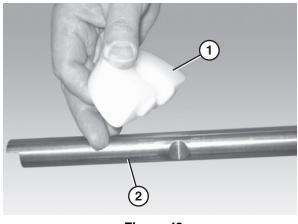
Belt Return Installation – Straight Frame Sections

Typical Belt Return Components (Figure 47)

1	Return shaft
2	Chain return shoe

Figure 47

1. Attach the chain return shoes (Figure 48, item 1) to the return shaft (Figure 48, item 2).





2. Slide the return shaft (**Figure 49, item 1**) up and through the large slot (**Figure 49, item 2**) in the frame (picture shown without the belt or wear strips).

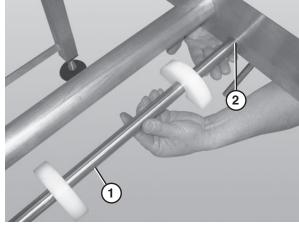


Figure 49

3. Push up on the return shaft (**Figure 49, item 1**) and slide the notched end of the shaft through the small slot on the opposite side of the frame.

4. Check belt sag by measuring from the top of the return (Figure 50). Belt sag should not exceed 4" (102 mm). Follow steps 7 – 9 in the "Belt Installation" section on page 15 to remove slack from the belt.

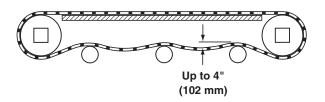


Figure 50



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 30 for recommendations.
- Replace any worn or damaged parts.

Cleaning

Routine Cleaning



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.

Standard Conveyors

 Remove the guides, if applicable, by removing the pull pins (Figure 51, item 1) that connect the guide (Figure 51, item 2) to the frame.

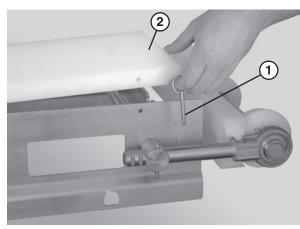
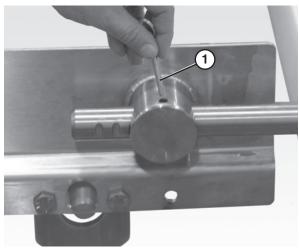


Figure 51

2. Remove the pull pin (**Figure 52, item 1**) on the tension end of the conveyor to release belt tension.





3. Lift up on the belt (**Figure 53**).



Figure 53

Conveyors with Tip Up Tails and Lifters

 Remove the guides, if applicable, by removing the pull pins (Figure 51, item 1) that connect the guide (Figure 51, item 2) to the frame.

Use the lifter handle (Figure 54, item 1) to raise the lifters (Figure 54, item 2) and raise the tip up tail (Figure 54, item 3).

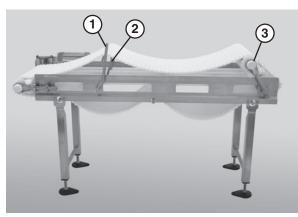


Figure 54

CAUTION

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

Periodic Cleaning

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

For conveyor disassembly and reassembly instructions:

- Refer to "Conveyor Belt Replacement" on page 20.
- Refer to "Sprocket and Puck Removal" on page 23.
- Refer to "Reassembling Tail Assemblies" on page 26.

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 regreasing will increase with the frequency of conveyor washing. Add grease to the bearing using the zerk fitting (Figure 55, item 1) on the exterior of the bearing shaft assembly.

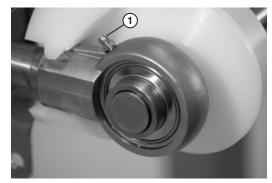


Figure 55

2. Replace the bearings if they become worn.

Wear Strips and Belt Returns

Replace the wear strips and belt returns if they become worn.

For wear strip and belt return installation instructions:

- Refer to "Wear Strip Installation" on page 12.
- Refer to "Belt Return Installation Straight Frame Sections" on page 16.

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

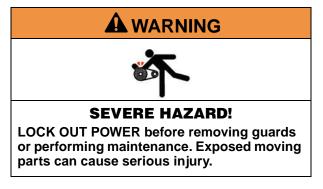
Skipping indicates:

- 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

Conveyor Belt Replacement



Conveyors with Guides

1. Remove the pull pins (Figure 56, item 1) that connect the guide (Figure 56, item 2) to the frame.

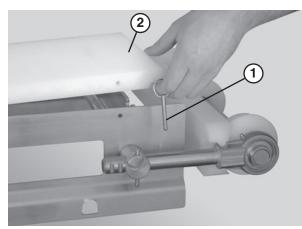
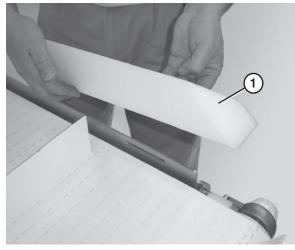


Figure 56

2. Remove the guide (Figure 57, item 1).





3. Follow the belt replacement procedures described in "Standard Belts" on page 20 or "Specailty Intralox 2400 Series Belts" on page 21.

Standard Belts

Replacing a Section of Belt

1. Remove the pull pins (**Figure 58, item 1**) on the tension end of the conveyor to release tension on the belt.

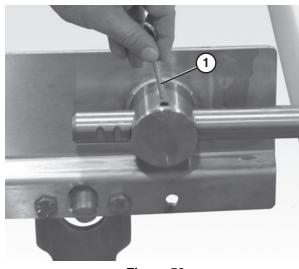


Figure 58

CAUTION

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

2. Secure the retaining head side of the belt using the belt removal tool (Figure 59, item 1).

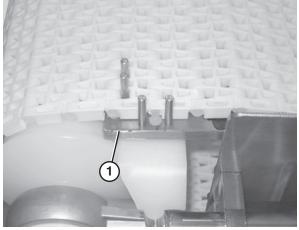


Figure 59

3. Use a punch and hammer to push the belt rod out by striking the rod end opposite the retaining head (**Figure 60**).



Figure 60

- 4. Remove the belt rods on both sides of the section of belt being replaced.
- 5. 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 by pushing up on the return shaft (**Figure 61, item 1**) and sliding it through the large hole (**Figure 61, item 2**) in the frame.

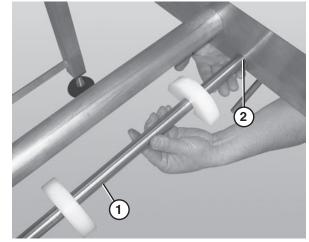


Figure 61

- 2. Lower the opposite end of the return shaft (**Figure 61, item 1**) and slide it out of the frame.
- Follow steps 1 3 in "Standard Belts: Replacing a Section of Belt" on page 20.
- 4. Remove the belt.
- 5. Replace the damaged or worn belt. Refer to "Belt Installation" on page 14 and "Belt Return Installation" on page 16.

Specialty Intralox 2400 Series Belts

Replacing a Section of Belt

1. Remove the pull pins (**Figure 62, item 1**) on the tension end of the conveyor to release tension on the belt.

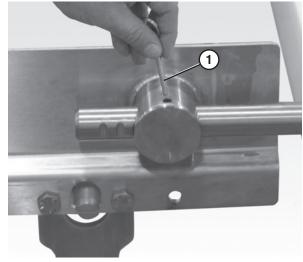


Figure 62

CAUTION

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

2. Use a punch and hammer to push the belt rod out by striking the rod end opposite the retaining head (**Figure 63, item 1**).

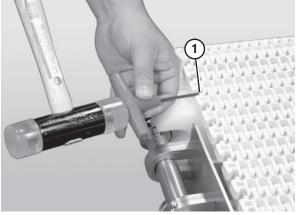


Figure 63

- 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 by pushing up on the return shaft (**Figure 64, item 1**) and sliding it through the large hole (**Figure 64, item 2**) in the frame.

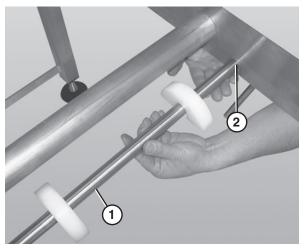


Figure 64

- 2. Lower the opposite end of the return shaft (**Figure 64, item 1**) and slide it out of the frame.
- Follow steps 1 3 in "Specialty Intralox 2400 Series Belts: Replacing a Section of Belt" on page 20.
- 4. Remove the belt.
- 5. Replace the damaged or worn belt. Refer to "Belt Installation" on page 14 and "Belt Return Installation" on page 16.

Conveyor Belt Tensioning



CAUTION

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

1. Remove both pull pins (**Figure 65, item 1**) on the tension end of the conveyor.

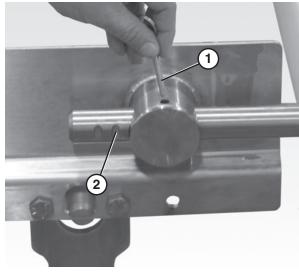


Figure 65

2. Extend the idler tail to the next groove (Figure 65, item 2) on the bearing shaft.

3. Continue extending the tension end until the belt is sufficiently tight (**Figure 66**).

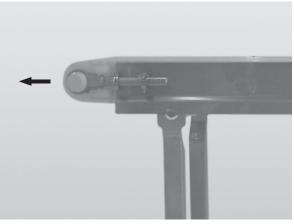


Figure 66

- 4. Reinsert the pull pins.
- 5. If no more travel is available, remove one or more belt links to take up the tension. Refer to "Replacing a Section of Belt" on page 20.

Sprocket and Puck Removal



- 1. Remove the conveyor belt to access the sprockets / pucks. Refer to "Conveyor Belt Replacement" starting on page 20.
- 2. Remove the desired sprocket / puck by following these instructions:
- A Drive Sprocket Removal
- B Nose Bar Puck Removal
- B Idler Puck Removal

A - Drive Sprocket Removal



1. Loosen the fasteners (Figure 67, item 1) that connect the gearmotor to the drive spindle using a hex wrench (Figure 67, item 2).

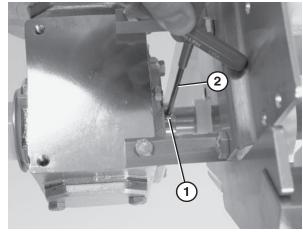


Figure 67

- 2. Remove the bolts that connect the motor to the drive assembly (**Figure 68**).
- 3. Remove the motor (Figure 68, item 1) from the drive assembly (Figure 68, item 2).

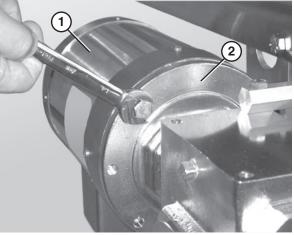


Figure 68

4. Unbolt the drive assembly and slide it off the bearing spindle (**Figure 69**).

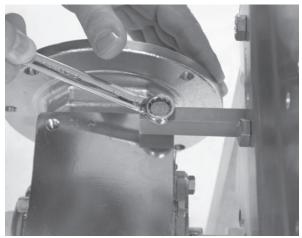
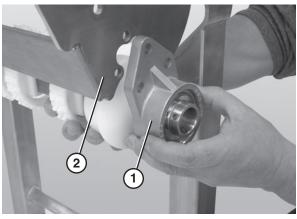


Figure 69

- 5. Remove the bearing cover.
- Loosen the 3 hole flange (Figure 70, item 1) with bearing fasteners using a hex wrench (Figure 70, item 2).

 Disconnect the 3 hole flange bearing (Figure 71, item 1) from the nose bar drive weldment (Figure 71, item 2).





- 8. Lower the entire drive assembly.
- 9. Slide the 3 hole flange with bearing (**Figure 72, item 1**) and flanged puck (**Figure 72, item 2**) off the drive spindle.

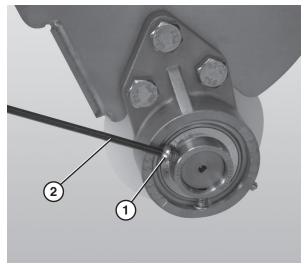


Figure 70

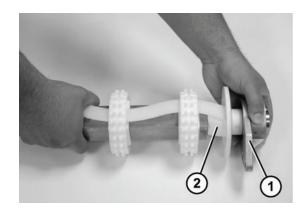


Figure 72

 Slide the sprockets (Figure 73, item 1) and the sprocket alignment bar (Figure 73, item 2) off the drive spindle (Figure 73, item 3).

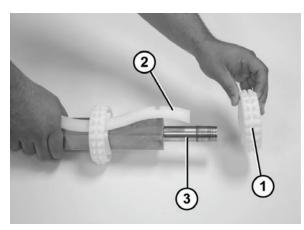


Figure 73

B - Nose Bar Puck Removal

 Slide the nose bar drive or transfer post (Figure 74, item 1) out of the nose bar drive weldment or idler hands (Figure 74, item 2).

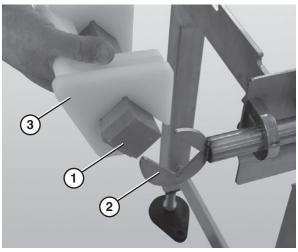


Figure 74

2. Remove the nose bar tracking pucks (**Figure 74, item 3**), if applicable.

3. Remove the nose bar wear strip (Figure 75, item 3).

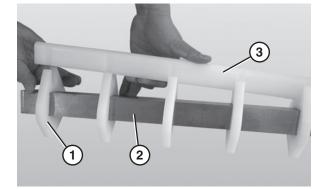


Figure 75

4. Slide the nose bar pucks (Figure 75, item 1) off the nose bar shaft (Figure 75, item 2).

C - Idler Puck Removal

1. Remove the pull pins (Figure 76, item 1).

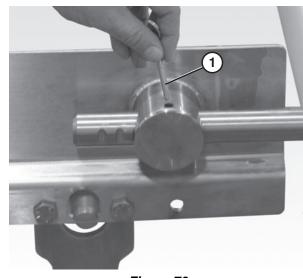


Figure 76

2. Slide the idler tail assembly (**Figure 77, item 1**) out of the take up blocks (**Figure 77, item 2**).

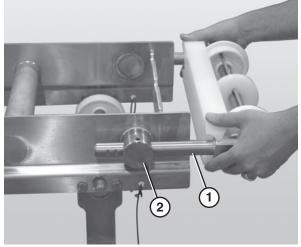


Figure 77

3. Remove the bearing cover (Figure 78, item 1).

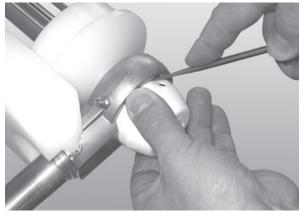
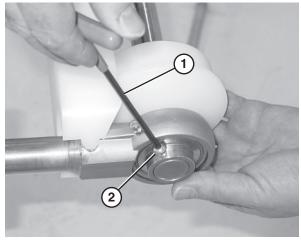


Figure 78

4. Use a hex wrench (**Figure 79, item 1**) to loosen the bearing shaft assembly fasteners (**Figure 79, item 2**).



5. Slide the bearing shaft assembly (**Figure 80, item 2**) off the idler shaft.

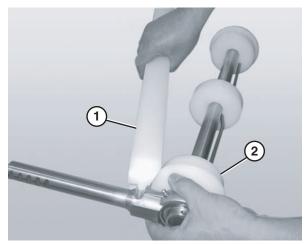


Figure 80

- 6. Remove the guard bar (Figure 80, item 3).
- 7. Slide the pucks (Figure 80, item 1) off the idler shaft.

Reassembling Tail Assemblies

Refer to the "Service Parts" section starting on page 30 for complete diagrams and lists of all tail assembly components.

Nose Bar Drive Tail

Nose Bar Assembly

1. Slide the nose bar pucks (Figure 81, item 1) onto the nose bar drive post (Figure 81, item 2).

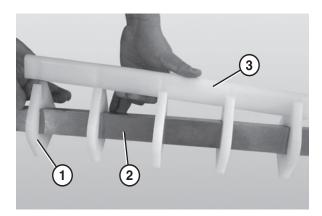


Figure 81

2. Attach the nose bar wear strip (Figure 81, item 3).

Figure 79

Drive Tail Assembly

1. Slide the first sprocket (Figure 82, item 1) onto the drive spindle (Figure 82, item 2).

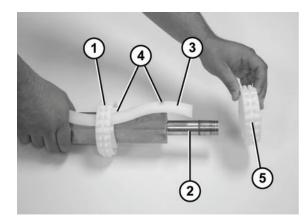


Figure 82

- 2. Insert the sprocket alignment bar (Figure 82, item 3) into the first sprocket and align the sprocket with the notch (Figure 82, item 4) in the sprocket alignment bar.
- 3. Slide the remaining sprockets (Figure 82, item 5) onto drive spindle and align each sprocket with the notches (Figure 82, item 4) in the sprocket alignment bar.
- 4. Attach the flanged pucks (Figure 83, item 1) and the 3 hole flange with bearing (Figure 83, item 2) to the drive spindle.

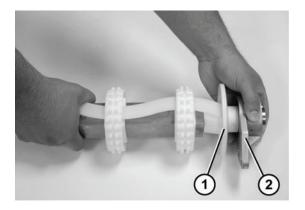


Figure 83

5. Tighten the 3 hole flange with bearing fasteners (Figure 84, item 1) using a hex wrench (Figure 84, item 2).

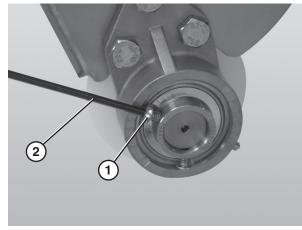


Figure 84

Nose Bar Idler and Tip Up Tail

1. Slide the nose bar pucks (Figure 85, item 1) onto the nose bar drive post (Figure 85, item 2).

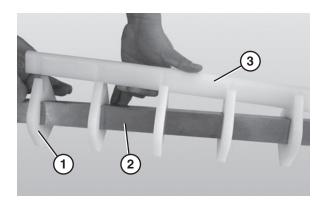
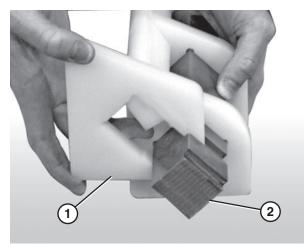


Figure 85

2. Attach the nose bar wear strip (Figure 85, item 3).

3. Attach the nose bar tracking pucks (**Figure 86, item 1**) to the nose bar drive post (**Figure 86, item 2**).





Idler Tail and Tip Up Tail

- 1. Place the idler puck (**Figure 87, item 1**) at the center of the bent retaining bar (**Figure 87, item 2**).
- Slide the idler puck onto the idler shaft (Figure 87, item 3). Make sure to center the idler puck.

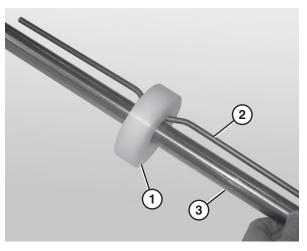


Figure 87

- 3. Attach the flanged pucks (**Figure 88, item 2**) and bearing shaft assemblies to the idler shaft.
- 4. Attach the guard bar (Figure 88, item 1).

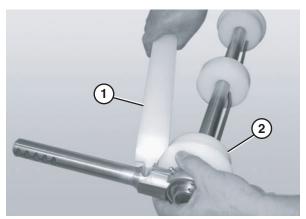


Figure 88

5. Use a hex wrench (Figure 89, item 1) to tighten the bearing shaft fasteners (Figure 89, item 2).

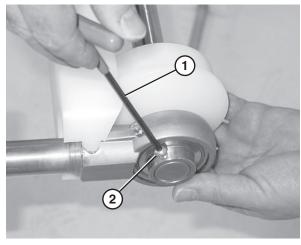


Figure 89

6. Attach the bearing covers.

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 90**).

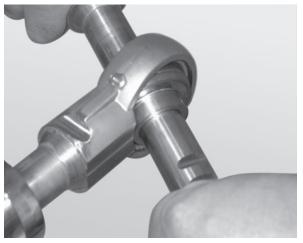


Figure 90

- 3. Apply lateral pressure to the rod until the bearing comes loose.
- 4. Remove the worn or damaged bearing (Figure 91).

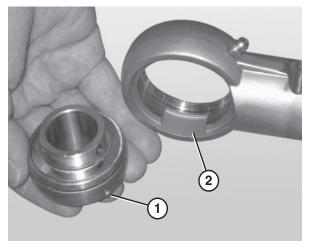


Figure 91

5. Replace the bearing.

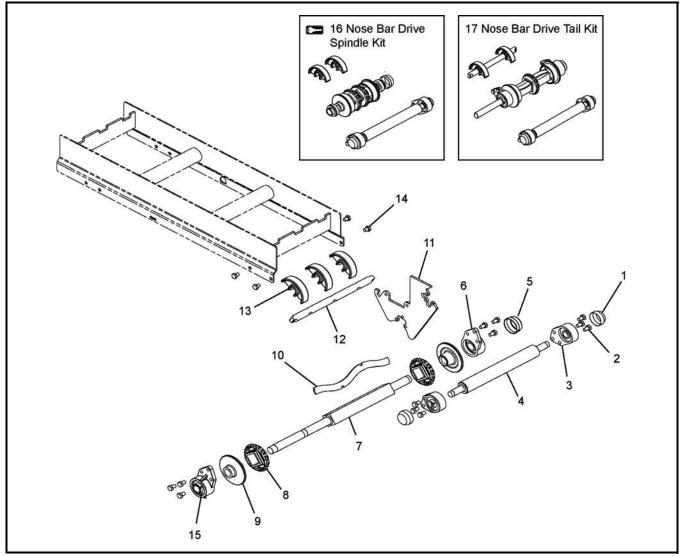
NOTE

When inserting the new bearing, make sure the anti-rotation notch (Figure 91, item 1) on the bearing lines up with the groove inside the housing (Figure 91, item 2).

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



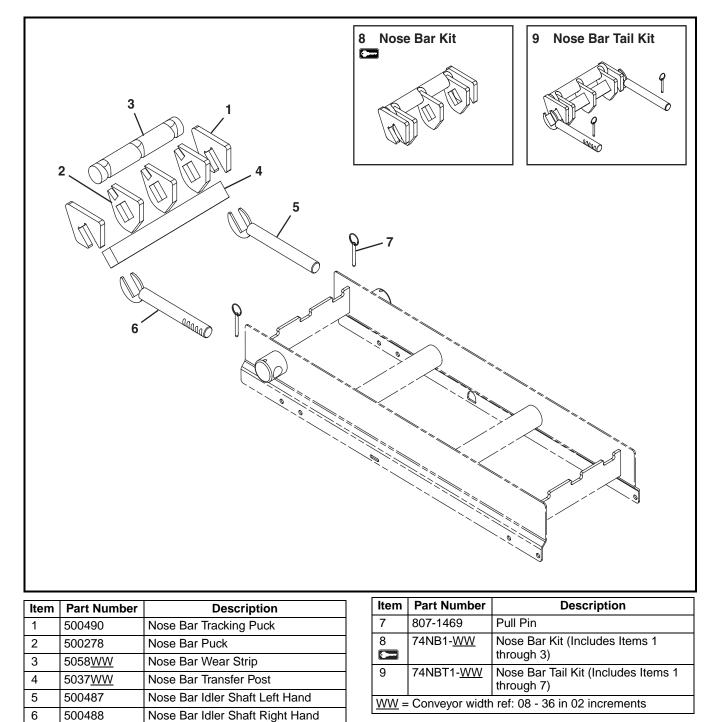
Item	Part Number	Description
1	802-133	Bearing Cover
2	961016MSS	Hex Head Cap Screw M10- 1.5x16mm
3	802-132	3 Hole Flange Bearing 20mm Bore
4	5006 <u>WW</u>	Transfer Spindle
5	807-1454	Bearing Cover
6	500288	3 Hole Flange with Bearing

ltem	Part Number	Description
7	5015 <u>WW</u>	Drive Spindle for Standard Belt
	5070 <u>WW</u>	Drive Spindle for Specialty Intralox Belt
8	807-1444	Sprocket for Standard 1.00" Pitch Belt
	807-1447	Sprocket for Specialty Intralox 1.00" Pitch Belt
9	5053 <u>WW</u>	Flange Puck for Standard Belt
	5071 <u>WW</u>	Flange Puck for Specialty Intralox Belt

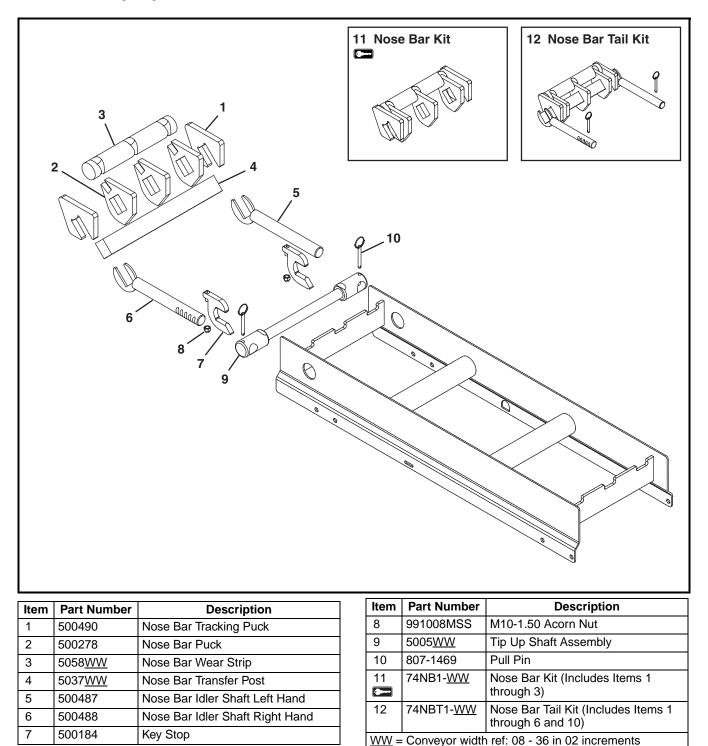
Item	Part Number	Description	
10	5085 <u>WW</u>	Sprocket Alignment Bar for Standard 1.00" Pitch Belt	
	5088 <u>WW</u>	Sprocket Alignment Bar for Specialty Intralox 1.00" Pitch Belt	
11	500496	Nose Bar Drive Sideplate	
12	5039 <u>WW</u>	Return Shaft	
13	500075	Chain Return Shoe	
14	961012MSS	Hex Head Cap Screw M10- 1.5x12mm	
15	802-163	Bearing	
16 ••••	74NBD25- <u>WW</u>	Nose Bar Drive Spindle Kit for Standard 1.00" Pitch Belt (Includes Items 1 through 5, 8, 9 and 15)	
	74NBD24- <u>WW</u>	Nose Bar Drive Spindle Kit for Specialty Intralox 1.00" Pitch Belt (Includes Items 1 through 5, 8, 9 and 15)	
17	74NBDDT25- <u>WW</u>	Nose Bar Drive Tail Kit when Conveyor is ordered with a Dorner Gearmotor Mounting Package for Standard 1.00" Pitch Belt (Includes Items 1 through 10, 12 and 13)	
	74NBDDT24- <u>WW</u>	Nose Bar Drive Tail Kit when Conveyor is ordered with a Dorner Gearmotor Mounting Package for Specialty Intralox 1.00" Pitch Belt (Includes Items 1 through 10, 12 and 13)	
	74NBCDT25- <u>WW</u>	Nose Bar Drive Tail Kit for Standard 1.00" Pitch Belt (Includes Items 1 through 10, 12 and 13)	
	74NBCDT24- <u>WW</u>	Nose Bar Drive Tail Kit for Specialty Intralox 1.00" Pitch Belt (Includes Items 1 through 10, 12 and 13)	
<u>WW</u> =	<u>WW</u> = Conveyor width ref: 08 - 36 in 02 increments		

Sprocket (Item 8)		
Width	Required Quantity	
8" (203 mm)	2	
10" (254 mm)	3	
12" (305 mm)	3	
14" (356 mm)	4	
16" (406 mm)	4	
18" (457 mm)	5	
20" (508 mm)	5	
22" (559 mm)	6	
24" (610 mm)	6	
26" (660 mm)	7	
28" (711 mm)	7	
30" (762 mm)	8	
32" (813 mm)	8	
34" (864 mm)	9	
36" (914 mm)	9	

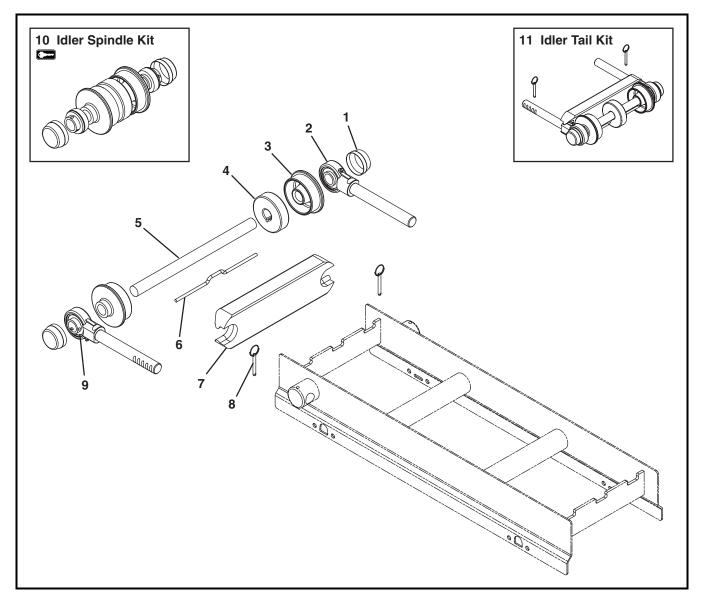
Nose Bar Tension End



Nose Bar Tip Up Tension End



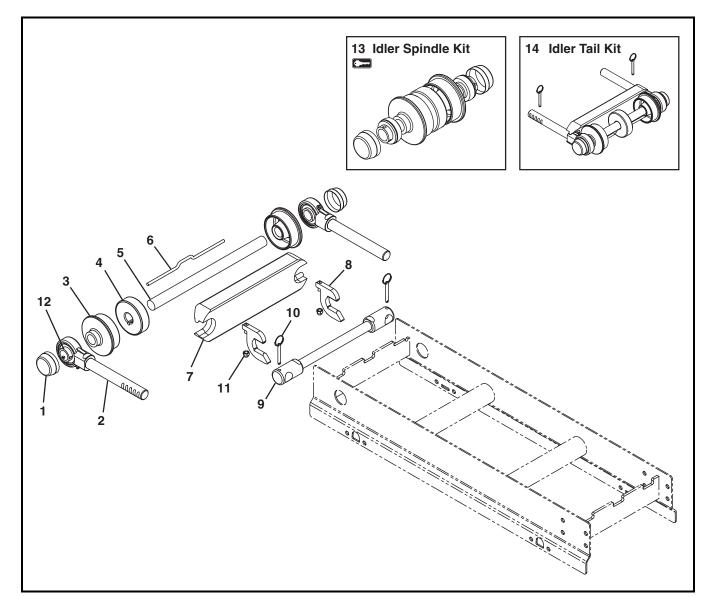
Tension End Components



ltem	Part Number	Description
1	807-1454	Bearing Cover
2	500079	Shaft Assembly with Bearing
3	5017 <u>WW</u>	Flanged Puck, Idler Tail for Standard Belt
	5072 <u>WW</u>	Flanged Puck, Idler Tail for Specialty Intralox Belt
4	500175	Idler Puck (for 8" - 36" wide conveyors only)
5	5007 <u>WW</u>	Idler Shaft
6	5008 <u>WW</u>	Bent Retaining Bar for Standard Belt (for 8" - 36" wide conveyors only)
	5073 <u>WW</u>	Bent Retaining Bar for Specialty Intralox Belt (for 8" - 36" wide conveyors only)

ltem	Part Number	Description	
7	5009 <u>WW</u>	Guard Bar	
8	807-1469	Pull Pin	
9	802-162	Bearing	
10	74I- <u>WW</u>	Idler Spindle Kit for Standard Belt (Includes Items 1, 3, 4 and 9)	
	74IS- <u>WW</u>	Idler Spindle Kit for Specialty Intralox Belt (Includes Items 1, 3, 4 and 9)	
11	74IT- <u>WW</u>	Idler Tail Kit for Standard Belt (Includes Items 1 through 8)	
	74ITS- <u>WW</u>	Idler Tail Kit for Specialty Intralox Belt (Includes Items 1 through 8)	
<u>WW</u> =	WW = Conveyor width ref: 08 - 36 in 02 increments		

Tip Up Tension End

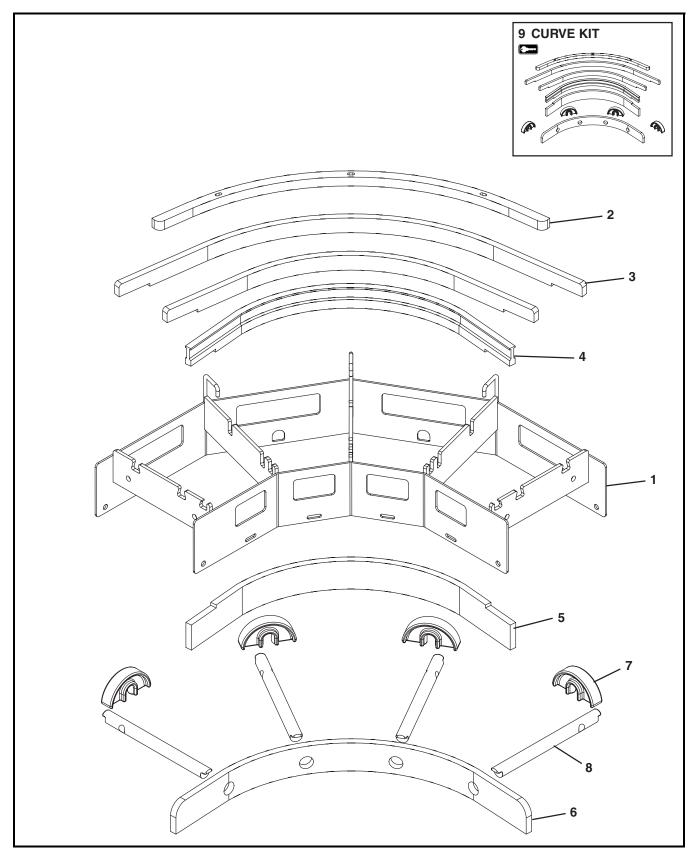


ltem	Part Number	Description
1	807-1454	Bearing Cover
2	500079	Shaft Assembly with Bearing
3	5017 <u>WW</u>	Flanged Puck, Idler Tail for Standard Belt
	5072 <u>WW</u>	Flanged Puck, Idler Tail for Specialty Intralox Belt
4	500175	Idler Puck (for 8" - 60" wide conveyors only)
5	5007 <u>WW</u>	Idler Shaft
6	5008 <u>WW</u>	Bent Retaining Bar for Standard Belt (for 8" - 36" wide conveyors only)
	5073 <u>WW</u>	Bent Retaining Bar for Specialty Intralox Belt (for 8" - 36" wide conveyors only)
7	5009 <u>WW</u>	Guard Bar

ltem	Part Number	Description	
8	500184	Key Stop	
9	5005 <u>WW</u>	Tip Up Shaft Assembly	
10	807-1469	Pull Pin	
11	991008MSS	M10-1.50 Acorn Nut	
12	802-162	Bearing	
13	74I- <u>WW</u>	Idler Spindle Kit for Standard Belt (Includes Items 1, 3, 4 and 12)	
	74IS- <u>WW</u>	Idler Spindle Kit for Specialty Intralox Belt (Includes Items 1, 3, 4 and 12)	
14	74IT- <u>WW</u>	Idler Tail Kit for Standard Belt (Includes Items 1 through 7 and 10)	
	74ITS- <u>WW</u>	Idler Tail Kit for Specialty Intralox Belt (Includes Items 1 through 7 and 10)	
<u>WW</u> =	<u>WW</u> = Conveyor width ref: 08 - 36 in 02 increments		

7400 Series Curved Nose Bar Conveyors

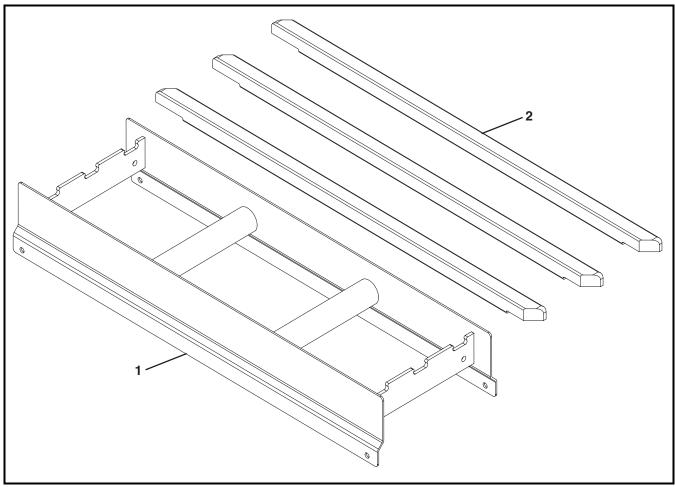
Curve Conveyor Frame and Wear Strips



ltem	Part Number	Description
1		Consult Factory for Frame Part Number
2	5044 <u>WW</u> - <u>DD</u>	Hold Down Wear Strip for Standard Belting
	5045 <u>WW</u> - <u>DD</u>	Hold Down Wear Strip for Specialty Intralox Belting
3	5042 <u>WW</u> - <u>DD</u>	Curved Bed Rail Group for Standard Belting
	5043 <u>WW</u> - <u>DD</u>	Curved Bed Rail Group for Specialty Intralox Belting
4	5040 <u>WW</u> - <u>DD</u>	Low Side Inside Curve Top Wear Strip for Standard Belting
	5041 <u>WW</u> - <u>DD</u>	Low Side Inside Curve Top Wear Strip for Specialty Intralox Belting
	5050 <u>WW</u> - <u>DD</u>	High Side Inside Curve Top Wear Strip for Standard Belting
	5051 <u>WW</u> - <u>DD</u>	High Side Inside Curve Top Wear Strip for Specialty Intralox Belting
5	5046 <u>WW</u> - <u>DD</u>	Inside Return Bottom Wear Strip for Standard Belting
	5047 <u>WW</u> - <u>DD</u>	Inside Return Bottom Wear Strip for Specialty Intralox Belting
6	5048 <u>WW</u> - <u>DD</u>	Return Bottom Wear Strip for Standard Belting
	5049 <u>WW</u> - <u>DD</u>	Return Bottom Wear Strip for Specialty Intralox Belting
7	500075	Chain Return Shoe
8	5033 <u>WW</u>	Curve Return Shaft
9	74C25 <u>WW</u> -DD	Curve Kit for Standard Belting (Includes Items 2 through 7)
	74C24 <u>WW-DD</u>	Curve Kit for Specialty Intralox Belting (Includes Items 2 through 7)
<u>WW</u> =	Conveyor width	ref: 08 - 36 in 02 increments
<u>DD</u> =	Section degree c	of turn (Refer to chart)

	Section Degree of Turn Chart							
		Co	Conveyor Width (<u>WW</u>)					
		08-10	12-24	26-36				
	15	N/A	15	15				
	30	30	30	30				
r	45	N/A	45	45				
Turn	60 60		60	30 & 30				
e of	75	N/A	75	45 & 30				
Jree	90	90	90	45 & 45				
Degree	105	N/A	60 & 45	45, 30 & 30				
	120	60 & 60	60 & 60	45, 45 & 30				
Module	135	N/A	75 & 60	45, 45 & 45				
Ň	150	90 & 60	75 & 75	45, 45, 30 & 30				
	165	N/A	90 & 75	45, 45, 45 & 30				
	180	90 & 90	90 & 90	45, 45, 45 & 45				

Straight Conveyor Frame and Wear Strips

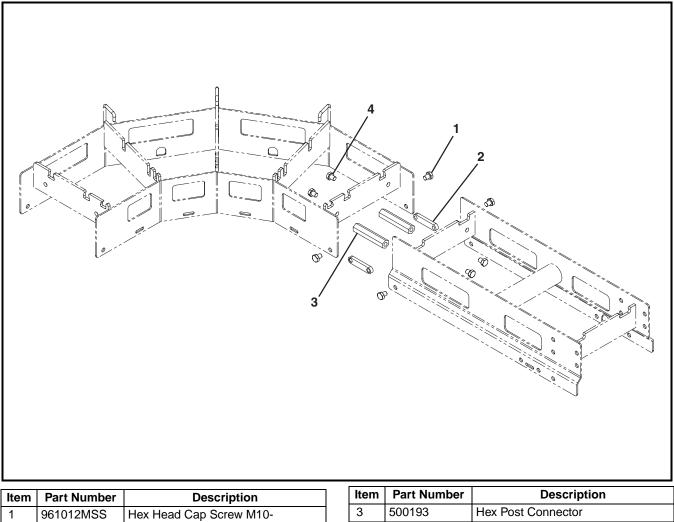


ltem	Part Number	Description			
1		Consult Factory for Frame Part Number			
2	501800-LLL Straight Wear Strip (Refer to char				
<u>LLL</u> =	LLL = Conveyor length ref: 020 - 999 in 001 increments				

	Wear Strip Quantity (Item 2)								
Conveyor Length (LL				(<u>LLL</u>)					
		020-	133-	253-	373-	493-	613-	733-	853-
		132	252	372	492	612	732	852	999
<u> ()</u>	08	2	4	6	8	10	12	14	16
(<u>WW</u>)	10	3	6	9	12	15	18	21	24
	12	3	6	9	12	15	18	21	24
Vid	14	3	6	9	12	15	18	21	24
or V	16	4	8	12	16	20	24	28	32
eyc	18	4	8	12	16	20	24	28	32
Conveyor Width	20	5	10	15	20	25	30	35	40
ŭ	22	5	10	15	20	25	30	35	40

	Wear Strip Quantity (Item 2)								
	Conveyor Length (<u>LLL</u>)								
		020- 132	133- 252	253- 372	373- 492	493- 612	613- 732	733- 852	853- 999
<u>(</u>)	24	5	10	15	20	25	30	35	40
\mathbb{N}	26	6	12	18	24	30	36	42	48
th (28	6	12	18	24	30	36	42	48
Vid	30	6	12	18	24	30	36	42	48
۲V	32	7	14	21	28	35	42	49	56
Conveyor Width (<u>WW</u>)	34	7	14	21	28	35	42	49	56
N	36	8	16	24	32	40	48	56	64
ŭ									

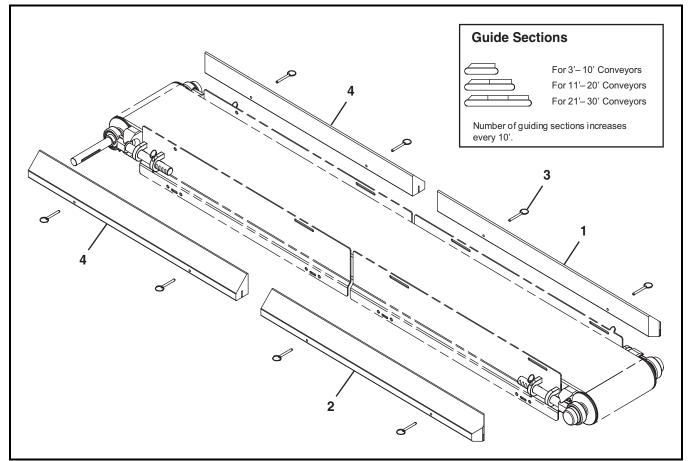
Conveyor Frame Connection



item	Part Number	Description
1	961012MSS	Hex Head Cap Screw M10- 1.5x12mm
2	500199	Flat Connector (Not Applicable if Stand Located at Connection)

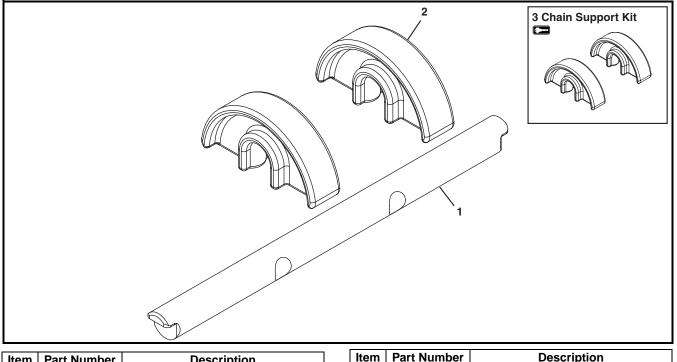
lte	m	Part Number	Description
3		500193	Hex Post Connector
4		961016MSS	Hex Head Cap Screw M10- 1.5x16mm

3" (76 mm) High Sides



Item	Part Number	Description	ltem	Part Number	Description
1	503501- <u>LLLLL</u>	Right Hand High Side Guide	4	503401- <u>LLLLL</u>	Square End High Side Guide
2	503601- <u>LLLLL</u>	Left Hand High Side Guide	LLLL	_ = Guide Length	in inches with 2 decimal places.
3	807-1469	Pull Pin	Exam	ple: Guide Lengt	h = 95.25" <u>LLLLL</u> = 09525

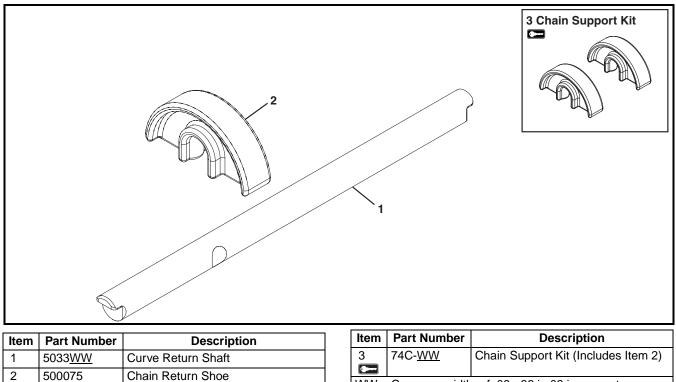
Straight Belt Return



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

ltem	Part Number	Description		
3	74R- <u>WW</u>	Chain Support Kit (Includes Item 2)		
WW = Conveyor width ref: 08 - 36 in 02 increments				

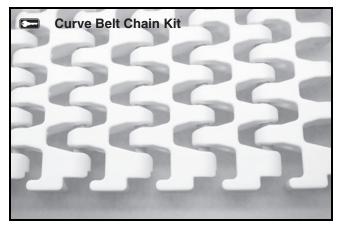
Curve Belt Return



Return Shaft	3	74C- <u>VVVV</u>	Chain Support Kit (Includes Item 2)
Return Shoe			
Return Shoe	$\lambda / \lambda / -$	Conveyor width	n ref: 08 - 36 in 02 increments
	<u>vvvv</u> –	Ourveyor what	

7400 Series Curved Nose Bar Conveyors

Curve Belt Chain Kit



ltem	Part Number	Description	
1	74 <u>BB-WW</u>	Curve Belt Chain Kit (Includes 1 ft (305 mm) of flat belt chain and assembly pins)	
<u>BB</u> = 0	<u>BB</u> = Chain Reference Number		
<u>WW</u> =	WW = Conveyor width ref: 08 - 36 in 02 increments		

Ordering a Replacement Chain

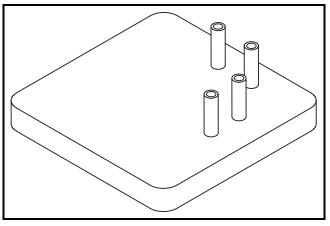
Determine the length of chain required for the conveyor and round up to the nearest foot length. Order the proper number of chain repair kits (1' long each) for your conveyor. Dorner will ship chain kits that are of a reasonable length fully assembled.

Example:

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

Order: Qty (43) of 74BB-WW

Belt Removal Tool



ltem	Part Number	Description
1	500581	Tool Rod Removal for Curve Belt

Configuring a Conveyor Part Number

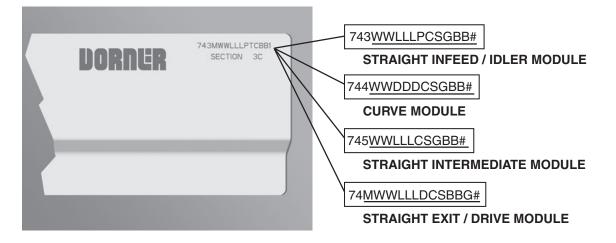


Figure 92

Curve Conveyor

Refer to your serial and model number plate (**Figure 92**). From the model number, determine conveyor width (<u>WW</u>), length (<u>LLL</u>), pulley type (<u>P</u>), stand location, cleaning options (<u>C</u>), stand holes (<u>S</u>), guide profile (<u>G</u>), belt material (<u>BB</u>), degree of turn (<u>DDD</u>), drive/pulley type (<u>D</u>) and module serialized sequence (<u>#</u>).

Straight Infeed / Idler Module Example: 7432412015B1MR1

Straight Infeed/Idler module, 24" wide, 10' long, ready for Dorner support stands, first stand 12" from pulley end including standard idler pulley, frame cutouts, belt lifters, tip up idler pulley option, lowside profile and MR belt material.

Straight Intermediate Module Example: 745241807Z1MR3

Straight Intermediate module, 24" wide, 15' long, ready for Dorner support stands, including frame cutouts, belt lifters, lowside profile and MR belt material.

Curve Module Example: 744240901Z1MR4

Curve module, 24" wide, 90°, ready for Dorner support stands, including frame cutouts and MR belt material.

Straight Exit / Drive Module Example: 74M2404817CMR15

Straight Exit/Drive module, 24" wide, 4' long, ready for Dorner support stands, last stand mounted 18" from pulley end, and side drive mount in position D, including standard drive pulley, frame cutouts, belt lifters, lowside profile and MR belt material.

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.

A representative will discuss action to be taken on the returned items and provide a Returned Goods Authorization number for reference.

There will be a return charge on all new undamaged items returned for credit where Dorner was not at fault. Dorner is not responsible for return freight on such items.

Conveyors and conveyor accessories

Standard catalog conveyors	30%
MPB Series, cleated and specialty belt conveyors	50%
7400 & 7600 Series conveyors	non-returnable items
Engineered special products	case by case
Drives and accessories	30%
Sanitary stand supports	non-returnable items
Derte	

Parts Standard stock parts MPB, cleated and specialty belts

30% 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 Technical Sales, Catalog Sales and Service Teams 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.



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