



# 7600 Series End Drive Conveyors

Installation, Maintenance and Parts Manual



Flat Belt Conveyor



**Cleated Belt Conveyor** 

DORNER MFG. CORP. P.O. Box 20 • 975 Cottonwood Ave. Hartland, WI 53029-0020 USA INSIDE THE USA TEL: 1-800-397-8664 FAX: 1-800-369-2440 OUTSIDE THE USA TEL: 262-367-7600 FAX: 262-367-5827

For other service manuals visit our website at:

www.dorner.com/service\_manuals.asp

## **Table of Contents**

Introduction	2	A - Drive Spindle Removal	20
Warnings – General Safety	3	B - Idler Spindle Removal	22
Product Description		C - 0.5" Nose Bar Idler Spindle Removal	23
Specifications		D - 1" Nose Bar Idler Spindle Removal	24
Flat Belt 7600 Series Conveyor	5	E - 1.875" Nose Bar Idler Spindle Removal	25
Cleated Belt 7600 Series Conveyor		Reassembling Tail Assemblies	26
Flat Belt 7600 Series LPZ Conveyor	5	Gas Assist Replacement	26
Cleated Belt 7600 Series LPZ Conveyor	5	Bearing Replacement	26
Conveyor Supports		Standard Bearings	26
Specifications		.5" and 1" Nose Bar Return Spindle Bearings	27
Installation		1" Nose Bar Bearings	27
Required Tools		1.875" Nose Bar Bearings	28
Recommended Installation Sequence		LPZ Knuckles	
Conveyors Longer than 10 ft (3048 mm)		Wearstrips and Belt Returns	
Connecting Components		Removal	
Wear Strip Installation	/ Q	Installation	
Standard Wear Strips	0	Notes	
Stainless Steel Sheet Bed Plates (Optional)	o	Service Parts	
Lifter Installation		Drive End Components	30
Belt Installation		Idler End Components	31
Guide Installation		.5" Nose Bar Idler End	
LPZ Conveyors		1" Nose Bar Idler End	
Knuckles		1.875" Nose Bar Idler End	
Belt		Upper Knuckle for Flat Belt Conveyors	37
Guides		Upper Knuckle for Cleated Belt Conveyors	
All Conveyors		Lower Knuckle for Cleated Belt Conveyors	39
Belt Return Installation		Conveyor Frame and Extensions	
Scraper Installation	13	with Standard Wear Strips	40
Stand Installation		Wear Strips with Stainless Steel Sheet Bed Plate	41
Drive Package Installation		Lifters	
Mounting Block Installation	15	Mounting Block	42
Preventive Maintenance and Adjustment	16	Gas Assisted Tip Up	42
Required Tools	16	3" High Sides	43
Checklist	16	Adjustable Guiding	44
Cleaning	16	Tool-Less Adjustable Guiding	45
Routine Cleaning	16	1" Cleated Guides	46
Standard Conveyors	16	3" Cleated Guides	
Conveyors with Lifters	16	Hinged Guides	
Periodic Cleaning	17	Adjustable Hinged Guides	49
Lubrication		Tool-Less Adjustable Hinged Guides	50
Conveyor Bearings	17	Flat Belt Returns	51
Wearstrips and Belt Returns	17	Cleated Belt Return	
Scraper		Scraper	
Maintaining the Conveyor Belt	17	Returns - Sidewall Cleated	
Conveyor Belt Replacement	18	Opposed (Thru Beam) Photo Eye Mount	52
Conveyors with Guides	18	Reflective Photo Eye Mount	52
Standard Belts		Reflective Photo Eye Kit	
Conveyor Belt Tensioning		Configuring Conveyor Belt Part Number	51
Conveyor Belt Tracking	19 10	Notes	54 55
Spindle Removal	20	Return Policy	33
Spinuic Kelliovai	∠∪	Keturii Foney	30

## Introduction

## **A** 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 7600 series conveyors are covered by Patent Numbers 7,246,697, 7,207,435, 7,549,531 B2, 7,681,719 B2, 7,383,944, 8,042,682 B2 and corresponding patents and patent applications in other countries.

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

## Warnings - General Safety

## **A** 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!

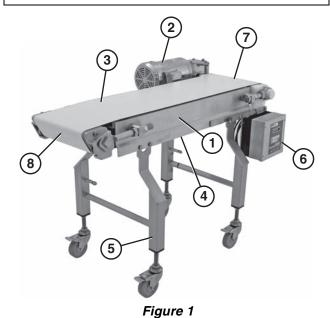
- Dorner cannot control the physical installation and application of conveyors.
   Taking protective measures is the responsibility of the user.
- When conveyors are used in conjunction with other equipment or as part of a multiple conveyor system, CHECK FOR POTENTIAL PINCH POINTS and other mechanical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

## **Product Description**

Refer to (Figure 1) for typical conveyor components.

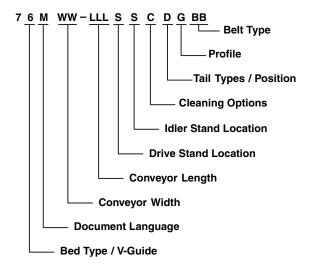
### **Typical Components**

- 1 Conveyor
- 2 Gearmotor
- 3 Belt (Flat Belt Shown)
- 4 Return
- 5 Support Stands
- 6 Motor Controller
- 7 Drive End
- 8 Idler End

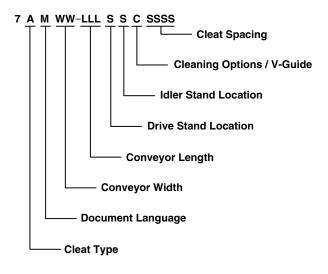


## **Specifications**

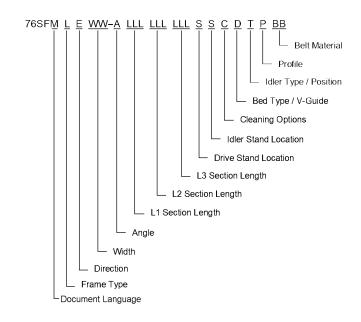
## Flat Belt 7600 Series Conveyor



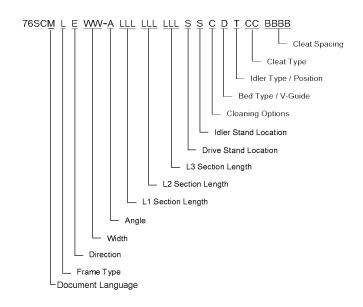
## **Cleated Belt 7600 Series Conveyor**



## Flat Belt 7600 Series LPZ Conveyor



# Cleated Belt 7600 Series LPZ Conveyor



## **Specifications**

## **Conveyor Supports**

#### **Maximum Distances:**

- 1 = Support Stand on Idler End = 3 ft (914 mm)
- 2 = Between Support Stands = 8 ft (2438 mm)\*\*
- 3 = Support Stand on Drive End = 3 ft (914 mm)
  - \*\* For conveyors longer than 10 ft (3.05 m), install support at frame joint.

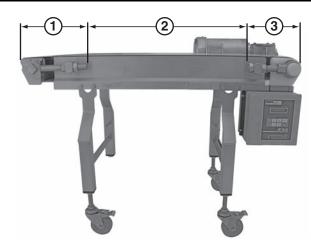


Figure 2

## **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	400 lbs. (181 kg)
Belt Travel	11.25" (286 mm) per revolution of pulley
Maximum Belt Speed	325 ft/minute (100 m/minute)
Belt Take-up	1.5" (38 mm)

Conveyor Length Reference (LLL)	036 – 480 in 001 increments
Conveyor Length	36" (914 mm) - 480" (12192 mm) 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

## **A** 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.

## **A** CAUTION

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

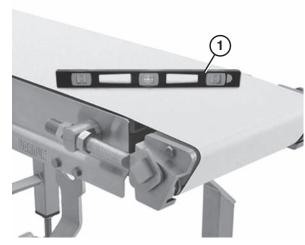


Figure 3

## **Required Tools**

- Level
- · Torque wrench

# Recommended Installation Sequence

- 1. Assemble the conveyor (if required). Refer to "All Conveyors" on page 12.
- 2. Attach the stands. Refer to "Stand Installation" on page 14.
- 3. Install the gearmotor. Refer to "Drive Package Installation" on page 15.

# Conveyors Longer than 10 ft (3048 mm)

## **Connecting Components**

Typical Connection Components (Figure 4)

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

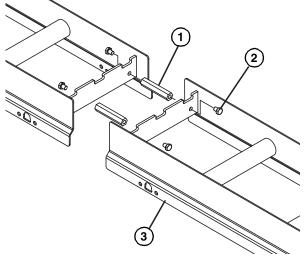


Figure 4

1. Locate and arrange conveyor sections by section labels (Figure 5, item 1).

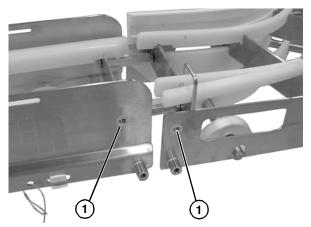


Figure 5

2. Position the frame sections in the correct order.

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

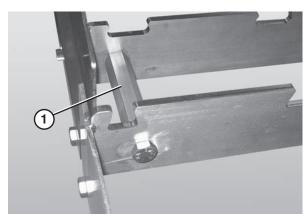


Figure 6

## **Wear Strip Installation**

## **Standard Wear Strips**

Typical Standard Wear Strips (Figure 7)

1 Wear Strips

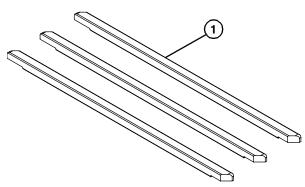


Figure 7

1. Position the wear strips (**Figure 8, item 1**) on the frame.

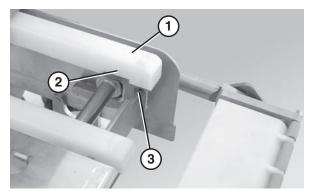


Figure 8

2. Make sure slots in the wear strips (**Figure 8, item 2**) line up properly with frame slots (**Figure 8, item 3**).

#### **Stainless Steel Sheet Bed Plates (Optional)**

Typical Stainless Steel Sheet Bed Plates (Figure 9)

- 1 Bed Plates
- 2 Wear Strips

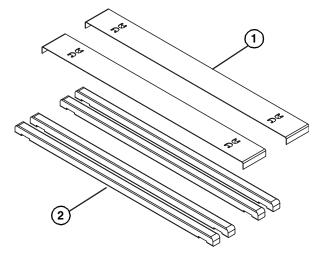


Figure 9

- 1. Attach the wear strips to the frame. Refer to "Standard Wear Strips" on page 8.
- 2. Place the sheet bed plates (**Figure 10, item 1**) over the wear strips (**Figure 10, item 2**).

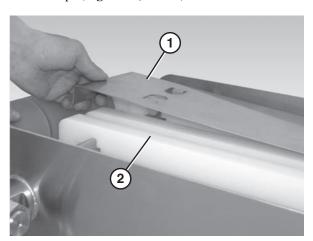


Figure 10

#### **Lifter Installation**

Typical Lifter Components (Figure 11)

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

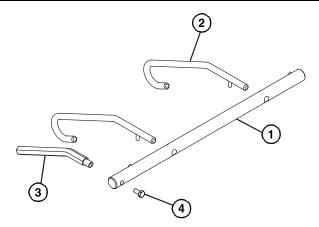


Figure 11

1. Slide the belt lift pivot bar (**Figure 12, item 1**) through the designated holes in the frame. The pins on the belt lift pivot bar should be located inside the frame side rails.

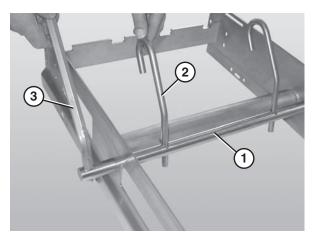


Figure 12

- 2. Attach the lifter bars (**Figure 12**, **item 2**) to the belt lift pivot bar (**Figure 12**, **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 12, item 3**) to the belt lift pivot rod.

#### **Belt Installation**

Typical Standard Belt (Figure 13)

Belt

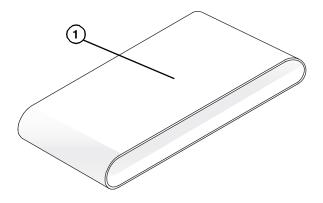


Figure 13

1. Place the idler tail (**Figure 14, item 1**) in the UP position.

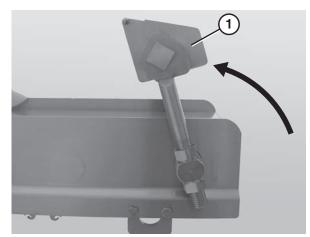


Figure 14



#### **SEVERE HAZARD!**

- ONLY DISCONNECT ONE PIVOT BRACKET AT A TIME AND ONLY IF THE STANDS ARE BOLTED TO THE FLOOR.
- Disconnecting more than one pivot bracket at a time or not bolting the stands to the floor can cause the conveyor to tip and may result in serious injury.

2. Lower the quick release arm (**Figure 15, item 1**) on one of the stands. *Note: if the conveyor is not equipped with Quick Release (QR Type) stands, it will be necessary to remove the entire stand.* For detailed instructions, refer to the "Sanitary Support Stands Installation, Maintenance and Parts Manual."

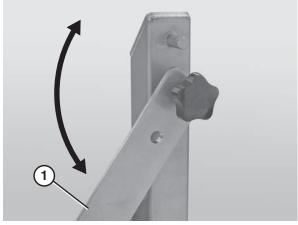


Figure 15

3. Slide the belt (**Figure 16, item 1**) on over the conveyor frame (**Figure 16, item 2**).

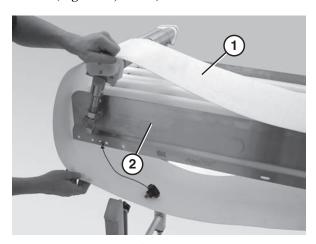


Figure 16

- 4. Secure the quick release arm on the stand and repeat steps 2 and 3 until the belt is around the entire length of the conveyor.
- 5. Add tension to the belt by lowering the tip-up tail or by sliding the idler tail out and tightening the nuts. Refer to "Conveyor Belt Tensioning" on page 19.
- 6. Adjust the belt tracking as necessary. Refer to "Conveyor Belt Tracking" on page 19.

#### **Guide Installation**

Typical Guide Components (Figure 17)

- 1 Guide
- 2 Pull pin

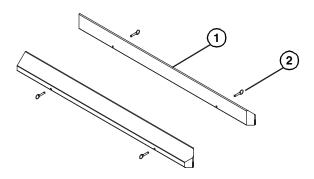


Figure 17

1. Position the guide (**Figure 18, item 1**) so that the flat surface is facing the belt and then slide the guide onto the frame rail (**Figure 18, item 2**).

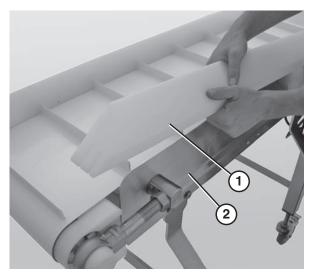


Figure 18

2. Line up the guide holes with the holes in the frame.

3. Insert the pull pins (**Figure 19, item 1**) into the holes in the guide (**Figure 19, item 2**).

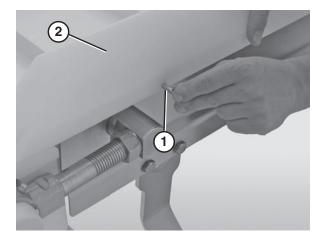


Figure 19

## **LPZ Conveyors**

### **Knuckles**

1. Attach upper knuckle (Figure 20, item 1) to frame (Figure 20, item 2) with hex rods (Figure 20, item 3) and bolts (Figure 20, item 4).

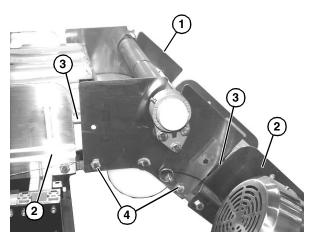


Figure 20

2. Attach lower knuckle (Figure 21, item 1) to frame (Figure 21, item 2) with hex rods (Figure 21, item 3), and bolts (Figure 21, item 4).

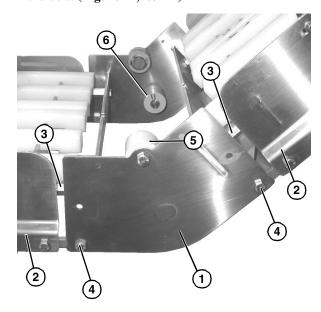


Figure 21

- 3. Install hold down sleeve bearing (**Figure 21, item 5**), and secure with cap screw. Repeat on opposite side.
- 4. Install return sleeve bearing (**Figure 21, item 6**), and secure with clamp. Repeat on opposite side.

## Belt

1. Slide belt (**Figure 22, item 1**) over knuckles and onto top and bottom of wear strips.

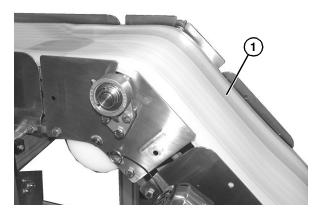


Figure 22

#### **Guides**

1. Install the belt return (**Figure 23, item 1**).

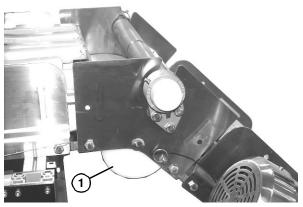


Figure 23

2. Slide the guides (**Figure 24, item 2**) onto the knuckle frame, and secure with two pull pins (**Figure 24, item 3**).

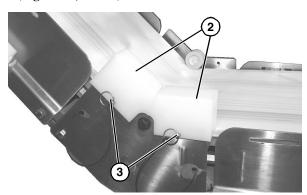


Figure 24

3. Repeat for opposite side of conveyor.

## **All Conveyors**

### **Belt Return Installation**

## Flat Belt

Typical Flat Belt Components (Figure 25)

1 Flat belt returns

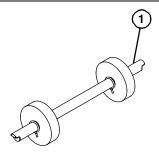


Figure 25

1. Slide the return shaft (**Figure 26, item 1**) up and through the large slot (**Figure 26, item 2**) in the frame.

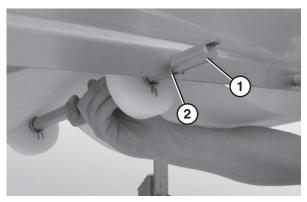


Figure 26

2. Push up on the return shaft (**Figure 27, item 1**) and slide the notched end of the shaft through the small slot (**Figure 27, item 2**) on the opposite side of the frame.

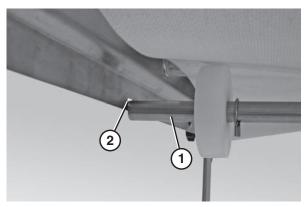


Figure 27

3. Repeat the procedure for all other belt returns.

#### **Cleated Belt**

Typical Cleated Belt Components (Figure 28)

1 Cleated belt returns

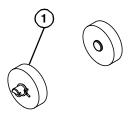


Figure 28

Insert the notched end of the return shaft
 (Figure 29, item 1) through the small hole
 (Figure 29, item 2) in the inside of the conveyor frame.

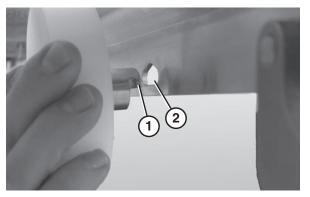


Figure 29

2. Repeat the procedure for all other belt returns.

## **Scraper Installation**

Typical Scraper Components (Figure 30)

- 1 Scraper adjust plate
- 2 Scraper shaft
- 3 Scraper bar holder
- 4 UHMW scraper
- 5 Scraper mount plate
- 6 Pull pin
- 7 Handle
- 8 M10-1.50 hex head cap screws (x4)

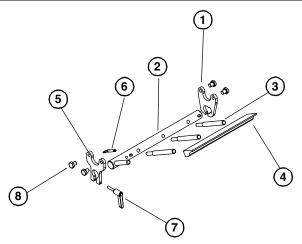


Figure 30

1. Attach the scraper adjust plate (**Figure 30, item 1**) and the scraper mount plate (**Figure 30, item 5**) to the frame using four M10-1.5 x 12mm hex head cap screws.

 Slide the notched end of the scraper shaft (Figure 31, item 1) through the adjustment plate (Figure 31, item 2).

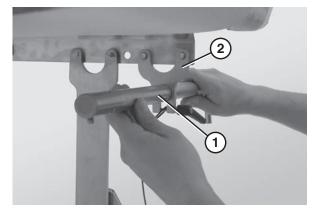


Figure 31

3. Insert the notched end of the scraper shaft (**Figure 32, item 1**) so that it is situated within the groove in the mounting plate (**Figure 32, item 2**).

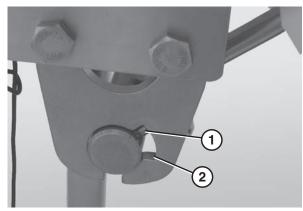


Figure 32

4. Attach the scraper bar holders (**Figure 33, item 1**) to the scraper shaft (**Figure 33, item 2**).

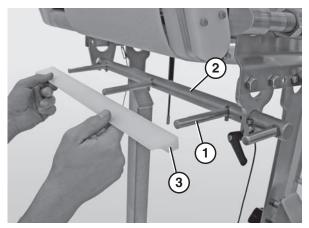


Figure 33

5. Attach the UWHM scraper (Figure 33, item 3) to the scraper bar holders (Figure 33, item 1).

6. Insert the pin (**Figure 34, item 1**) to lock the scraper bar in place (**Figure 34, item 2**).

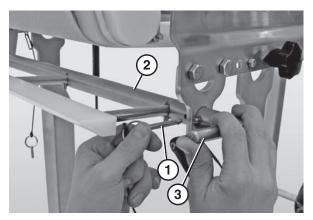


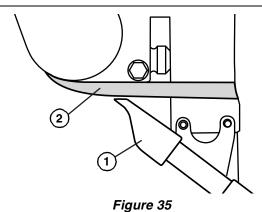
Figure 34

7. Adjust the scraper to the desired position using the scraper bar handle (**Figure 34, item 3**).

## **CAUTION**

Apply minimal pressure between the scraper (Figure 35, item 1) and the belt (Figure 35, item 2).

Positioning the scraper so that it is digging into the belt will increase resistance, cause unnecessary strain on the motor and lead to premature belt failure.



8. Secure the scraper by tightening the handle (**Figure 36, item 1**).

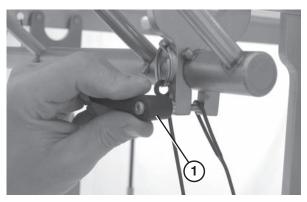


Figure 36

### **Stand Installation**

Typical Stand Components (Figure 37)

- 1 Conveyor
- 2 Stand
- 3 Knob
- 4 M10-1.50 x 12 mm hex head cap screws (x2)

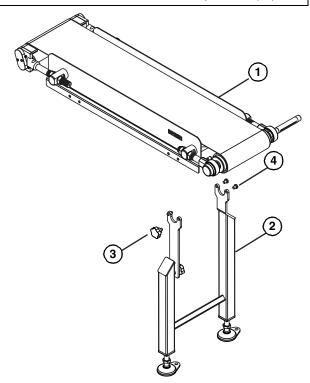


Figure 37

1. Properly support the conveyor.

2. Attach the non-quick release side of the stand (Figure 38, item 1) to the MOTOR SIDE of the conveyor (Figure 38, item 2) using two M10-1.5 x 12mm hex head cap screws (Figure 38, item 3).

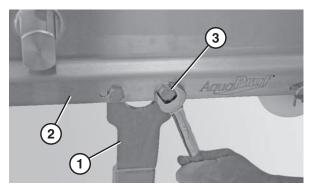


Figure 38

3. Attach the quick-release arm to the stand with the knob (**Figure 37, item 3**).

For detailed assembly instructions, refer to the "Sanitary Support Stands Installation, Maintenance and Parts Manual."

## **Drive Package Installation**

Typical Motor Components (Figure 39) (end drive shown)

- 1 End drive package
- 2 Motor

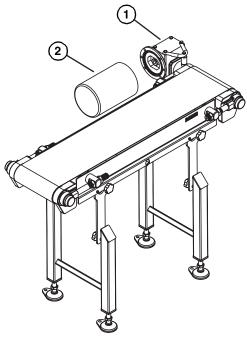


Figure 39

1. Attach the motor (Figure 40, item 1) to the gear reducer (Figure 40, item 2).

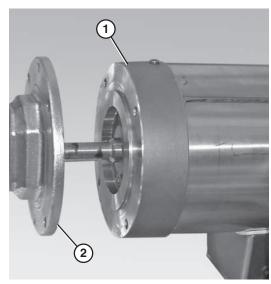


Figure 40

For detailed assembly instructions, refer to the "7600 Series End Drive Packages Installation, Maintenance and Parts Manual."

## **Mounting Block Installation**

- 1. Clamp mounting block (**Figure 41, item 1**) to frame (**Figure 41, item 2**).
- 2. Tighten bolt to 20 in-lb (2 Nm) (**Figure 41, item 3**) to secure.

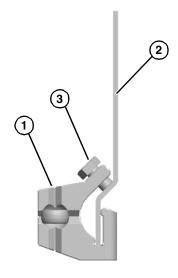


Figure 41

## **CAUTION**

Do not overtighten bolt. Over tightening may cause the mounting block to deform.

## **Required Tools**

- 14 mm wrench (or adjustable wrench)
- 1/8" hex wrench (for bearing shaft assembly fasteners)
- 8 mm wrench
- 10 mm wrench
- 17 mm wrench
- 3 mm hex wrench
- 5 mm hex wrench

#### 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

### NOTE

Proper conveyor application, cleaning, and sanitation are the responsibility of the end user.

## **A** 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**



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.

#### **Standard Conveyors**

1. Remove the guides, if applicable, by removing the pull pins (**Figure 42, item 1**) that connect the guide (**Figure 42, item 2**) to the frame.

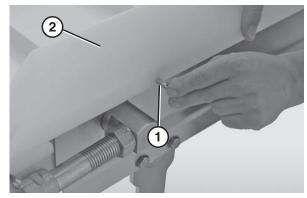


Figure 42

2. Place the tip up tail (**Figure 43, item 1**) in the up position.

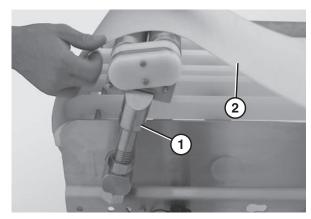


Figure 43

3. Lift up on the belt (Figure 43, item 2).

#### **Conveyors with Lifters**

- 1. Remove the guides, if applicable, by removing the pull pins (**Figure 44**, **item 1**) that connect the guide (**Figure 44**, **item 2**) to the frame.
- 2. Place the tip up tail in the up position.
- 3. Use the lifter handle (**Figure 44**, **item 1**) to raise the belt (**Figure 44**, **item 2**).

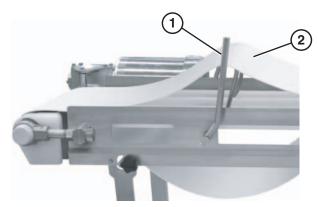


Figure 44

## A CAUTION

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

## **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 18.
- Refer to "Spindle Removal" on page 20.

#### 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 45, item 1) on the exterior of the bearing shaft assembly.



Figure 45

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 8.
- Refer to "Belt Return Installation" on page 12.

## Scraper

Replace the UHMW scraper if it becomes worn.

Refer to "Scraper Installation" on page 13 for scraper installation instructions.

## **Maintaining the Conveyor Belt**

## **Troubleshooting**

Inspect conveyor belt for:

· Surface cuts or wear

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

- Sharp or heavy parts impacting belt
- · Jammed parts
- Accumulated dirt
- Foreign material inside the conveyor
- Improperly positioned accessories
- Excessive load on belt
- Dirt impacted on spindle
- Excessive or improper side loading
- Improper tracking

Skipping indicates:

- Excessive load on belt
- Worn spindle or impacted dirt on drive spindle
- · Improper tracking

## **Conveyor Belt Replacement**



**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 46, item 1**) that connect the guide (**Figure 46, item 2**) to the frame.

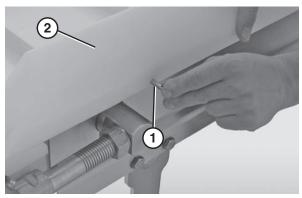


Figure 46

2. Remove the guide (**Figure 47**, **item 1**) from the conveyor (**Figure 47**, **item 2**).

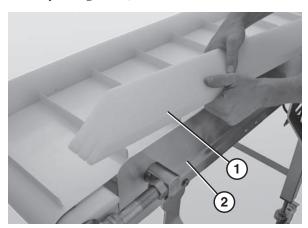


Figure 47

#### **Standard Belts**

1. Place the idler tail (**Figure 48, item 1**) in the UP position.

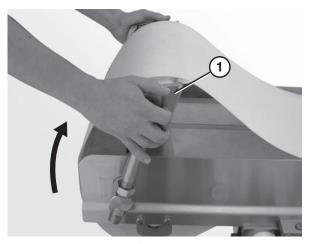


Figure 48



#### **SEVERE HAZARD!**

- ONLY DISCONNECT ONE PIVOT BRACKET AT A TIME AND ONLY IF THE STANDS ARE BOLTED TO THE FLOOR.
- Disconnecting more than one pivot bracket at a time or not bolting the stands to the floor can cause the conveyor to tip and may result in serious injury.
- 2. Lower the quick release arm (**Figure 49, item 1**) on one of the stands. *Note: if the conveyor is not equipped with Quick Release (QR Type) stands, it will be necessary to remove the entire stand.* For detailed instructions, refer to the "Sanitary Support Stands Installation, Maintenance and Parts Manual."

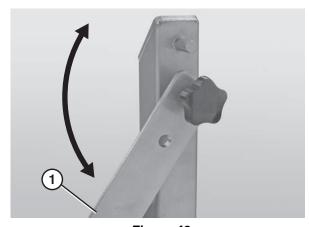


Figure 49

3. Slide the old belt (**Figure 50, item 1**) off the conveyor frame (**Figure 50, item 2**).

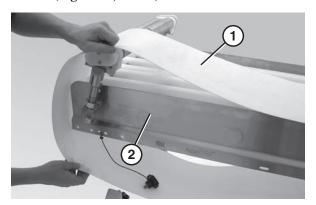


Figure 50

- 4. Secure the quick release arm on the stand and repeat steps 2 and 3 until the entire belt is off the conveyor.
- 5. Replace the old belt with a new one. Refer to "Belt Installation" on page 9.

## **Conveyor Belt Tensioning**



**SEVERE HAZARD!** 

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



Over-tensioning of conveyor may stretch conveyor belt and reduce bearing life.

 Loosen the back nuts (Figure 51, item 1) on both sides of the idler tail shaft.

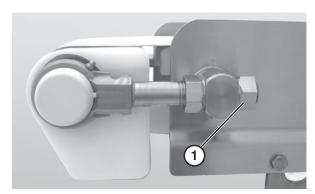


Figure 51

2. Turn the front nuts closest to the tail (**Figure 52**, **item 1**) clockwise in order to increase tension on the belt.

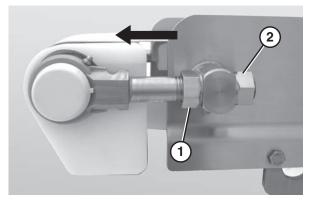


Figure 52



Ensure that there is at least 6" (152 mm) from the frame to the end of the tail.

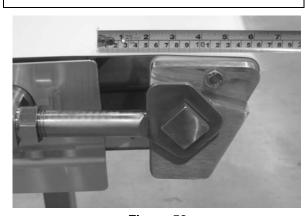


Figure 53

3. Tighten the back nuts (**Figure 52, item 2**) to secure the tail.

## **Conveyor Belt Tracking**

Adjust the lengths of the idler tail shafts to correct conveyor belt tracking.

For v-guide belts, track until the bulge in the conveyor belt (**Figure 54, item 1**) lies flat.

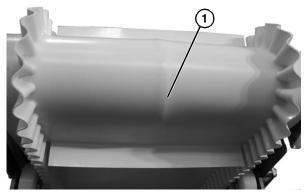


Figure 54

To adjust conveyor belt tracking:

- 1. Loosen the back nut (**Figure 52**, **item 2**) on the idler tail shaft that needs to be adjusted.
- 2. Tighten or loosen the front nut (**Figure 52**, **item 1**) on the idler tail shaft adjust the belt tracking.

## **A** CAUTION

Ensure that there is at least 6" (152 mm) from the frame to the end of the tail.

 Loosen the nut to shorten the length of the idler tail shaft and bring the belt closer to that side of the conveyor (Figure 55).

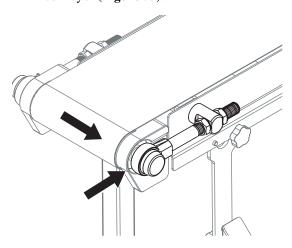


Figure 55

b. Tighten the nut to increase the length of the idler tail shaft and move the belt away from that side of the conveyor (**Figure 56**).

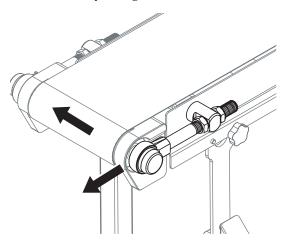


Figure 56

Tighten the back nut on the idler tail shaft when finished.

## **Spindle Removal**

# WARNING 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 spindles. Refer to "Conveyor Belt Replacement" on page 18.
- 2. Remove the spindle by following the instructions for the specific spindle type:
- A Drive Spindle Removal
- B Idler Spindle Removal
- C 0.5" Nose Bar Idler Spindle Removal
- D 1" Nose Bar Idler Spindle Removal
- E 1.875" Nose Bar Idler Spindle Removal

## A - Drive Spindle Removal



#### **PUNCTURE HAZARD!**

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

1. Remove the drive spindle cover (**Figure 57**, item 1).

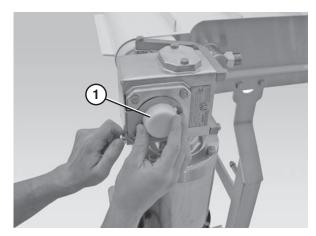


Figure 57

2. Use a 5 mm hex wrench to loosen the outside button head screws (**Figure 58**, **item 1**) and the inside button head screws (**Figure 58**, **item 2**) that connect the gearmotor to the drive spindle.

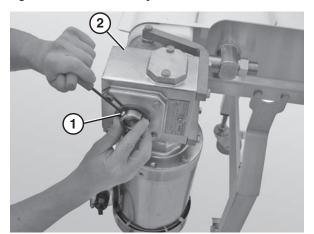


Figure 58



**CRUSH HAZARD!** 

- SUPPORT MOTOR PRIOR TO LOOSENING THE BOLTS.
- Loosening motor bolts may cause it to drop down, causing serious injury.
- 3. Remove the bolts (**Figure 59**, **item 1**) that connect the motor (**Figure 59**, **item 2**) to the gear reducer (**Figure 59**, **item 3**) and remove the motor (vertical mount drive package shown).

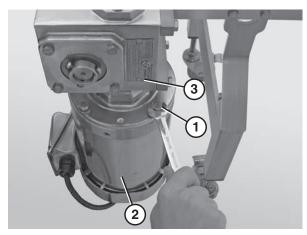


Figure 59

4. Remove the bolts (**Figure 60, item 1**) that connect the gear reducer (**Figure 60, item 2**) to the motor support bracket (**Figure 60, item 3**) and slide the gear reducer off the drive spindle.

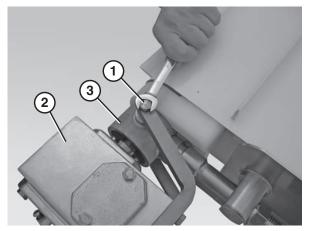


Figure 60

5. Remove the back nut (**Figure 61, item 1**) on both drive tail shafts (**Figure 61, item 2**).

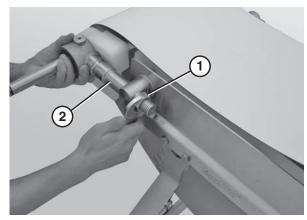


Figure 61

6. Slide the drive tail assembly (**Figure 62, item 1**) out of the take up blocks (**Figure 62, item 2**).

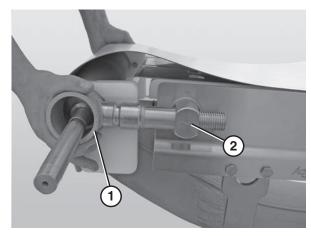


Figure 62

7. Slide the motor support bracket (**Figure 63, item 1**) off the drive spindle (**Figure 63, item 2**).

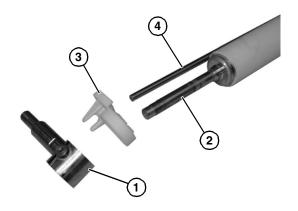


Figure 63

- 8. Remove the pinch guard (**Figure 63, item 3**) from pinch guard shaft (**Figure 63, item 4**) and drive spindle.
- 9. Use a 4 mm hex wrench to loosen the bearing fasteners (Figure 64, item 1).

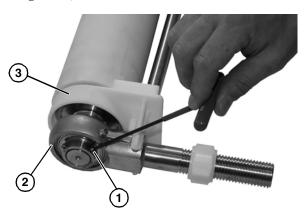


Figure 64

10. Remove the bearing shaft (**Figure 64, item 2**) and pinch guard (**Figure 64, item 3**).

## **B** - Idler Spindle Removal

1. Remove the back nuts (**Figure 65, item** 1) on both idler tail shafts.

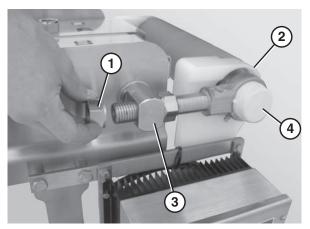


Figure 65

- 2. Slide the idler tail assembly (**Figure 65, item 2**) out of the take up blocks (**Figure 65, item 3**).
- 3. Remove the bearing covers (**Figure 65, item 4**).
- 4. Use a 4 mm hex wrench to loosen the bearing shaft assembly fasteners (**Figure 66**, item 1).



Figure 66

5. Remove the bearing shafts (**Figure 67, item 1**) and both pinch guards (**Figure 67, item 2**).

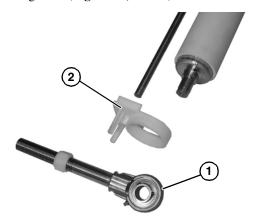


Figure 67

## C - 0.5" Nose Bar Idler Spindle Removal

1. Remove the back nuts (**Figure 68, item 1**) on both discharge nose bar shafts.

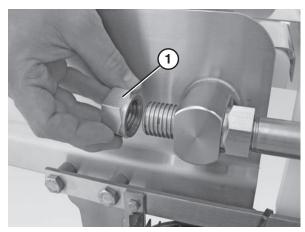


Figure 68

2. Slide the nose bar tail assembly (**Figure 69, item 1**) out of the take up blocks (**Figure 69, item 2**).

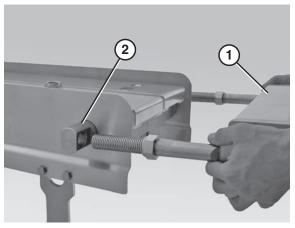


Figure 69

3. Slide the nose bar shafts (**Figure 70, item 1**) off of the nose bar weldment (**Figure 70, item 2**).

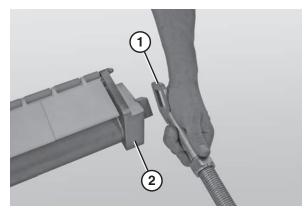


Figure 70

4. Use a 10 mm wrench to remove one of the acorn nuts (**Figure 71, item 1**) from the nose bar shaft.

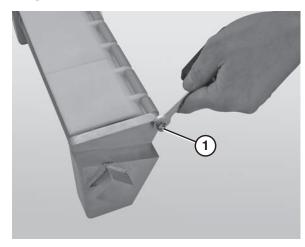


Figure 71

5. Remove the nose bar shaft (**Figure 72, item 1**), the rollers (**Figure 72, item 2**) and the roller mounts (**Figure 72, item 3**).

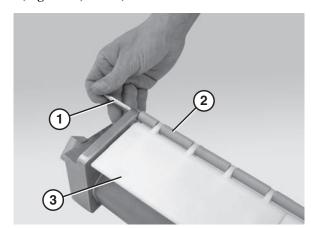


Figure 72

6. Remove the nose bar return spindle (**Figure 73, item 1**).

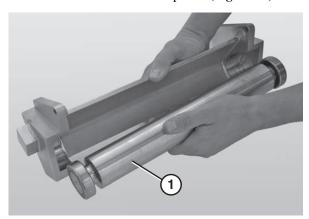


Figure 73

## D - 1" Nose Bar Idler Spindle Removal

1. Remove the back nuts (**Figure 74**, **item 1**) on both discharge nose bar shafts.

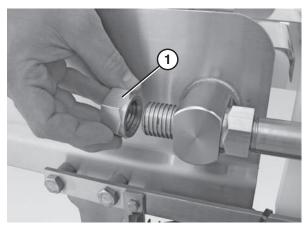


Figure 74

2. Slide the nose bar tail assembly (**Figure 75, item 1**) out of the take up blocks (**Figure 75, item 2**).

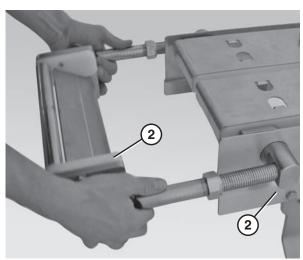


Figure 75

3. Slide the nose bar shafts (**Figure 76, item 1**) off of the nose bar weldment (**Figure 76, item 2**).

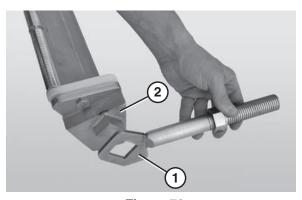


Figure 76

4. Use a 17 mm wrench to remove both pilot nose bolts (Figure 77, item 1) from the nose bar weldment (Figure 77, item 2).

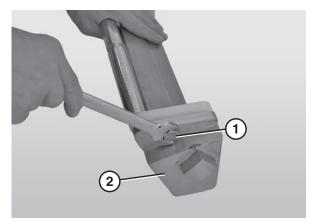


Figure 77

5. Slide the nose bar puck holders (**Figure 78, item 1**) and the nose bar spindle (**Figure 78, item 2**) off of the nose bar weldment (**Figure 78, item 3**).

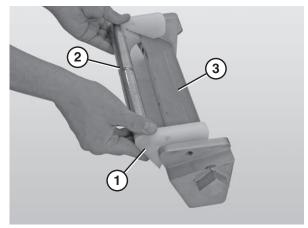


Figure 78

6. Remove the nose bar return spindle (**Figure 79**, item 1).

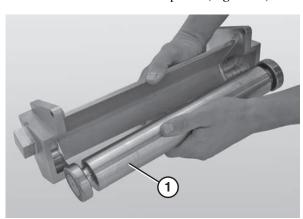


Figure 79

## E - 1.875" Nose Bar Idler Spindle Removal

1. Slide the pinch guard blocks (**Figure 80**, **item 1**) off the nose bar spindles (**Figure 80**, **item 2**).

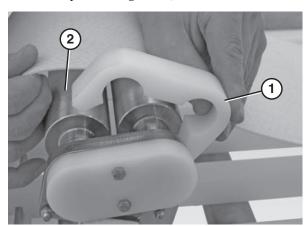


Figure 80

2. Remove the transfer bearing screws (**Figure 81, item 1**) and the cover (**Figure 81, item 2**) using an 8 mm wrench.

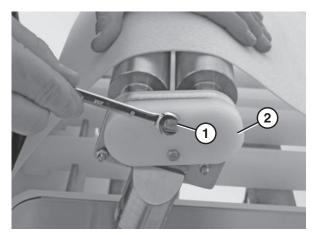


Figure 81

3. Remove the back nuts (**Figure 82**, **item 1**) on both discharge nose bar shafts.

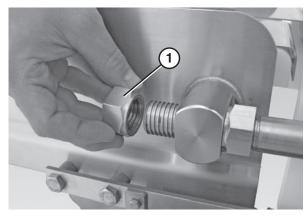


Figure 82

4. Slide the nose bar tail assembly (**Figure 83, item 1**) out of the take up blocks (**Figure 83, item 2**).

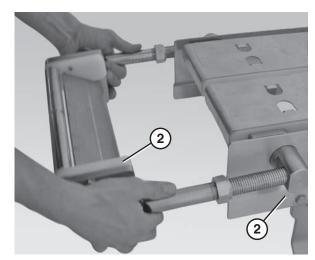


Figure 83

5. Use a 4 mm hex wrench to loosen all the bearing fasteners (**Figure 84, item 1**).

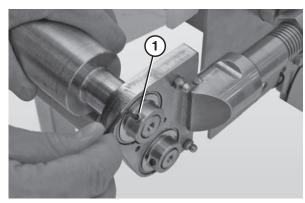


Figure 84

6. Slide the nose bar shafts (**Figure 85, item 1**) off the nose bar spindles (**Figure 85, item 2**).

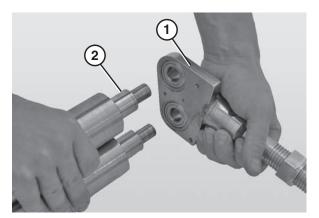


Figure 85

## **Reassembling Tail Assemblies**

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

## **Gas Assist Replacement**

- 1. Raise the tip up tail.
- 2. Remove the pull pin (Figure 86, item 1).

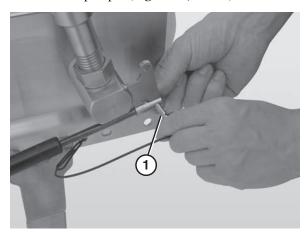


Figure 86

3. Remove the hex bolt (**Figure 87, item 1**) that connects the gas spring (**Figure 87, item 2**) to the gas spring standoff post (**Figure 87, item 3**).

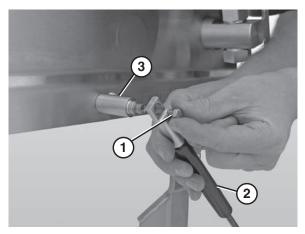


Figure 87

4. Remove the inside hex bolt that connects the standoff post (**Figure 87**, **item 3**) to the frame.

## **Bearing Replacement**

## **Standard Bearings**

- 1. Secure the bearing shaft.
- 2. Remove the bearing cover.
- 3. Insert the rod end of another bearing shaft through the bearing orifice (**Figure 88**).

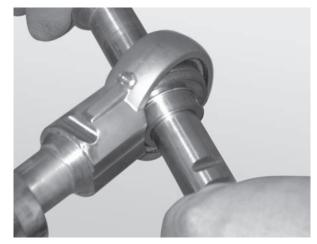


Figure 88

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

5. Remove the worn or damaged bearing (**Figure 89, item**).

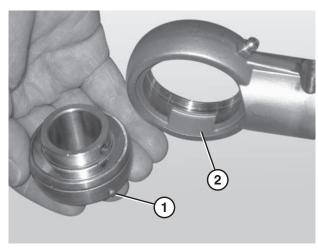


Figure 89

6. Replace the bearing.

## **NOTE**

When inserting the new bearing, make sure the anti-rotation notch (Figure 89, item 1) on the bearing lines up with the groove inside the housing (Figure 89, item 2).

## .5" and 1" Nose Bar Return Spindle Bearings

- 1. Remove the nose bar return spindle. Refer to "Spindle Removal" starting on page 20.
- 2. Using a bearing removal tool (**Figure 90, item 1**), remove the bearing (**Figure 90, item 2**).

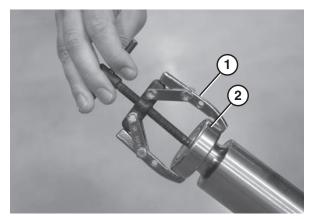


Figure 90

3. Replace the bearing.

## 1" Nose Bar Bearings

- 1. Remove the nose bar spindle. Refer to "Spindle Removal" starting on page 20.
- 2. Remove the nose bar puck holders (Figure 91, item 1).

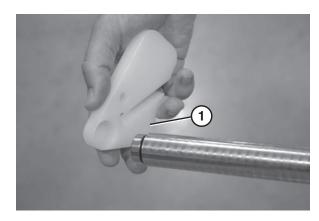


Figure 91

3. Using a bearing removal tool (**Figure 92, item 1**) remove the bearing (**Figure 92, item 2**).

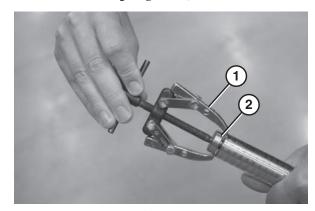


Figure 92

4. Replace the bearing.

## 1.875" Nose Bar Bearings

- 1. Remove the nose bar spindle. Refer to "Spindle Removal" starting on page 20.
- 2. Remove the bearing (**Figure 93, item 1**) from the nose bar shaft assembly (**Figure 93, item 2**).

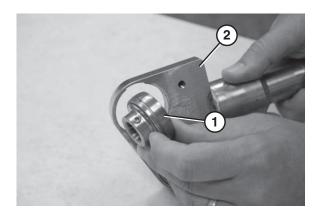


Figure 93

3. Replace the bearing.

## **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 12.

## Removal

 Remove three bolts (Figure 94, item 1) on each side, and remove spindle assembly (Figure 94, item 2) from knuckle.

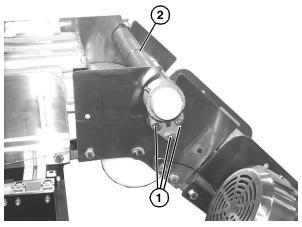


Figure 94

2. Remove the bearing cover (Figure 95, item 1).

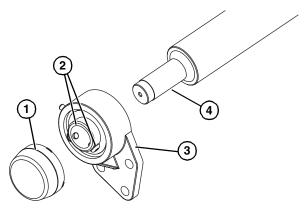


Figure 95

- 3. Use a hex wrench to loosen the bearing shaft assembly fasteners (**Figure 95, item 2**).
- 4. Slide the bearing flange assembly (**Figure 95, item 3**), off the spindle shaft end (**Figure 95, item 4**).

#### Installation

1. Slide the bearing flange assembly (**Figure 96, item 1**), onto the spindle shaft end (**Figure 96, item 2**).

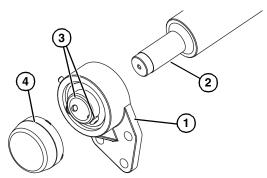


Figure 96

- Use a hex wrench to tighten the bearing shaft assembly fasteners (Figure 96, item 3).
- 3. Install the bearing cover (Figure 96, item 4).
- 4. Insert spindle assembly (**Figure 97, item 1**) onto knuckle, and attach with three bolts (**Figure 97, item 2**).

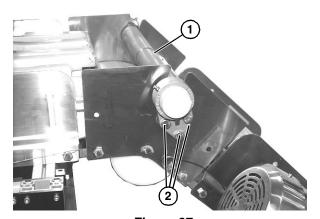


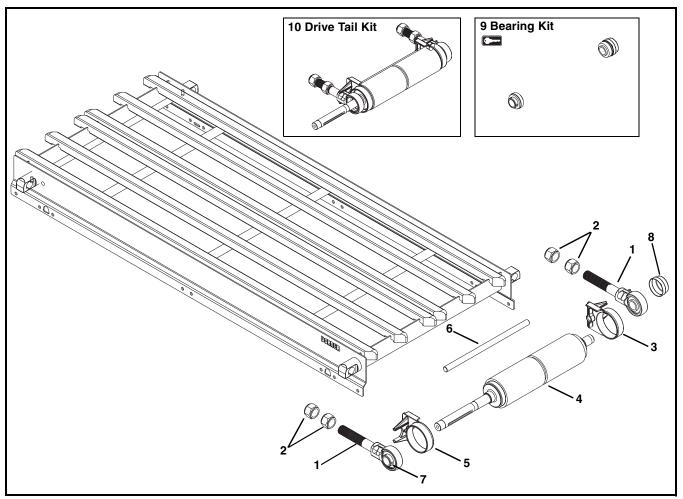
Figure 97

## **NOTES**

## **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.

## **Drive End Components**



Item	Part Number	Description
1 *	506372	Shaft Assembly, with Bearing and Cover
2	500791	Nut
3	506294	Pinch Guard, Right Hand
4	5103 <u>WW</u>	Drive Spindle
	5291 <u>WW</u>	CE Drive Spindle
5	506293	Pinch Guard, Left Hand
6	506369- <u>WW</u>	Pinch Shaft Guard
7	802-162	Bearing
8	807-1454	Bearing Cover

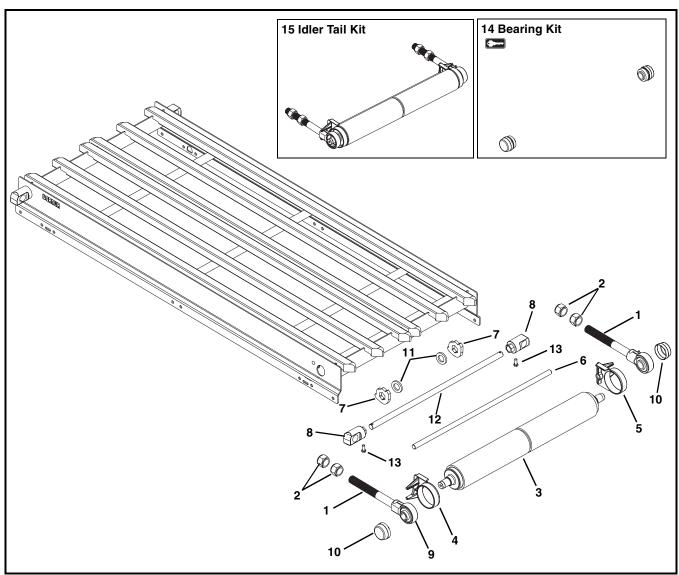
Item	Part Number	Description
E °	76BDKX	Bearing Kit when Conveyor is ordered with a Dorner Gearmotor Mounting Package (Includes Items 7 and 8)
	76BCKX	Bearing Kit when Conveyor is ordered without a Dorner Gearmotor Mounting Package (Includes Items 7 and 8)
10**	76DDTX-WW	Drive Tail Kit when Conveyor is ordered with a Dorner Gearmotor Mounting Package (Includes Items 1 through 6)
	76DCTX-WW	Drive Tail Kit when Conveyor is ordered without a Dorner Gearmotor Mounting Package (Includes Items 1 through 6)

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

<sup>\*</sup> When the conveyor is ordered with a Dorner gearmotor mounting package a shaft assembly is replaced with a gearmotor mounting bracket.

<sup>\*\*</sup> Drive tail kits are not available for CE conveyors.

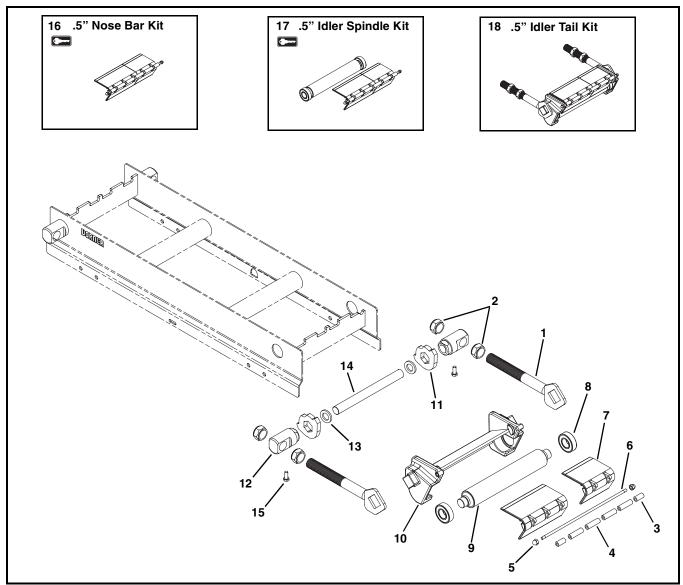
## **Idler End Components**



Item	Part Number	Description
1	506375	Shaft Assembly, with Bearing and Cover
2	500791	Nut
3	5104 <u>WW</u>	Idler Spindle
4	506293	Pinch Guard, Left Hand
5	506294	Pinch Guard, Right Hand
6	506369- <u>WW</u>	Pinch Shaft Guard
7	506356	Key Stop

Item	Part Number	Description
8	506318	Tip Up Knob
9	802-162	Bearing
10	807-1454	Bearing Cover
11	514373	Spacer
12	506370- <u>WW</u>	Tip Up Shaft
13	960620MSS	Hex Head Cap Screw, M6-1.00 x 20 mm
14	76BKX- <u>WW</u>	Bearing Kit (Includes Items 9 and 10)
•		
15	76STX-WW	Idler Tail Kit (Includes Items 1 through 6)
WW = Conveyor width ref: 06 - 60 in 02 increments		

## .5" Nose Bar Idler End



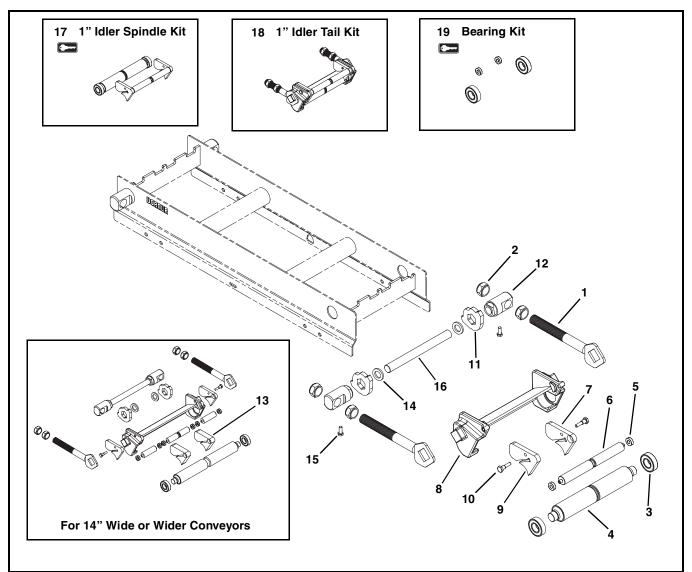
Item	Part Number	Description
1	500997	0.5" Nose Bar Shaft Assembly
2	500791	Nut
3	501087	Roller, 0.5" x 1.06"
4	501086	Roller, 0.5" x 1.72"
5	990608MSS	Acorn Nut
6	5099 <u>WW</u>	Nose Bar Shaft
7	See Chart	Roller Mount
8	802-164	Return Spindle Bearing
9	5097 <u>WW</u>	0.5" Nose Bar Return Spindle
10	5092 <u>WW</u>	0.5" Nose Bar Weldment Assembly
11	506356	Key Stop

Item	Part Number	Description	
12	506318	Tip Up Knob	
13	514373	Spacer	
14	506370- <u>WW</u>	Tip Up Shaft	
15	960620MSS	Hex Head Cap Screw, M6-1.00 x 20 mm	
16	76NB5- <u>WW</u>	0.5" Nose Bar Kit (Includes Items 3 through 7)	
17	76NB- <u>WW</u>	0.5" Idler Spindle Kit (Includes Items 3 through 9)	
18	76NBT- <u>WW</u>	0.5" Idler Tail Kit (Includes Items 1 through 10)	
<u>WW</u> =	<u>WW</u> = Conveyor width ref: 06 - 60 in 02 increments		

Dorner Mfg. Corp.

Item 7: Roller Mount		
Width	Part Number	
6" (152 mm)	501078	
8" (203 mm)	501077	
10" (254 mm)	501078 & 501079	
12" (305 mm)	501077 & 501079	
14" (356 mm)	501077 & 501078	
16" (406 mm)	501077 (x2)	
18" (457 mm)	501077, 501078 & 501079	
20" (508 mm)	501077 (x2) & 501079	
22" (559 mm)	501077 (x2) & 501076	
24" (610 mm)	501077 (x3)	
26" (660 mm)	501077 (x2), 501078 & 501079	
28" (711 mm)	501077 (x3) & 501079	
30" (762 mm)	501077 (x3) & 501078	
32" (813 mm)	501077 (x4)	
34" (864 mm)	501077 (x3), 501078 & 501079	
36" (914 mm)	501077 (x4) & 501079	
38" (965 mm)	501077 (x4) & 501078	
40" (1016 mm)	501077 (x5)	
42" (1067 mm)	501077 (x4), 501078 & 501079	
44" (1118 mm)	501077 (x5) & 501079	
46" (1168 mm)	501077 (x5) & 501078	
48" (1219 mm)	501077 (x6)	
50" (1270 mm)	501077 (x5), 501078 & 501079	
52" (1321 mm)	501077 (x6) & 501079	
54" (1372 mm)	501077 (x6) & 501078	
56" (1422 mm)	501077 (x7)	
58" (1473 mm)	501077 (x6), 501078 & 501079	
60" (1524 mm)	501077 (x7) & 501079	

## 1" Nose Bar Idler End

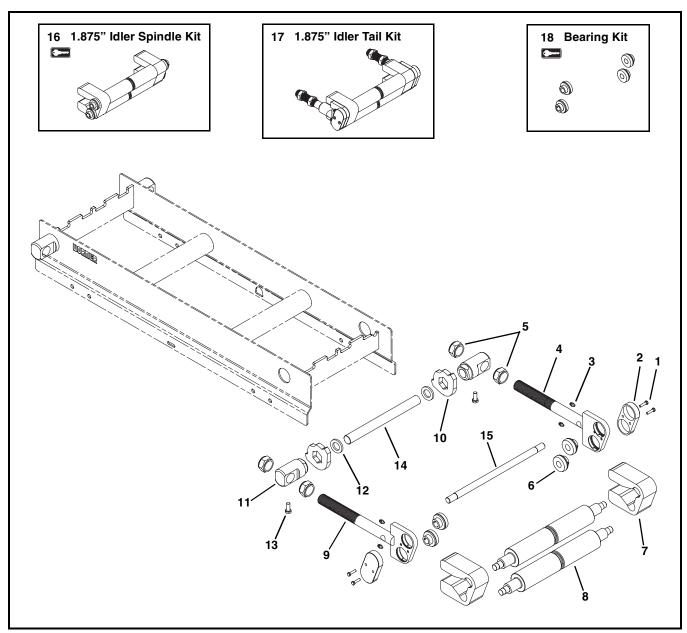


Item	Part Number	Description
1	500997	1" Nose Bar Shaft Assembly
2	500791	Nut
3	802-164	Return Spindle Bearing
4	5107 <u>WW</u>	1" Nose Bar Return Spindle
5	802-123	Nose Bar Bearing
6	See Chart	1" Nose Bar Spindle
7	500975	Nose Bar Puck Holder, Right Hand
8	5105 <u>WW</u>	1" Nose Bar Weldment Assembly
9	500976	Nose Bar Puck Holder, Left Hand
10	501178	Pilot Nose Bolt
11	506356	Key Stop

Item	Part Number	Description	
12	506318	Tip Up Knob	
13	500977	Nose Bar Puck Holder, Center	
14	514373	Spacer	
15	960620MSS	Hex Head Cap Screw, M6-1.00 x 20 mm	
16	506370- <u>WW</u>	Tip Up Shaft	
17	76NB1- <u>WW</u>	1" Idler Spindle Kit (Includes Items 3 through 7, 9 and 13)	
18	76NBT1- <u>WW</u>	1" Idler Tail Kit (Includes Items 1 through 10 and 13)	
19	76BK1- <u>WW</u>	Bearing Kit	
		(Includes Items 3 and 5)	
<u>WW</u> =	WW = Conveyor width ref: 06 - 60 in 02 increments		

Item 6: 1" Nose Bar Spindle			
Width	Part Number		
6" (152mm)	505107		
8" (203mm)	505108		
10" (254mm)	505109		
12" (305mm)	505110		
14" (356mm)	505103 (x2) & 505107		
16" (406mm)	505103 (x2) & 505108		
18" (457mm)	505103 (x2) & 505109		
20" (508mm)	505103 (x2) & 505110		
22" (559mm)	505104 (x2) & 505107		
24" (610mm)	505104 (x2) & 505108		
26" (660mm)	505104 (x2) & 505109		
28" (711mm)	505104 (x2) & 505110		
30" (762mm)	505106 (x2) & 505107		
32" (813mm)	505106 (x2) & 505108		
34" (864mm)	505106 (x2) & 505109		
36" (914mm)	505106 (x2) & 505110		
38" (965mm)	505104 (x4) & 505107		
40" (1016mm)	505104 (x4) & 505108		
42" (1067mm)	505104 (x4) & 505109		
44" (1118mm)	505104 (x4) & 505110		
46" (1168mm)	505105 (x4) & 505107		
48" (1219mm)	505105 (x4) & 505108		
50" (1270mm)	505105 (x4) & 505109		
52" (1321mm)	505105 (x4) & 505110		
54" (1372mm)	505106 (x4) & 505107		
56" (1422mm)	505106 (x4) & 505108		
58" (1473mm)	505106 (x4) & 505109		
60" (1524mm)	505106 (x4) & 505110		

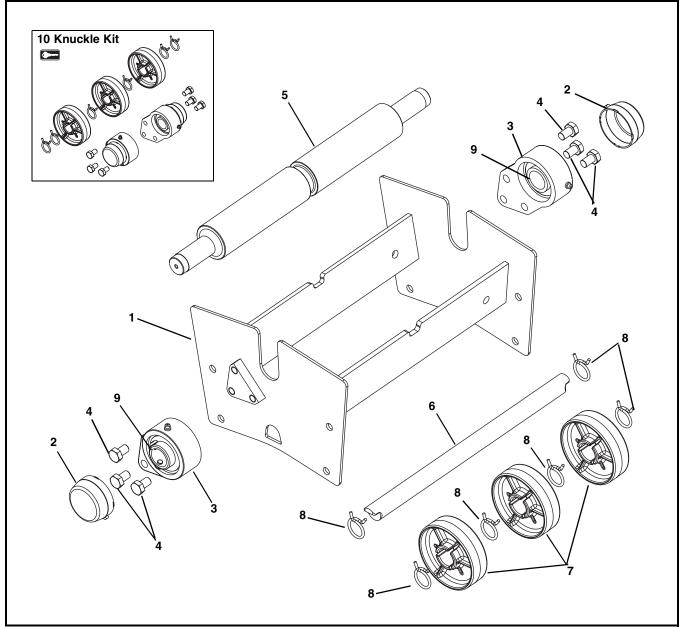
## 1.875" Nose Bar Idler End



Item	Part Number	Description
1	960520MSS	Hex Head Cap Screw M5-0.8 x 20 mm
2	501085	Transfer Bearing Cover
3	810-187	Grease Fitting
4	501083	1.875" Nose Bar Shaft Assembly Right Hand
5	500791	Nut
6	802-171	Bearing
7	501081	Pinch Guard block
8	5101 <u>WW</u>	1.875" Nose Bar Spindle
9	501084	1.875" Nose Bar Shaft Assembly Left Hand
10	506357	Key Stop

Item	Part Number	Description	
11	506318	Tip Up Knob	
12	514373	Spacer	
13	960620MSS	Hex Head Cap Screw, M6-1.00 x 20 mm	
14	506370- <u>WW</u>	Tip Up Shaft	
15	514403- <u>WW</u>	Anti-Rotation Bar	
16	76NB2- <u>WW</u>	1.875" Idler Spindle Kit	
		(Includes Items 6 through 8)	
17	76NBT2- <u>WW</u>	1.875" Idler Tail Kit	
		(Includes Items 1 through 9)	
18	76BK2- <u>WW</u>	Bearing Kit (Includes Item 6)	
<u>ww</u> =	<u>WW</u> = Conveyor width ref: 06 - 60 in 02 increments		

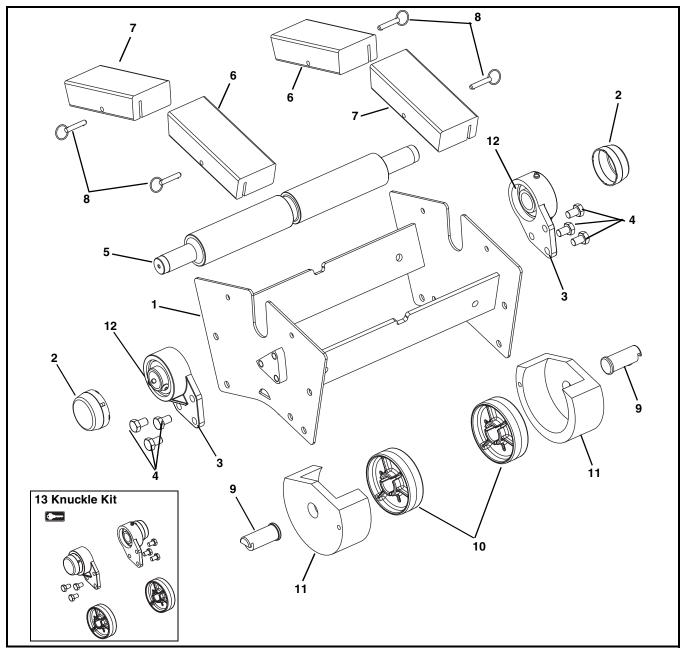
## **Upper Knuckle for Flat Belt Conveyors**



Item	Part Number	Description
1	5266 <u>WW</u>	Frame Assembly for 5° Knuckle
	5267 <u>WW</u>	Frame Assembly for 10° Knuckle
	5268 <u>WW</u>	Frame Assembly for 15° Knuckle
2	807-1454	Bearing Cover
3	500288	3 Hole Flange with Bearing
4	961016MSS	Hex Head Cap Screw M10-1.5 x 20 mm

Item	Part Number	Description
5	5244 <u>WW</u>	Spindle
6	5108 <u>WW</u>	Return Shaft
7	506296	Return Disk
8	807-1551	Clamp
9	802-162	Bearing
10	76UKBK-WW	Upper Knuckle Kit
		(Includes items 2, 3, 4, 7, and 8)
WW = Conveyor length ref: 06 - 24 in 02 increments		

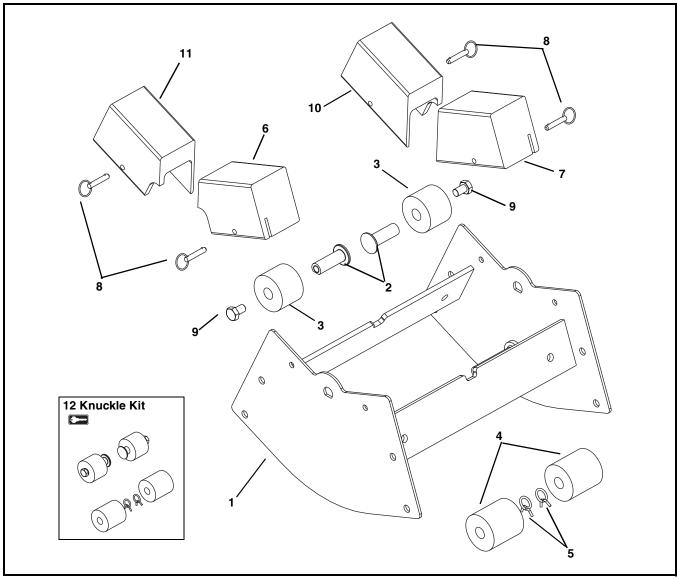
### **Upper Knuckle for Cleated Belt Conveyors**



Item	Part Number	Description
пеш	rait ivuilibei	Description
1	5251 <u>WW</u>	Frame Assembly for 30° Knuckle
	5252 <u>WW</u>	Frame Assembly for 45° Knuckle
	5253 <u>WW</u>	Frame Assembly for 60° Knuckle
2	807-1454	Bearing Cover
3	500288	3 Hole Flange with Bearing
4	961016MSS	Hex Head Cap Screw M10-1.5 x 20 mm
5	5244 <u>WW</u>	Spindle
6	501788- <u>AA</u>	1.5" Hold Down Guide,
		for Knuckle Right Hand
	501787- <u>AA</u>	3" Hold Down Guide,
		for Knuckle Right Hand

Item	Part Number	Description	
7	501978- <u>AA</u>	1.5" Hold Down Guide,	
		for Knuckle Left Hand	
	501977- <u>AA</u>	3" Hold Down Guide for Knuckle Left Hand	
8	807-1553	Pull Pin	
9	501097	Return Shaft	
10	506296	Return Disk	
11	501896- <u>AA</u>	Return Guards	
12	802-162	Bearing	
13	76UKBK	Upper Knuckle Kit	
		(Includes items 2, 3, 4, and 10)	
<u>ww</u> =	Conveyor lengt	th ref: 06 - 24 in 02 increments	
AA =	<u>AA</u> = Angle 30, 45 or 60		

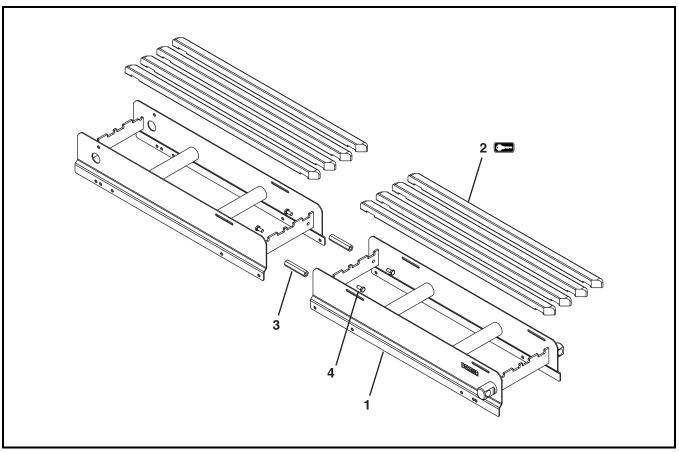
## **Lower Knuckle for Cleated Belt Conveyors**



Item	Part Number	Description
1	5245 <u>WW</u>	Frame Assembly for 30° Knuckle
	5246 <u>WW</u>	Frame Assembly for 45° Knuckle
	5247 <u>WW</u>	Frame Assembly for 60° Knuckle
2	501792	Hold Down Shaft
3	801-135	Hold Down Sleeve Bearing
4	801-136	Return Sleeve Bearing
5	807-1682	Clamp
6	501795- <u>AA</u>	Hold Down Guide for Knuckle Right Hand
7	501796- <u>AA</u>	Hold Down Guide for Knuckle Left Hand
8	807-1553	Pull Pin
9	961016MSS	Hex Head Cap Screw, M10-1.5x16 mm

Item	Part Number	Description
10	501795-AA	Hold Down Guide for Knuckle - Right Hand Cleated Belt Only
	501790-AA	Hold Down Guide for Knuckle - Right Hand Sidewall Cleated Belt Only
11	501796-AA	Hold Down Guide for Knuckle - Left Hand Cleated Belt Only
	501793-AA	Hold Down Guide for Knuckle- Left Hand Sidewall Cleated Belt Only
12	76LKBK	Lower Knuckle Kit (Includes items 2, 3, 4, 5, and 9)
<u>WW</u> =	Conveyor lengt	h ref: 06 - 24 in 02 increments
<u>AA</u> = .	Angle 30, 45 or 6	60

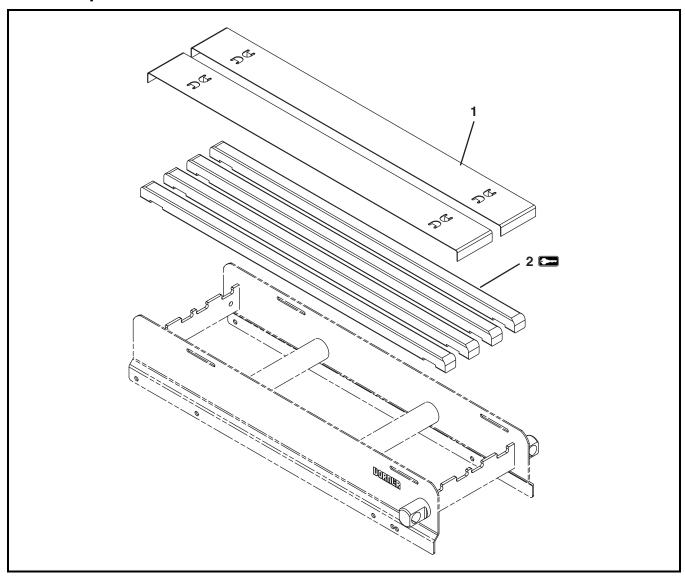
## Conveyor Frame and Extensions with Standard Wear Strips



Item	Part Number	Description
1		Consult Factory for Frame Part Number
2	501800- <u>LLL</u>	Wear Strip

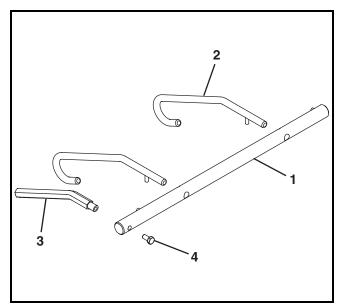
Item	Part Number	Description	
3	500193	Hex Post Connector	
4	961020MSS	Hex Head Cap Screw M10-1.5 x 20 mm	
LLL =	<u>LLL</u> = Conveyor length ref: 036 - 480 in 001 increments		

## **Wear Strips with Stainless Steel Sheet Bed Plate**



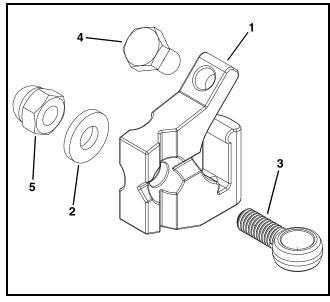
Item	Part Number	Description	
1	5123 <u>WW</u> - <u>LLL</u>	Bed Plate	
2	501098- <u>LLL</u>	Wear Strip	
<u>WW</u> =	<u>WW</u> = Conveyor width ref: 06 - 60 in 02 increments		
LLL =	<u>LLL</u> = Conveyor length ref: 036 - 480 in 001 increments		

#### Lifters



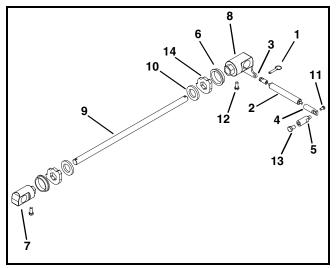
Item	Part Number	Description
1	5121 <u>WW</u>	Belt Lifter Shaft
2	501376	Belt Lifter
3	500491	Belt Lifter Handle
4	960812MSS	Hex Head Cap Screw, M8-1.25 x 12 mm
WW - Conveyor width ref: 06 - 60 in 02 increments		

#### **Mounting Block**



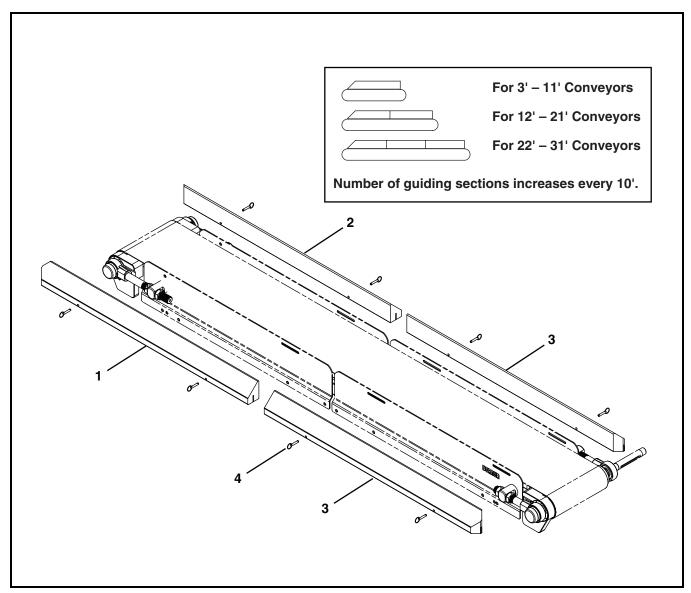
Item	Part Number	Description
1	509868	Mounting Block
2	807-1821	Washer
3	807-1994	Eyebolt, M10 x 1.50
4	961016MSS	Hex Head Cap Screw, M10 - 1.50 x 16 mm
5	991008MSS	Hex Nut, M10 - 1.50

### **Gas Assisted Tip Up**



807-1553 807-1562 500792 500793 500794	Pin Gas Spring Gas Spring Clevis Gas Spring Eyelet Gas Spring Stand Off Post
500792 500793	Gas Spring Clevis Gas Spring Eyelet
500793	Gas Spring Eyelet
500794	Gas Spring Stand Off Post
500895	Tip Up Bushing
506318	Tip Up Knob
506329	Tip Up Knob Assembly
500792	Tip Up Shaft
514373	Spacer
960612MSS	Hex Head Cap Screw, M6-1.00 x 12 mm
960820MSS	Hex Head Cap Screw, M8-1.25 x 20 mm
961015MSS	Hex Head Cap Screw,
	M10-1.50 x 16 mm
506356	Key Stop
10 10 10 10	506318 506329 500792 514373 960612MSS 960820MSS

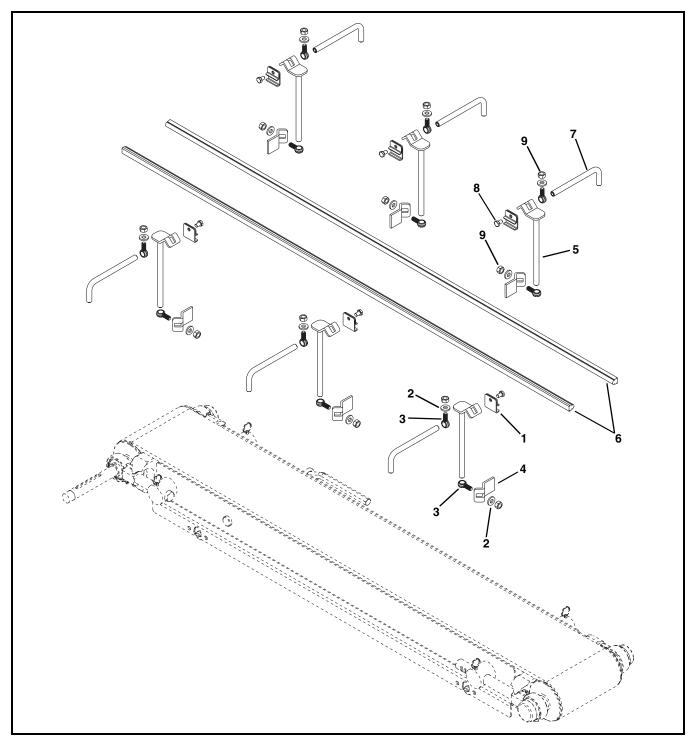
### 3" High Sides



Item	Part Number	Description
1	503460- <u>LLLLL</u>	High Side Guide for Conveyors 3'-11' Long
	503550- <u>LLLLL</u>	High Side Right Hand Guide for Conveyors over 11' Long
2	503460- <u>LLLLL</u>	High Side Guide for Conveyors 3'-11' Long

Item	Part Number	Description	
3	503650- <u>LLLLL</u>	High Side Right Hand Guide for Conveyors over 11' Long	
		, ,	
	503450- <u>LLLLL</u>	High Side Guide Square End	
4	807-1553	Pull Pin	
LLLLL	LLLLL = Guide Length in inches with 2 decimal places.		
Example: Guide Length = 95.25" LLLLL = 09525			

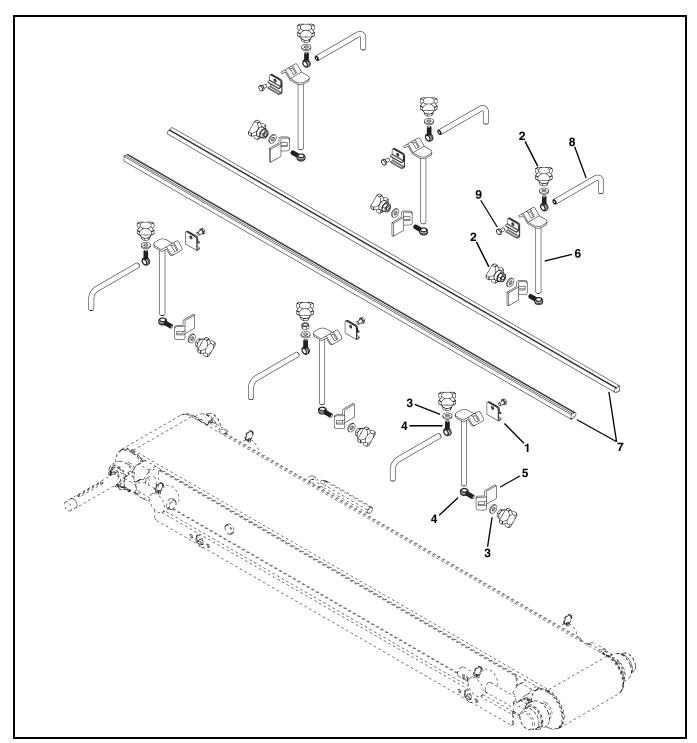
## Adjustable Guiding



Item	Part Number	Description
1	807-015	Rail Clamp
2	807-1821	Washer
3	807-1994	Eye Bolt M10 x 1.50
4	509875	Mounting Bracket
5	509876	Vertical Post Assembly
6	532167-LLLLL	Round Guide Rail

Item	Part Number	Description
7	532300	Guide Post
8	960812MSS	Hex Head Cap Screw, M8 - 1.25 x 12 mm
9	991001MSS	Hex Nut, M10 - 1.50
LLLLL = Length in inches with 2 decimal places.		
Example: Guide Length = 95.25" LLLLL = 09525		

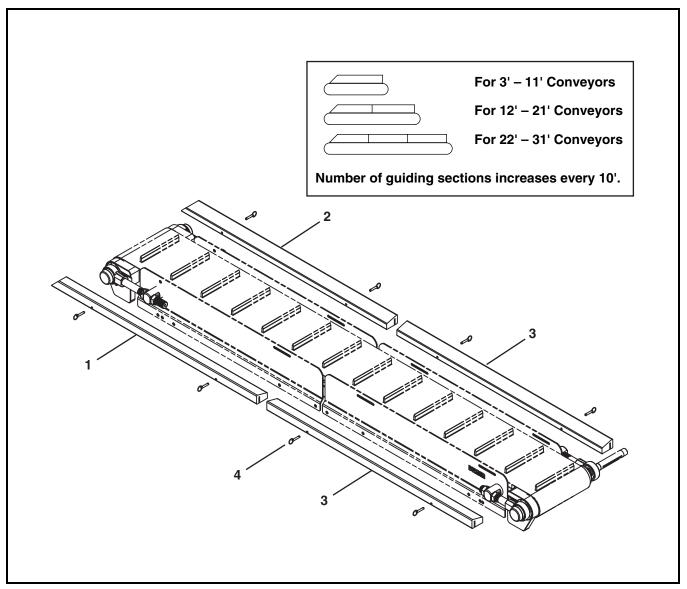
## **Tool-Less Adjustable Guiding**



Item	Part Number	Description
1	807-015	Rail Clamp
2	807-1057	Handle
3	807-1821	Washer
4	807-1994	Eye Bolt M10 x 1.50
5	509875	Mounting Bracket
6	509876	Vertical Post Assembly

Item	Part Number	Description	
7	532167- <u>LLLLL</u>	Round Guide Rail	
8	532300	Guide Post	
9	960812MSS	Hex Head Cap Screw, M8 - 1.25 x 12 mm	
LLLLI	LLLLL = Length in inches with 2 decimal places.		
Exam	ple: Guide Length	n = 95.25" <u>LLLLL</u> = 09525	

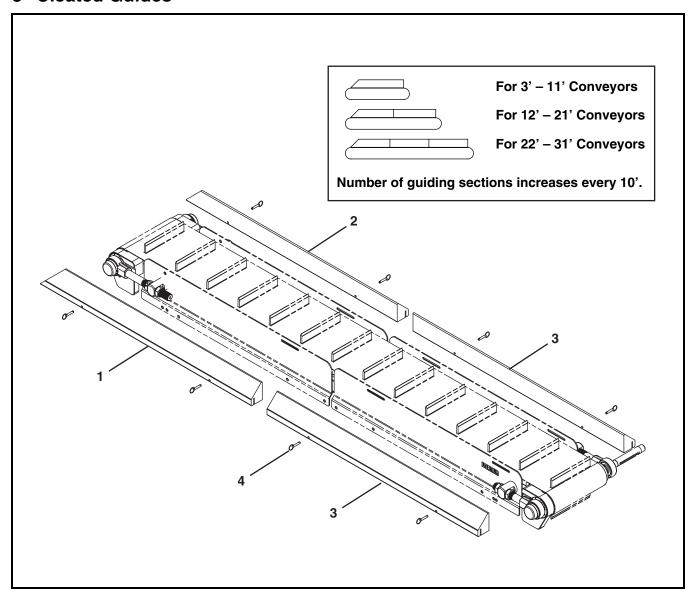
#### 1" Cleated Guides



Item	Part Number	Description
1	502450- <u>LLLLL</u>	1" Cleated Right-hand Guide
2	502460- <u>LLLLL</u>	1" Cleated Left-hand Guide
3	502350- <u>LLLLL</u>	1" Cleated Guide Square End

Item	Part Number	Description
4	807-1553	Pull Pin
<u>LLLLL</u> = Guide Length in inches with two decimal places.		
Example: Guide Length = 95.25" LLLLL = 09525		

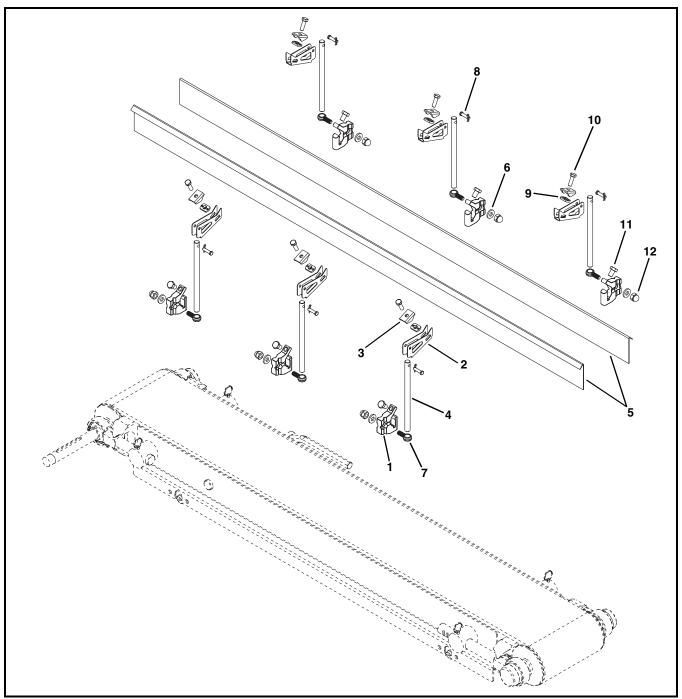
#### 3" Cleated Guides



Item	Part Number	Description
1	502750- <u>LLLLL</u>	3" Cleated Right-hand Guide
2	502850- <u>LLLLL</u>	3" Cleated Left-hand Guide
3	502650- <u>LLLLL</u>	3" Cleated Guide Square End

Item	Part Number	Description
4	807-1553	Pull Pin
<u>LLLLL</u> = Guide Length in inches with two decimal places.		
Example: Guide Length = 95.25" LLLLL = 09525		

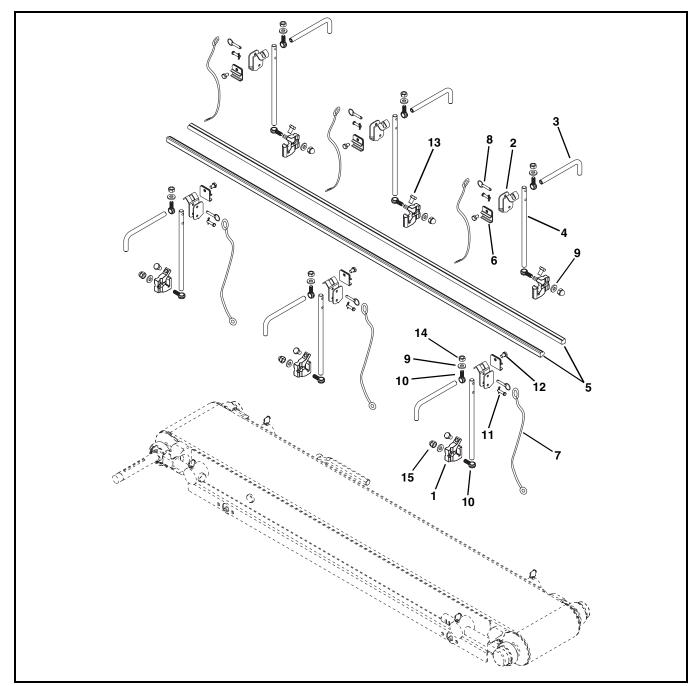
## **Hinged Guides**



Item	Part Number	Description
1	509868	Mounting Block
2	509870	Pivot Guide Mounting Bracket
3	509871	Guide Clamp Bracket
4	509872-PH-0800	Mounting Guide Shaft for 3" Guides
	509872-PH-1100	Mounting Guide Shaft for 6" Guides
5	532172- <u>LLLLL</u>	Guiding for 3" Guides
	509890- <u>LLLLL</u>	Guiding for 6" Guides
6	807-1821	Washer
7	807-1994	Eyebolt M10 x 1.50 mm

Item	Part Number	Description
8	807-1995	Cotter Pin
9	807-1075SS	Weld Nut, M8 x 1.25 mm
10	960825MSS	Hex Head Cap Screw, M8 - 1.25 x 25 mm
		1018 - 1.25 X 25 111111
11	961016MSS	Hex Head Cap Screw,
		M10 - 1.50 x 16 mm
12	991008MSS	Hex Nut, M10 - 1.50 mm
LLLLL = Length in inches with 2 decimal places.		
Example: Guide Length = 95.25" LLLLL = 09525		

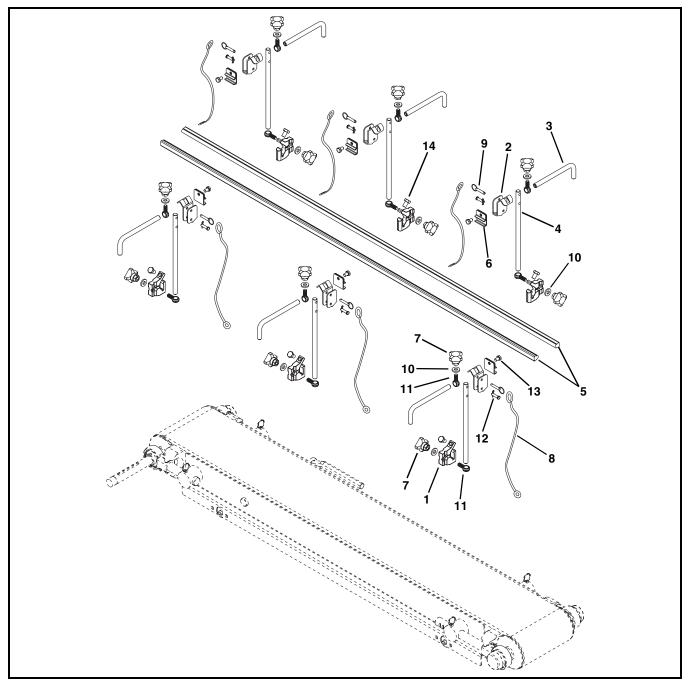
## **Adjustable Hinged Guides**



Item	Part Number	Description
1	509868	Mounting Block
2	509883	Pivot Guide Bracket
3	532300	Guide Post
4	509872-DH-1100	Adjustable Guide Shaft
5	532167- <u>LLLLL</u>	Guiding
6	807-015	Clamp Rail
7	807-1448	Lanyard
8	807-1553	Pin
9	807-1821	Washer
10	807-1994	Eyebolt M10 x 1.50

Item	Part Number	Description
11	807-1995	Cotter Pin
12	960812MSS	Hex Head Cap Screw,
		M8 - 1.25 x 12 mm
13	961016MSS	Hex Head Cap Screw,
		M10 - 1.50 x 16 mm
14	991001MSS	Hex Nut, M10 - 1.50
15	991008MSS	Hex Nut, M10 - 1.50 mm
<u>LLLLL</u> = Length in inches with 2 decimal places.		
Example: Guide Length = 95.25" <u>LLLLL</u> = 09525		

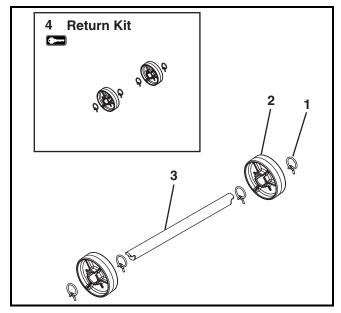
## **Tool-Less Adjustable Hinged Guides**



Item	Part Number	Description
1	509868	Mounting Block
2	509883	Pivot Guide Bracket
3	532300	Guide Post
4	509872-DH-1100	Adjustable Guide Shaft
5	532167- <u>LLLLL</u>	Guiding
6	807-015	Clamp Rail
7	807-1057	Handle
8	807-1448	Lanyard
9	807-1553	Pin
10	807-1821	Washer

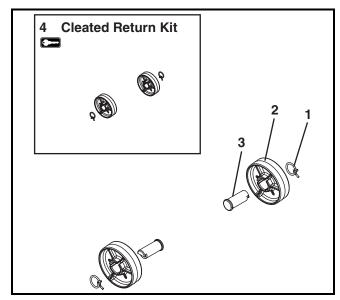
Item	Part Number	Description	
11	807-1994	Eyebolt M10 x 1.50	
12	807-1995	Cotter Pin	
13	960812MSS	Hex Head Cap Screw, M8 - 1.25 x 12 mm	
14	961016MSS	Hex Head Cap Screw, M10 - 1.50 x 16 mm	
LLLLI	LLLLL = Length in inches with 2 decimal places.		
Exam	Example: Guide Length = 95.25" <u>LLLLL</u> = 09525		

#### **Flat Belt Returns**



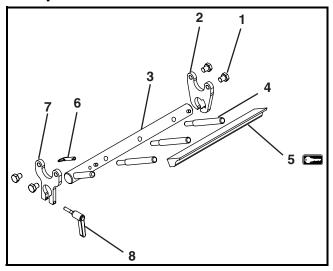
Item	Part Number	Description
1	807-1551	Clamp
2	506296	Return Disk
3	5108 <u>WW</u>	Return Shaft
4	76R- <u>WW</u>	Return Kit (Includes Items 1 and 2)
<u>WW</u> = Conveyor width ref: 06 - 60 in 02 increments		

#### **Cleated Belt Return**



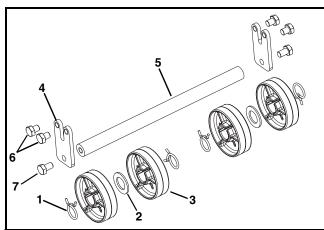
Item	Part Number	Description
1	807-1551	Clamp
2	506296	Return Disk
3	501097	Cleated Return Shaft
4	76CR	Cleated Return Kit (Includes Items 1
		and 2)

#### Scraper



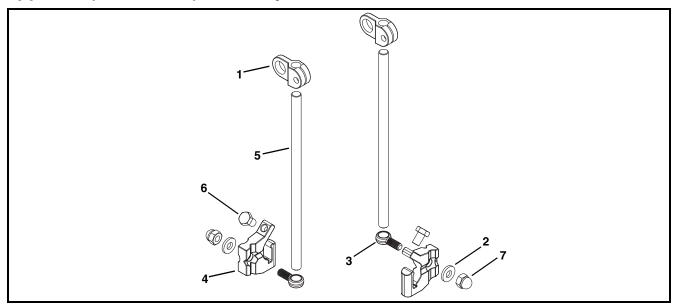
Item	Part Number	Description	
1	961012MSS	Hex Head Cap Screw M10-1.50 x 12 mm	
2	500878	Scraper Adjust Plate	
3	5102 <u>WW</u>	Scraper Shaft Assembly	
4	500881	Scraper Holder Bar	
5	5047 <u>WW</u>	Scraper Wear Bar	
•			
6	807-1553	Pull Pin	
7	500879	Scraper Mount Plate	
8	807-1559	Handle	
WW =	<u>WW</u> = Conveyor width ref: 06 - 60 in 02 increments		

#### **Returns - Sidewall Cleated**



Item	Part Number	Description	
1	807-1551	Hose Clamp	
2	807-1808	Washer	
3	506296	Return Disk	
4	514398	Return Plate for 1" Sidewalls	
	514392	Return Plate for 2" Sidewalls	
5	514393- <u>WW</u>	Return Shaft	
6	961012MSS	Hex Head Cap Screw M10-1.50 x 12 mm	
7	961016MSS	Hex Head Cap Screw M10-1.50 x 16 mm	
<u>WW</u> =	<u>WW</u> = Conveyor width ref: 06 - 60 in 02 increments		

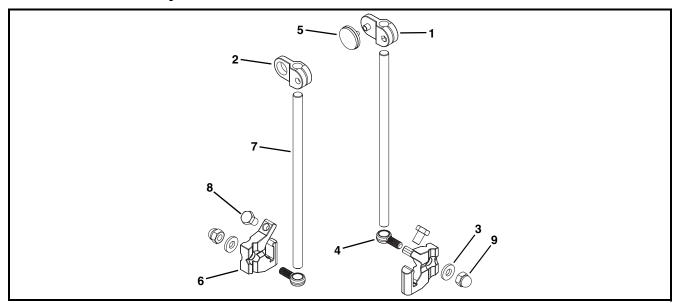
#### **Opposed (Thru Beam) Photo Eye Mount**



Item	Part Number	Description
1	807-1391	Mount Clamp
2	807-1821	Washer
3	807-1994	Eyebolt, M10 x 1.50
4	509868	Mounting Block

Item	Part Number	Description
5	509872-NH-1100	Mounting Shaft
6	961016MSS	Hex Head Cap Screw, M10 - 1.50 x 16 mm
7	991008MSS	Hex Nut, M10 - 1.50

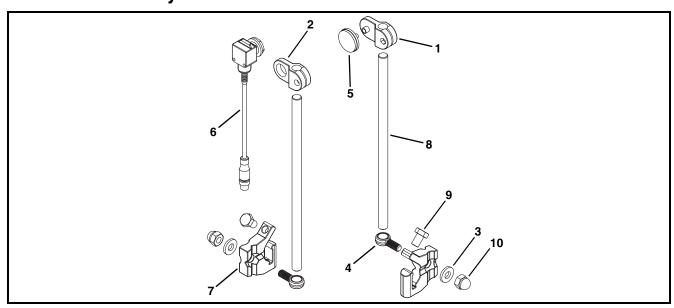
### **Reflective Photo Eye Mount**



Item	Part Number	Description
1	807-1390	Reflector Mount Clamp
2	807-1391	Photo Eye Mount Clamp
3	807-1821	Washer
4	807-1994	Eyebolt, M10 x 1.50
5	809-289	Reflector

Item	Part Number	Description
6	509868	Mounting Block
7	509872-NH-1100	Mounting Shaft
8	961016MSS	Hex Head Cap Screw,
		M10 - 1.50 x 16 mm
9	991008MSS	Hex Nut, M10 - 1.50

## **Reflective Photo Eye Kit**



Item	Part Number	Description
1	807-1390	Reflector Mount Clamp
2	807-1391	Photo Eye Mount Clamp
3	807-1821	Washer
4	807-1994	Eyebolt, M10 x 1.50
5	809-289	Reflector
6	809-315	Photo Eye Sensor
7	509868	Mounting Block
8	509872-NH-1100	Mounting Shaft
9	961016MSS	Hex Head Cap Screw,
		M10 - 1.50 x 16 mm
10	991008MSS	Hex Nut, M10 - 1.50

#### **Configuring Conveyor Belt Part Number**

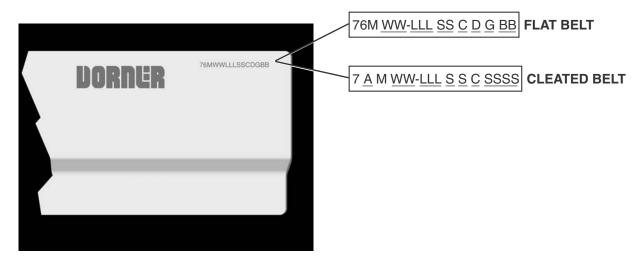


Figure 98

#### **Flat Belt Part Number Configuration**

Refer to model number on the conveyor frame (**Figure 98**). From the model number determine the conveyor width (<u>WW</u>), length (<u>LLL</u>), drive/tail types (A) and belt type (<u>BB</u>). Use data to configure belt part number as indicated below. \*Add "V" for v-guided belts.

#### **Cleated Belt Part Number Configuration**

Refer to model number on the conveyor frame (**Figure 98**). From the model number determine the conveyor width (<u>WW</u>), length (<u>LLL</u>), cleat type (<u>C</u>) and cleat spacing (<u>SSSS</u>). Use data to configure belt part number as indicated below. \*Add "V" for v-guided belts.

## **Notes**

#### **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

#### **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. 2012

DORNER MFG. CORP.

975 Cottonwood Ave., PO Box 20 Hartland, WI 53029-0020 USA TEL 1-800-397-8664 (USA) FAX 1-800-369-2440 (USA) Internet: www.dorner.com

Outside the USA: TEL 1-262-367-7600 FAX 1-262-367-5827