AquaPruf® Modular Belt Curved Conveyors

Installation, Maintenance and Parts Manual

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www.dornerconveyors.com/manuals-literature

Record Conveyor Serial Number Here

851-945 Rev. A

Table of Contents

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

Dorner has convenient, pre-configured kits of Critical 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. Recommended Critical Service Parts and Kits are marked in the Service Parts section of this manual with the Key Service Parts symbol .

⚠ WARNING

The safety alert symbol, black triangle with white exclamation, is used to alert you to potential personal injury hazards.

⚠ DANGER

SEVERE HAZARD!

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

⚠ 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!

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

Product Description

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

1	Conveyor
2	Gearmotor
3	Belt
4	Support Stands
5	Drive End
6	Idler End

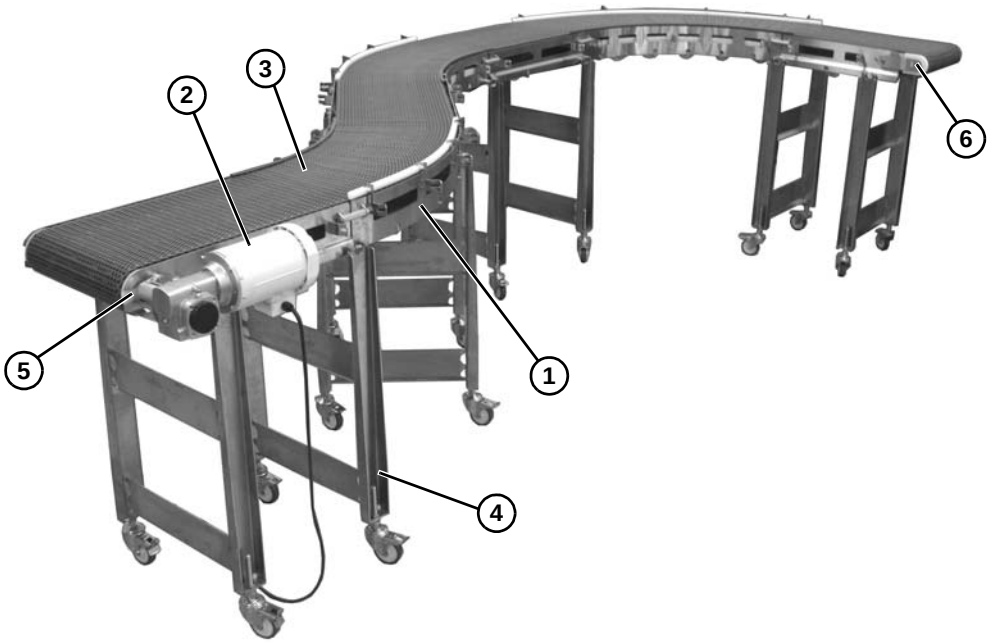


Figure 1

Specifications

Conveyor Width Reference (WWWW)	0152, 0229, 0305, 0381, 0457, 0533, 0610, 0686, 0762, 0838, 0914
Conveyor Belt Width	152 mm (6"), 229 mm (9"), 305 mm (12"), 381mm (15"), 457 mm (18"), 533 mm (20"), 610 mm (24"), 686 mm (27"), 762 mm (30"), 838 mm (33"), 914 mm (36")
Maximum Conveyor Load (See NOTE Below)	97 kg/ m^2 (20 lbs. / ft^2) with a maximum of 227 kg (500 lbs.)
Belt Travel	305 mm (12") per revolution of pulley
Maximum Belt Speed	78.6 m/minute (260 ft/minute)
Conveyor Length Reference (LLLLL)	00460 - 15240 in 00005 increments
Conveyor Length	460 mm (18") - 15240 mm (600") (25.4 m) in 5 mm (.20") increments

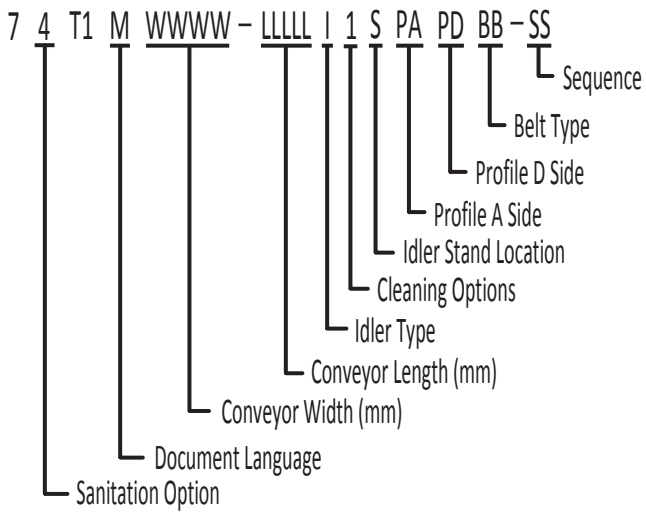
NOTE

Maximum conveyor loads are based on:

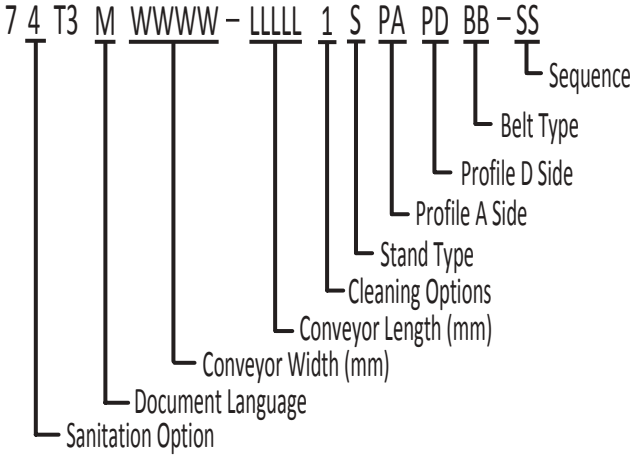
- *Non-accumulating product*
- *Product moving toward gearmotor*
- *Conveyor being mounted horizontally*
- *Conveyor being located in a dry environment*
- *Conveyor equipped with standard belt only*

AquaPruf Modular Belt Curved Conveyors

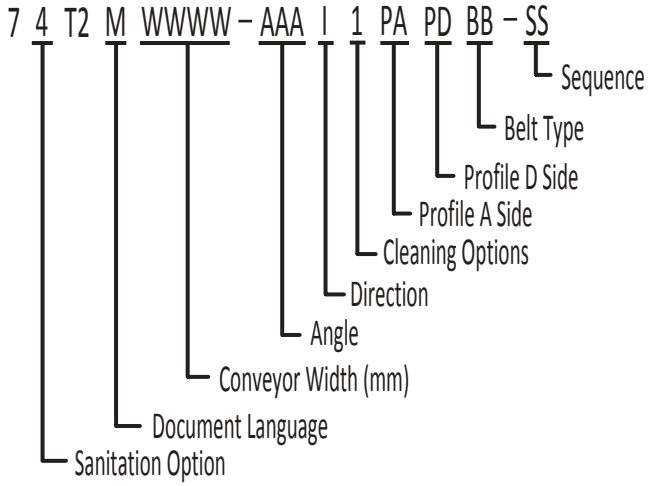
Infeed / Idler Module



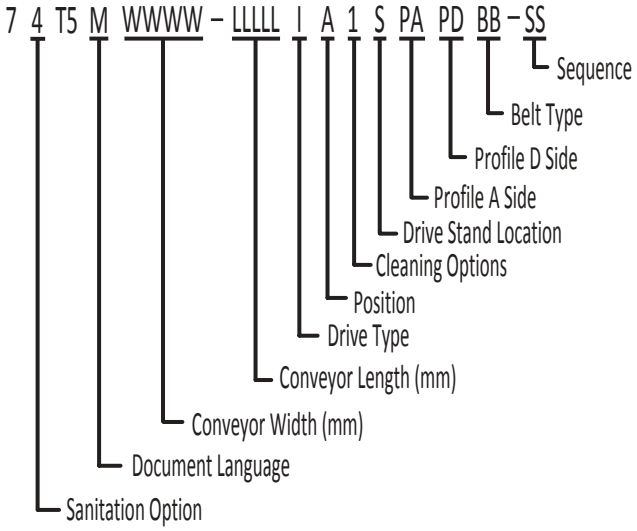
Intermediate Module



Curve Module



Exit / Discharge Module



Specifications

Conveyor Supports

Maximum Distances:

A = Support Stand on Idler End = 914 mm (36")

B = Support Stand on Drive End = 610 mm (24")**

C = Between Support Stands = 2997 mm (118")

** For conveyors longer than 3048 mm (10 ft), install stand mount kit at frame joint.

NOTE: Additional stands located at frame joints.

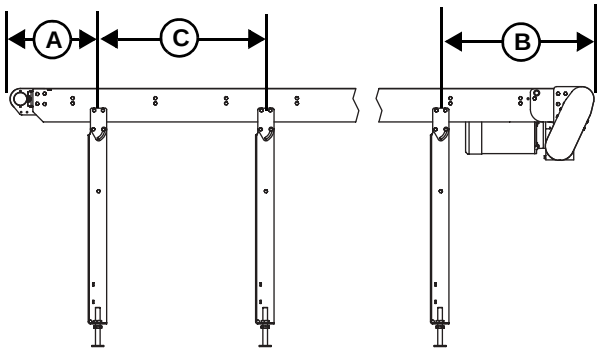


Figure 2

Curve Module

Reference chart below for support stand quantities:

Degree/Width	152 mm (6")	305 mm (12")	457 mm (18")	610 mm (24")
45°	0	0	0	0
90°	0	1	1	1
135°	1	2	2	2
180°	1	3	3	3

Torque Specifications

	Flat Head		Socket Head		Button/Low Head		Set Screw	
	Size	**Torque**	**Size**	**Torque**	**Size**	**Torque**	**Size**	**Torque**
M4 x 0.7	2.5 mm	3.4 Nm (30 in lbs)	3 mm	5.9 Nm (52 in lbs)	2.5 mm	2.9 Nm (26 in lbs)	2 mm	2.1 Nm (19 in lbs)
M5 x 0.8	3 mm	6.9 Nm (61 in lbs)	4 mm	12.0 Nm (106 in lbs)	3 mm	5.9 Nm (52 in lbs)	2.5 mm	4.7 Nm (42 in lbs)
M6 x 1.0	4 mm	12.0 Nm (106 in lbs)	5 mm	20.3 Nm (180 in lbs)	4 mm	10.0 Nm (89 in lbs)	3 mm	7.7 Nm (68 in lbs)
M8 x 1.25	5 mm	28.0 Nm (248 in lbs)	6 mm	48.8 Nm (432 in lbs)	5 mm	24.0 Nm (212 in lbs)	4 mm	17.8 Nm (158 in lbs)
M10 x 1.5	6 mm	56.0 Nm (496 in lbs)	8 mm	97.5 Nm (863 in lbs)	6 mm	48.0 Nm (425 in lbs)	5 mm	35.0 Nm (310 in lbs)

⚠ CAUTION

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

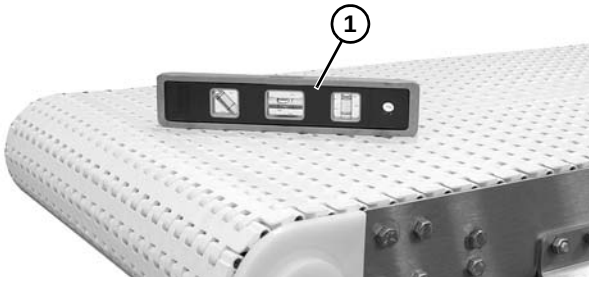


Figure 3

Required Tools

- Level
- Flat blade screwdriver
- 5/32" hex wrench
- 6 mm hex wrench
- 8 mm hex wrench
- 10 mm wrench
- 13 mm wrench
- 14 mm wrench
- 17 mm wrench
- 19 mm wrench
- Torque wrench

Recommended Installation Sequence

1. Assemble the conveyor (if required). Refer to "Connecting Components" on page 7 or "Belt Installation" on page 8.
2. Attach the stands. Refer to "Stand Installation" on page 8.
3. Install the belt. Refer to "Belt Installation" on page 8.
4. Install the gearmotor. Refer to "Drive Package Installation" on page 12.

NOTE

For 3-A compliance, a conveyor cover or shield must be installed over the conveyor that is easily cleaned, self-draining, and located to prevent liquid or other contaminants from draining or dropping into the container or product, or onto the conveyor belt. Multiple covers can be used if necessary, with overlapping edges. Cover(s) should be fabricated from stainless steel or FDA certified plastic material, and the bottom of the cover(s) must be smooth, with no crevices or exposed threads.

Connecting Components

Typical connecting components **(Figure 4)**.

1	Connector (x2)
2	Hex Head Cap Screw (x4)
3	Conveyor Frames

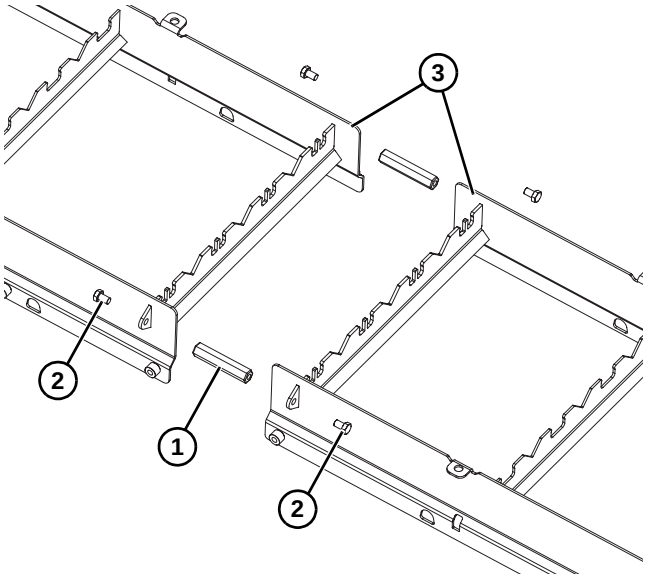


Figure 4

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

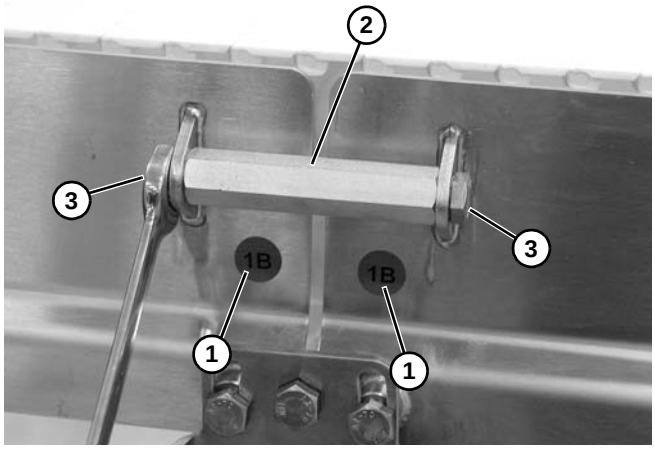


Figure 5

2. Join both conveyor sections and install connector **(Figure 5, item 2)** with two screws **(Figure 5, item 3)**. Repeat on opposite side. Tighten screws to 28-32 Nm (20-24 ft-lbs).

Installation

Stand Installation

NOTE
For detailed assembly instructions, please see support stand manual 851-948.

Typical stand components **(Figure 6)**.

1	Conveyor Frame
2	Stand
3	Screw (x4)

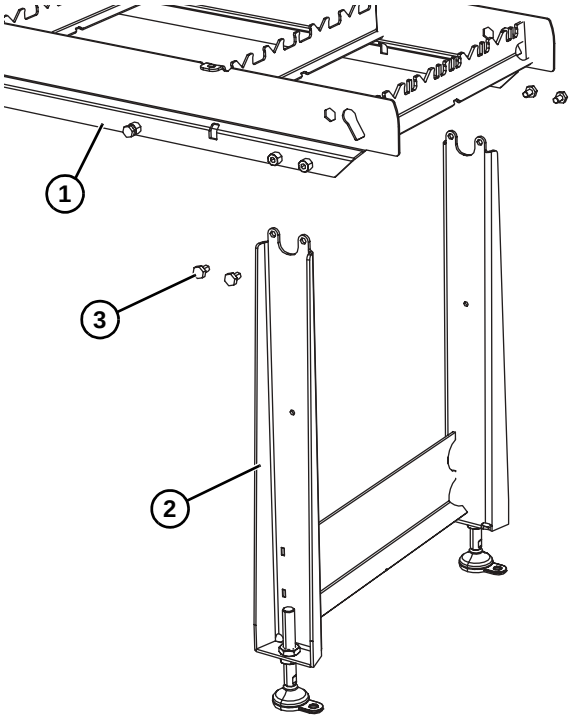


Figure 6

1. Position the stands on a flat, level surface.
2. Attach the stands **(Figure 7, item 1)** to the frame. Tighten screws to 28-32 Nm (20-24 ft-lbs).

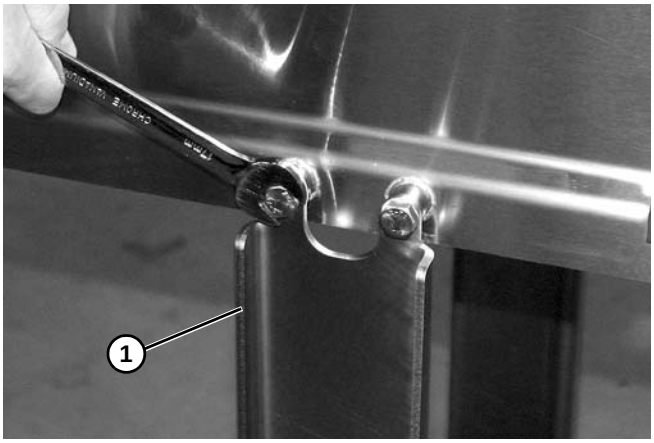


Figure 7

Belt Installation

Typical belt components **(Figure 8)**.

1	Chain Belt
2	Belt Rod, Long
3	Belt Rod, Short

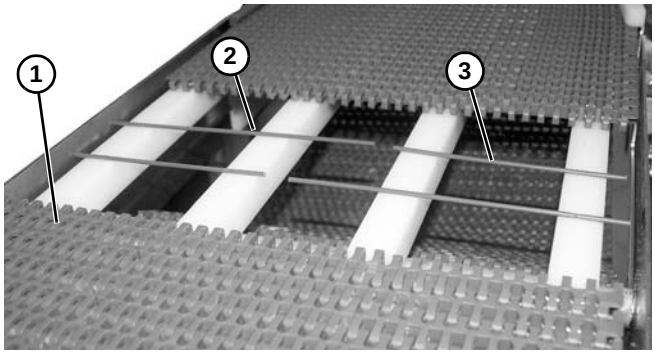


Figure 8

1. Position the belt on the conveyor frame.
2. Orient the belt **(Figure 9, item 1)** around the drive end of the conveyor and engage with sprocket teeth **(Figure 9, item 2)**, as shown.

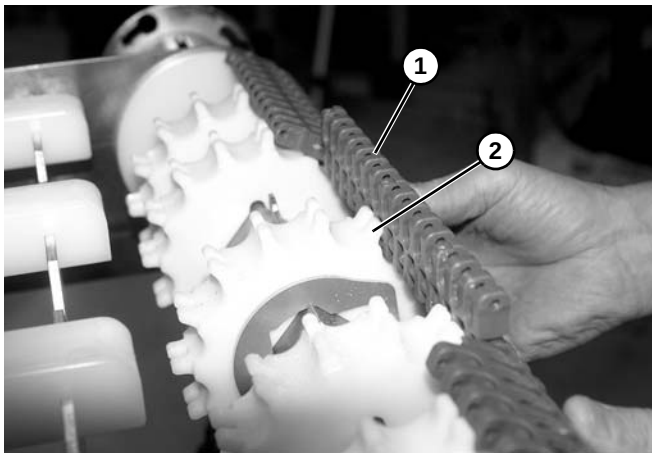


Figure 9

3. Make sure the sprocket teeth have engaged the belt with the teeth **(Figure 10, item 1)** mating with the rounded section **(Figure 10, item 2)** of the belt, as shown.

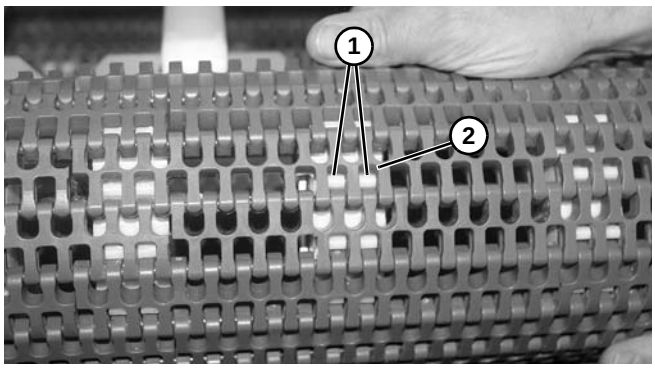


Figure 10

4. Continue installing belt and wrap the belt around the idler end of the conveyor the same way as the drive end.

> **NOTE**
>
> *Depending upon the sequence of the previous belt rod installed, short and long rods could be either on the outside or inside of conveyor. To maximize chain strength, alternate between the short and long rods when installing.*

5. Bring the ends of the belt together and install long **(Figure 11, item 1)** and short belt rod **(Figure 11, item 2)** to secure belt.

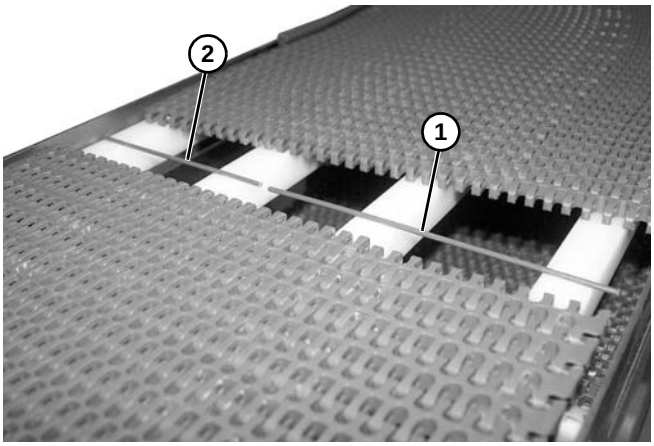


Figure 11

6. Insert each belt rod **(Figure 12, item 1)** and push it through the belt to fully engage notches **(Figure 12, item 2)** on rod.

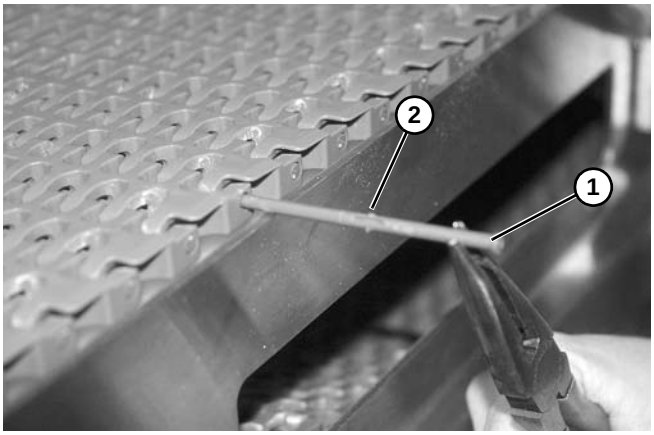


Figure 12

Belt Returns

Belt Returns 650 mm Wide and Wider

Typical flat return components **(Figure 13)**.

1	Shaft
2	Retaining Plate
3	Puck

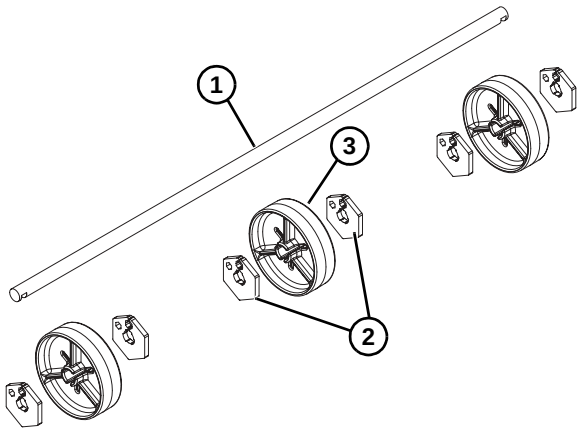


Figure 13

1. Install pucks with retainer plates on both sides.
   a. Insert an 8 mm **(Figure 14, item 1)** and 6 mm **(Figure 14, item 2)** hex wrench into the retainer plate.

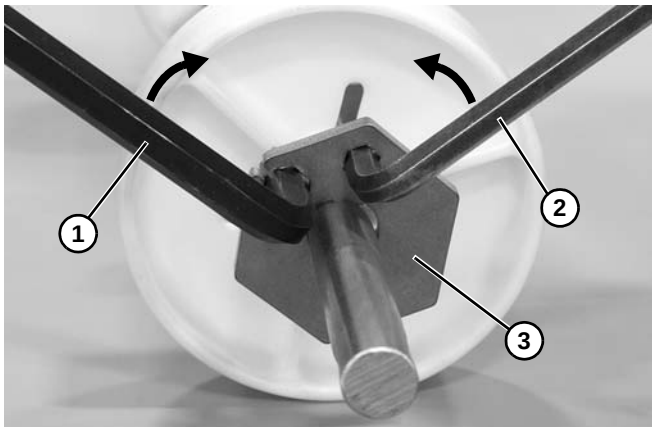


Figure 14

   b. Move wrenches toward each other to open the retainer plate **(Figure 14, item 3)** and install onto the shaft. Position retainer plate where needed.

c. To lock the retainer plate **(Figure 15, item 1)** in place, move the wrenches **(Figure 15, item 2)** away from each other.

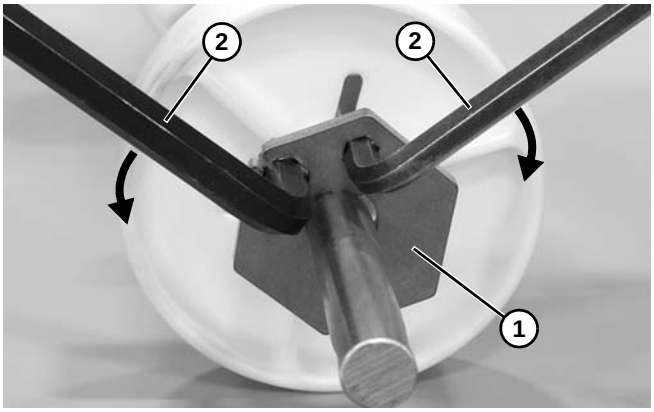


Figure 15

2. Repeat step 1 as needed.

> **NOTE**
>
> *When assembling pucks **(Figure 16, item 1)** with retainer plates **(Figure 16, item 2)**, make certain that there is a minimum of 38 mm (1.5") of clearance **(Figure 16, item 3)** on each end.*

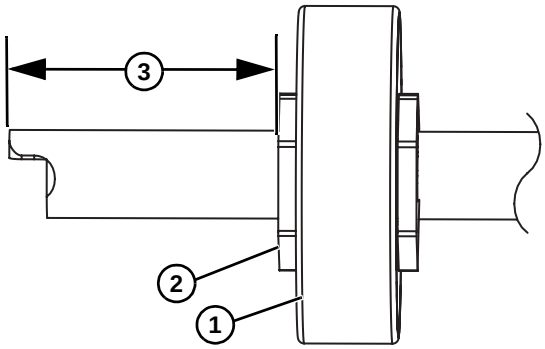


Figure 16

3. Install belt return assembly **(Figure 17, item 1)** onto the slotted holes **(Figure 17, item 2)** on each side of conveyor frame.

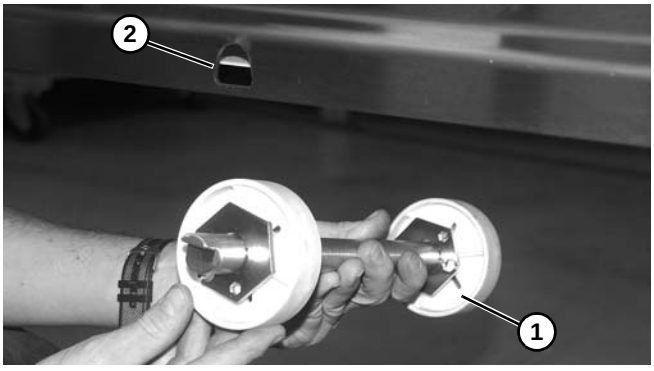


Figure 17

4. Check belt sag by measuring from the bottom of conveyor frame **(Figure 18)**. Belt sag should not exceed 2" (51 mm).

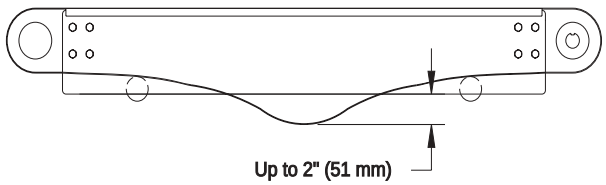


Figure 18

> **⚠ CAUTION**
>
> **Belt sag should not exceed 2" (51 mm) from the bottom of the conveyor frame.**

Belt Returns Under 650 mm Wide

Typical return components **(Figure 19)**.

1	Spacer
2	Puck
3	Stub Shaft
4	O-Ring

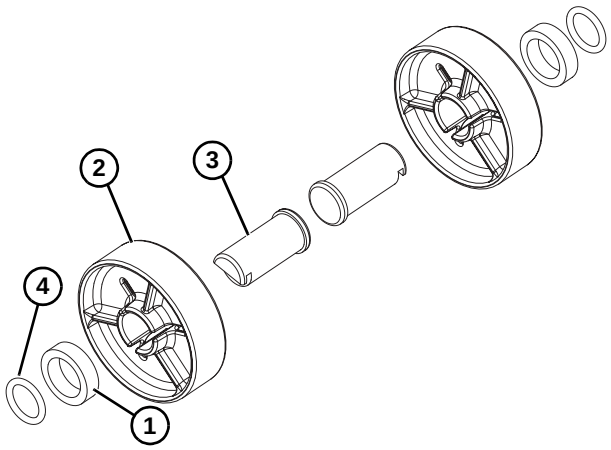


Figure 19

1. Insert the notched end of the return shaft **(Figure 20, item 1)** through the small hole **(Figure 20, item 2)** in the inside of the conveyor frame.

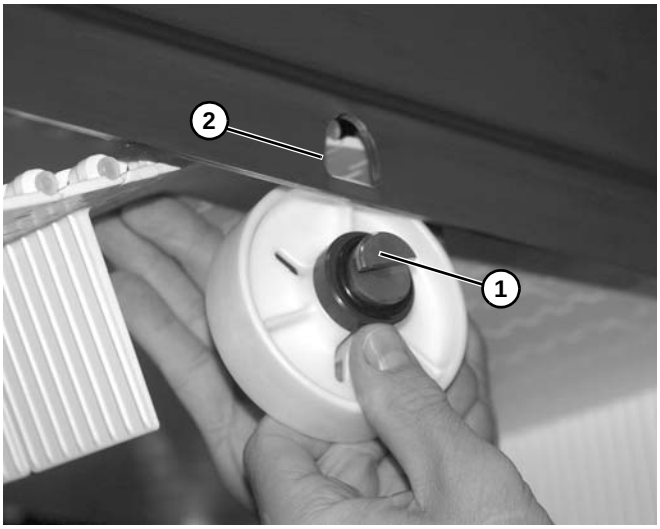


Figure 20

2. Repeat the procedure for all other belt returns.
3. Check belt sag by measuring from the bottom of conveyor frame **(Figure 21)**. Belt sag should not exceed 2" (51 mm).

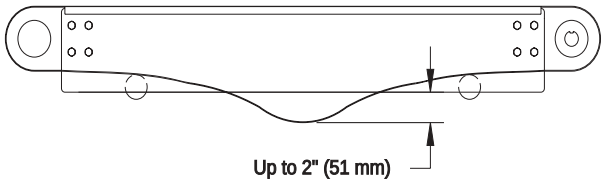


Figure 21

⚠ CAUTION

Belt sag should not exceed 2" (51 mm) from the bottom of the conveyor frame.

Guide Installation

Fixed Height Guides

1. Install guide post **(Figure 22, item 1)** through conveyor side frame tab **(Figure 22, item 2)**, making sure slotted portion **(Figure 22, item 3)** of post is fully seated into the bottom **(Figure 22, item 4)** of frame. Tap to lock in place.

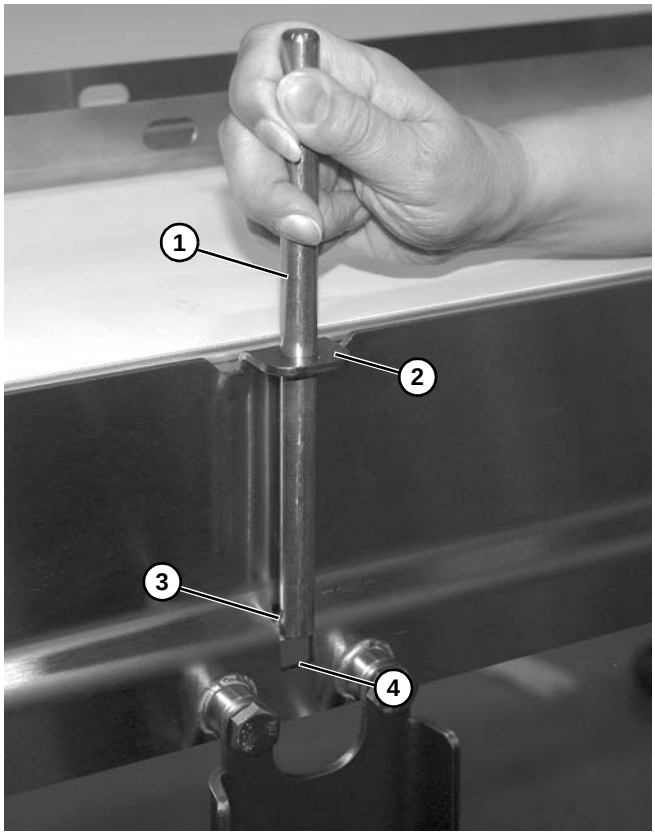


Figure 22

2. Repeat for remaining guide posts required for your conveyor size.
3. Install guide **(Figure 23, item 1)** onto the guide posts **(Figure 23, item 2)**.

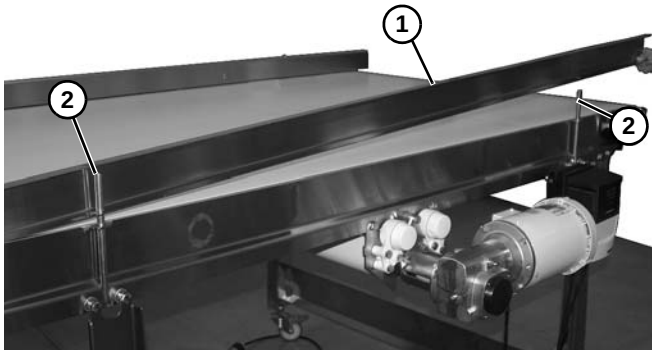


Figure 23

NOTE

*For UHMW guides, install guides with horizontal side **(Figure 24, item 1)** down.*

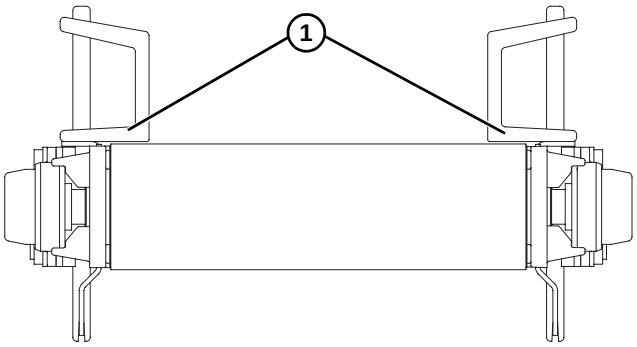


Figure 24

NOTE

*To remove guide posts, tap from underneath with a hammer to release from conveyor frame **(Figure 25)**.*

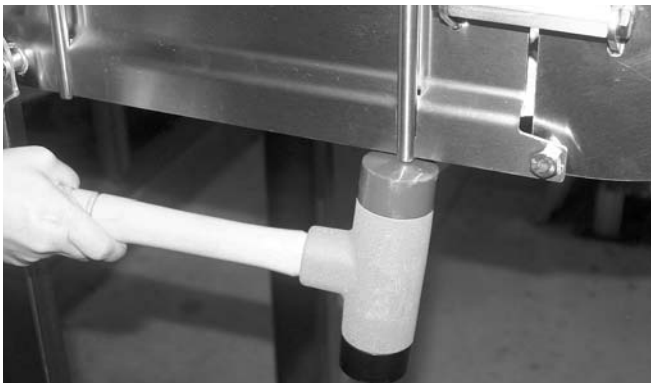


Figure 25

4. Repeat on the opposite side of conveyor.

Adjustable Height Guides

1. Install guide rail **(Figure 26, item 1)** onto brackets **(Figure 26, item 2)**. Tighten screw **(Figure 26, item 3)** to secure.

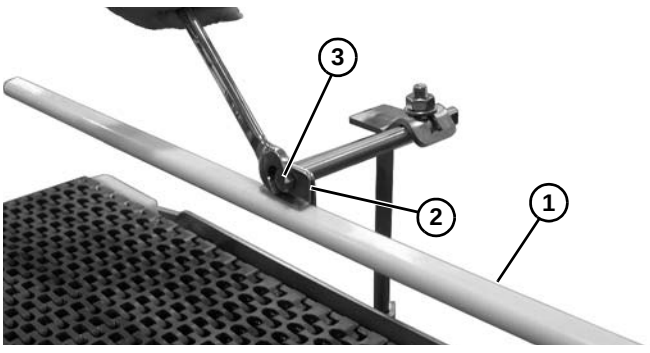


Figure 26

2. Loosen nut **(Figure 27, item 1)**, and adjust the guide post **(Figure 27, item 2)** height, as needed. Tighten nut.

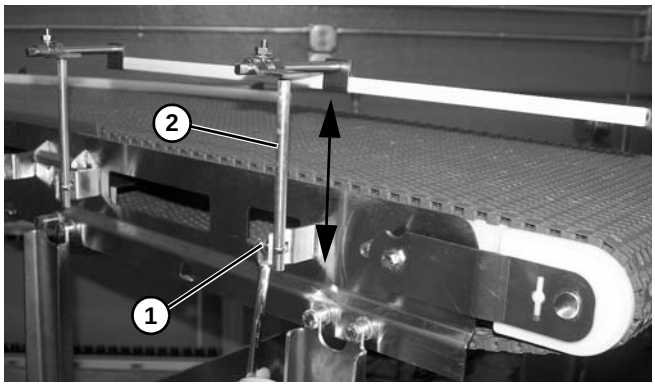


Figure 27

3. Loosen nut **(Figure 28, item 1)**, and adjust the horizontal guide post **(Figure 28, item 2)** and guide rail, as needed. Tighten nut.

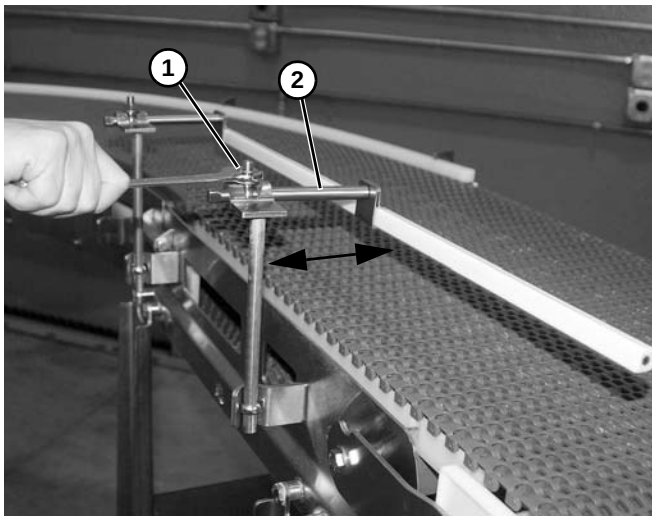


Figure 28

4. Repeat, as needed for remaining guiding brackets.

Drive Package Installation

NOTE

For detailed assembly instructions, please see drive packages manual 851-947.

Required Tools

- 1/8" hex wrench
- 4 mm hex wrench
- 5 mm hex wrench
- 6 mm hex wrench
- 8 mm hex wrench
- 10 mm wrench
- 13 mm wrench
- Punch and hammer (to remove belt rod)
- Phillips screwdriver
- Flat blade screwdriver
- Needle nose pliers

Checklist

- Keep critical service parts on hand. Refer to the "Service Parts" section starting on page 27 for recommendations.
- Replace any worn or damaged parts.

Cleaning

For detailed cleaning instructions, refer to the 851-950 AquaPruf Cleaning manual.

NOTE

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

⚠ CAUTION

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

⚠ WARNING

SEVERE HAZARD!

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

Lubrication

Conveyor Bearings

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

NOTE

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

1. Add grease to the bearing using the zerk fitting **(Figure 29, item 1)** on the exterior of the motor mount.

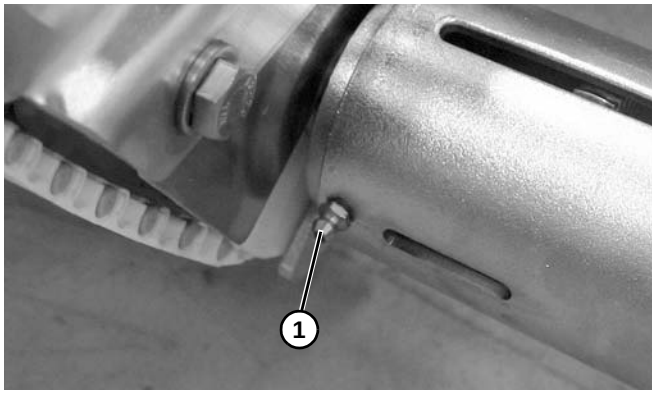


Figure 29

2. Replace the bearings if they become worn.

Maintaining the Conveyor Belt

Troubleshooting

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 spindle or impacted dirt on drive spindle

Conveyor Belt Replacement

⚠ WARNING

SEVERE HAZARD!

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

1. Remove guides **(Figure 30, item 1)** when required.

Figure 30

2. Remove belt returns **(Figure 31, item 1)** from slotted holes **(Figure 31, item 2)** on each side of conveyor frame at location you are separating belt.

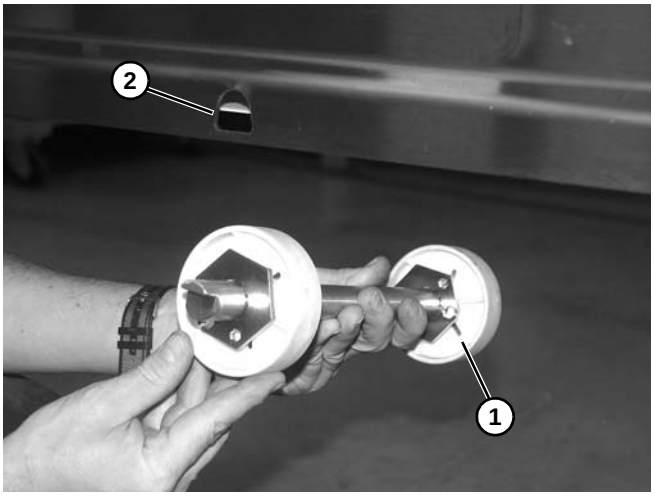


Figure 31

3. Rotate idler end **(Figure 32, item 1)** upward as shown.

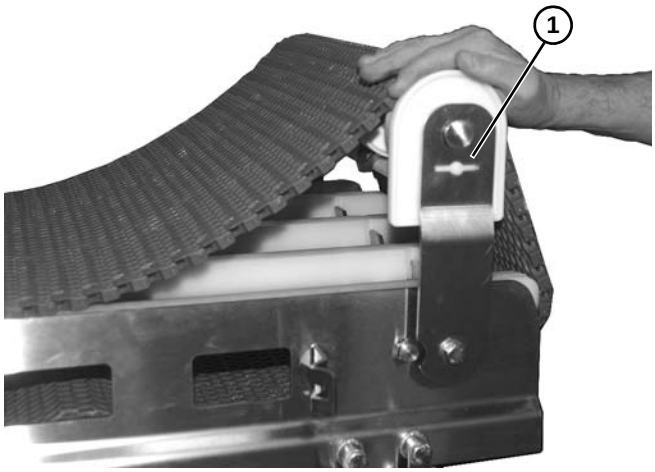


Figure 32

4. Raise belt **(Figure 33, item 1)** out of and over inner wear strip **(Figure 33, item 2)**.

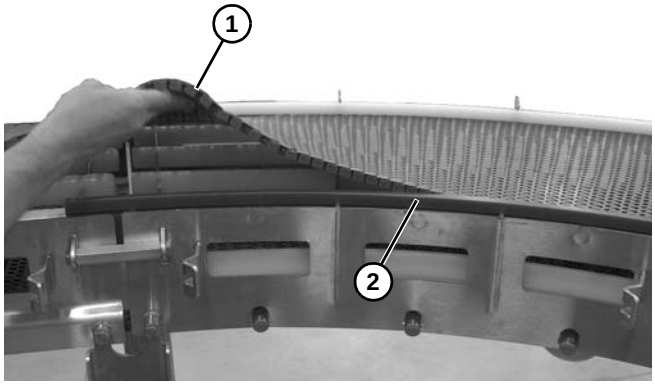


Figure 33

5. Continue to pull belt **(Figure 34, item 1)** away from outer wear strip **(Figure 34, item 2)**.

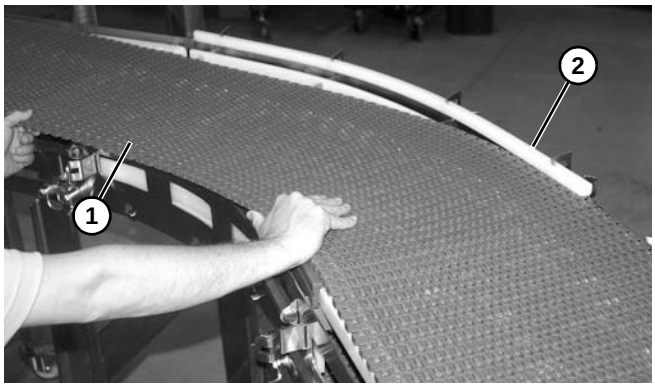


Figure 34

6. Carefully use a needle nose pliers to gently twist belt rod connection **(Figure 35, item 1)** to expose the end **(Figure 36, item 1)** of belt rod.

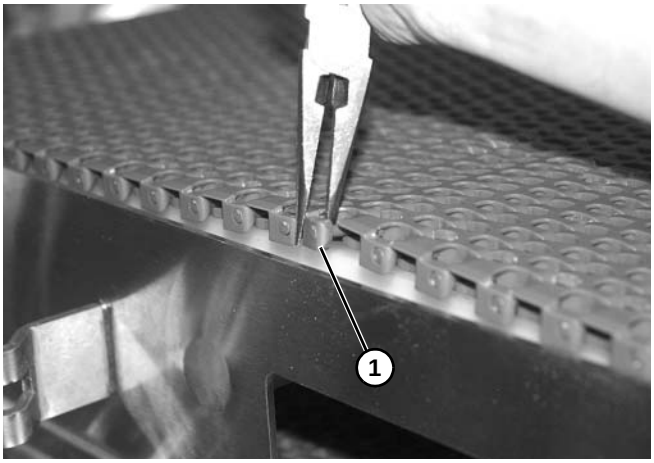


Figure 35

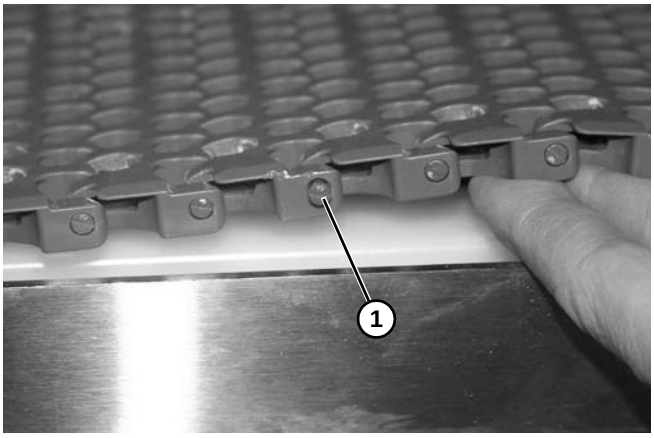


Figure 36

7. Use needle nose pliers to remove belt rod **(Figure 37, item 1)**.

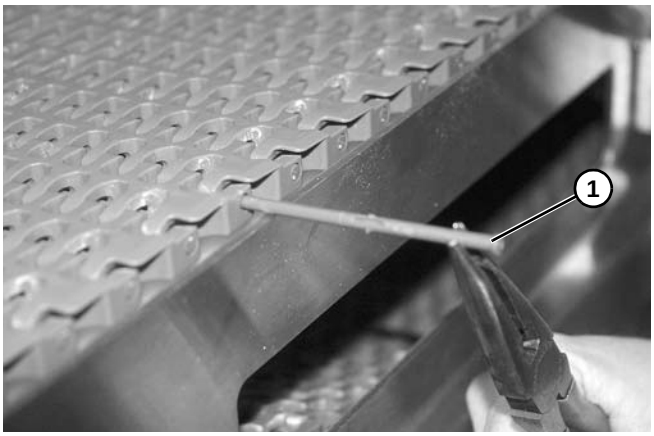


Figure 37

NOTE

Depending upon the sequence of the previous belt rod installed, short ***(Figure 38, item 1)*** *and long* ***(Figure 38, item 2)*** *rods could be either on the outside or inside of conveyor.*

8. Repeat on opposite end for remaining belt rod **(Figure 38, item 1)**.

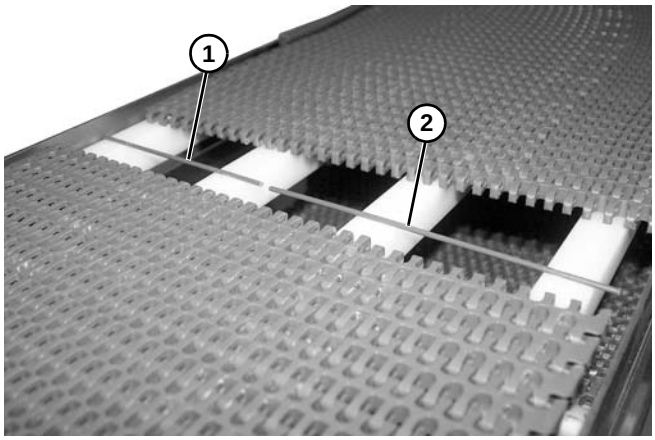


Figure 38

9. Slide the old belt off the conveyor frame.
10. Replace the old belt with a new one. Refer to "Belt Installation" on page 8.

⚠ CAUTION

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

Conveyor Belt Tensioning

⚠ WARNING

SEVERE HAZARD!

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

NOTE

Depending upon the sequence of the previous belt rod installed, short and long rods could be either on the outside or inside of conveyor.

1. Remove both belt rods **(Figure 39, item 1)**. Refer to "Conveyor Belt Replacement" on page 14.

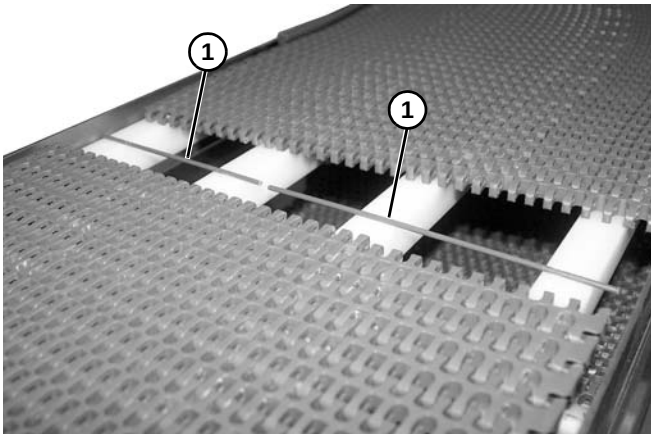


Figure 39

2. Remove one or more belt links to take up tension.

NOTE

Belt should not be stretched during installation. A proper length of belt can be installed by interlocking the ends by hand without excess links.

3. Connect ends of belt **(Figure 40, item 1)** together.

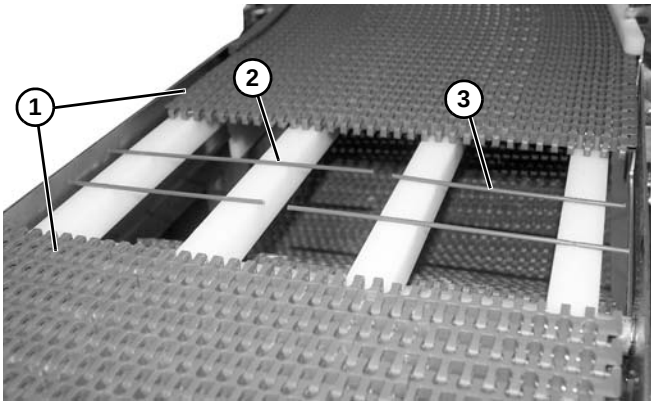


Figure 40

NOTE

Depending upon the sequence of the previous belt rod installed, short ***(Figure 40, item 2)*** *and long* ***(Figure 40, item 3)*** *rods could be either on the outside or inside of conveyor.*

4. Reinstall belt rod on each side of conveyor belt.

Tail Height Adjustment

⚠ WARNING

SEVERE HAZARD!

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

1. To adjust tail height, rotate idler tail:

- Rotate idler end so that hex bar **(Figure 41, item 1)** fits into notched area **(Figure 41, item 2)**.
- Adjust dimpled side **(Figure 41, item 3)** of hex bar into one of four locations **(Figure 41, item 4)** (labeled 1-4 on conveyor).

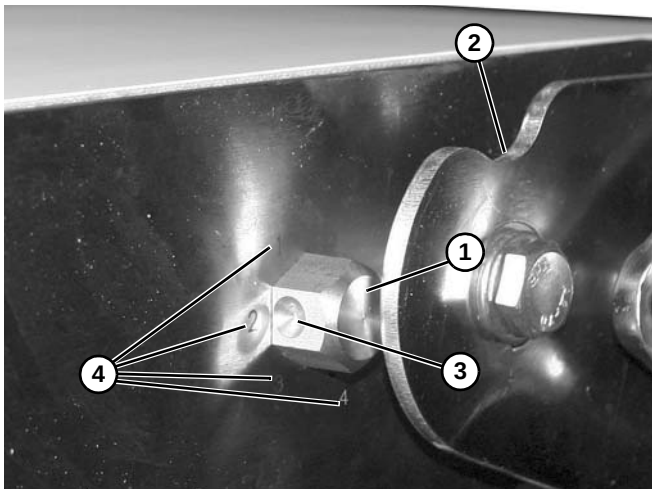


Figure 41

NOTE

Each rotation of hex bar is approximately 2.5 mm (0.10") of elevation change of tail.

The elevation of change of tail is as follows ***(Figure 41)****:*

- *Dimple at position labeled 4 = TAIL AT HIGHEST*
- *Dimple at position labeled 1 = TAIL AT LOWEST*

2. Rotate idler tail **(Figure 42, item 1)** up as shown. Pull out and rotate dimpled end of hex bar **(Figure 42, item 2)** into one of four locations **(Figure 42, item 3)** marked on the side of conveyor frame.

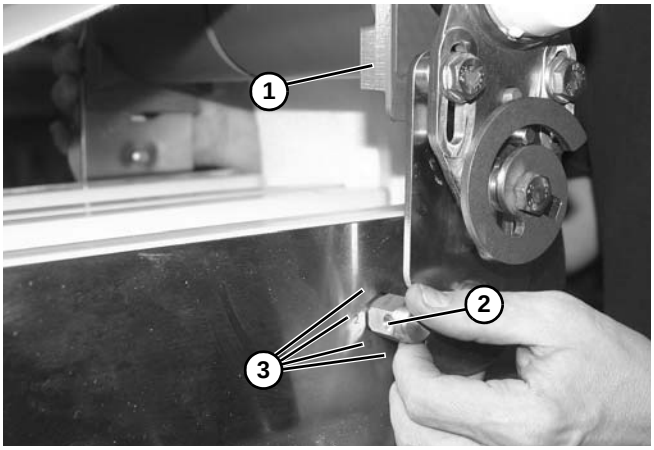


Figure 42

3. Lower idler end and verify proper adjustment.

Wear Strips

Replace the wear strips if they become worn.

Typical straight wear strips **(Figure 43)**.

1	Wear Strip

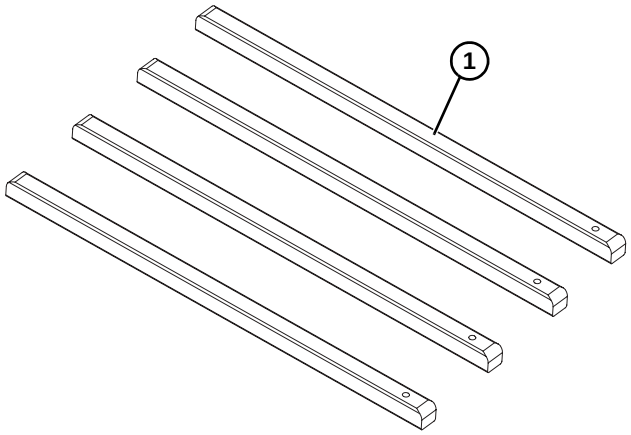


Figure 43

Typical curve wear strips **(Figure 44)**.

1	Wear Strip, Upper Hold Down
2	Wear Strips
3	Wear Strip, Inner Hold Down
4	Wear Strip, Inner Curve

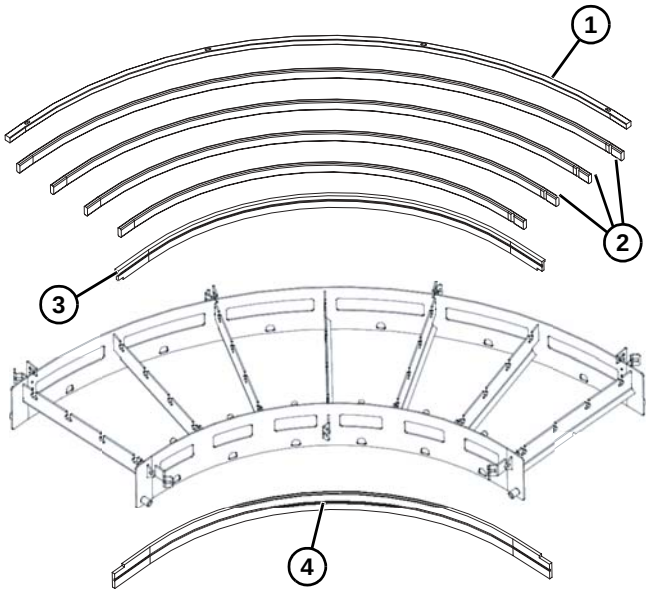


Figure 44

Straight Wear Strip Replacement

1. Remove conveyor belt. Refer to “Conveyor Belt Replacement” on page 14.
2. Remove worn wear strips **(Figure 45, item 1)** from the frame notches.

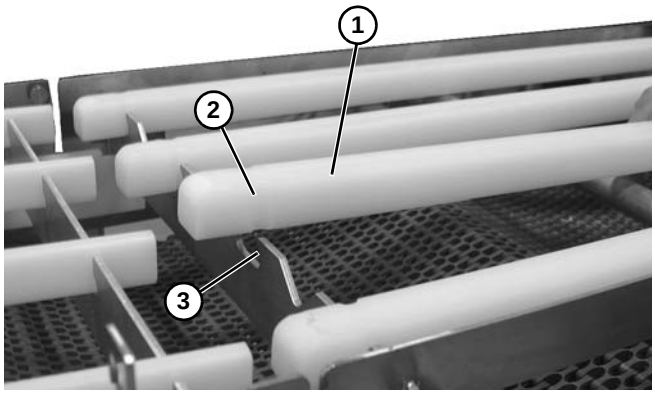


Figure 45

3. Attach new wear strips by installing the locating slot **(Figure 45, item 2)** onto the bracket tab **(Figure 45, item 3)** on the crossmember.

NOTE
Rounded end of the wear strip must face up.

Curved Wear Strip Replacement

Upper Hold Down Wear Strip

NOTE
Belt does not need to be removed when removing top inner or outer curved wear strips.

1. Lower and remove the top upper hold down wear strip **(Figure 46, item 1)** slotted holes **(Figure 46, item 2)** from the conveyor frame tabs **(Figure 46, item 3)**.

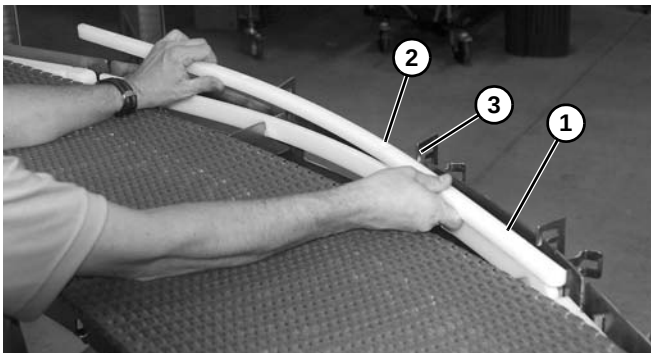


Figure 46

2. Install new wear strip, making sure the slotted holes **(Figure 46, item 2)** are fully engaged into the conveyor frame tabs **(Figure 46, item 3)**.

Inner Hold Down Wear Strip

NOTE
Belt does not need to be removed when removing top inner or outer curved wear strips.

1. Rotate idler end **(Figure 47, item 1)** upward as shown.

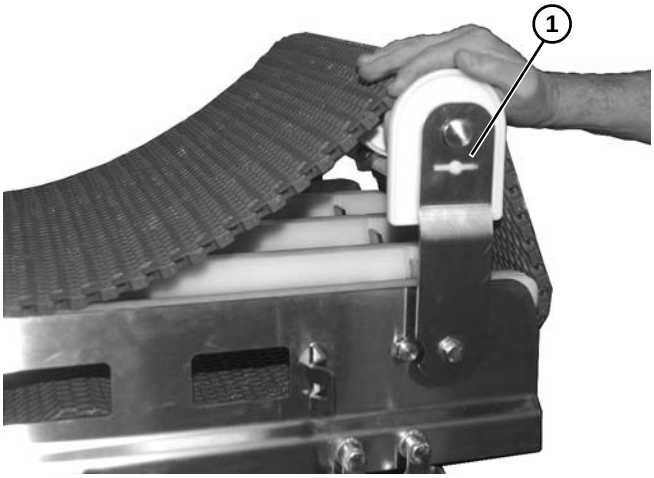


Figure 47

2. Raise belt **(Figure 48, item 1)** out of and over inner hold down wear strip **(Figure 48, item 2)**.

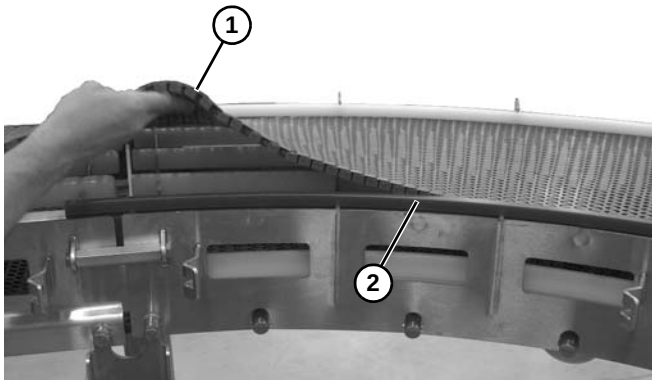


Figure 48

3. Remove inner hold down wear strip **(Figure 49, item 1)**.

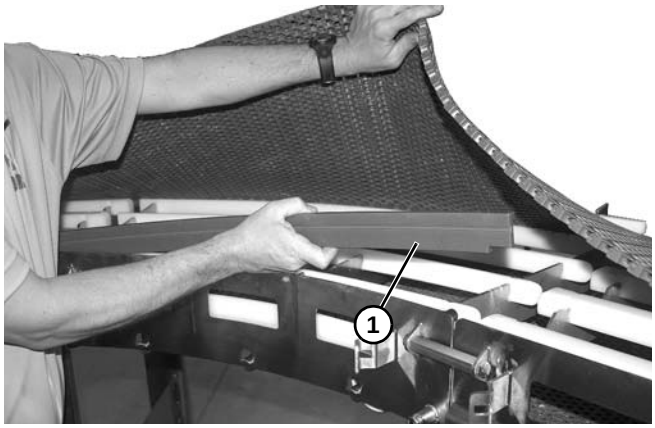


Figure 49

4. Install new wear strip, making sure that slot **(Figure 50, item 1)** in inner hold down wear strip is engaged with frame tabs **(Figure 51, item 1)**.

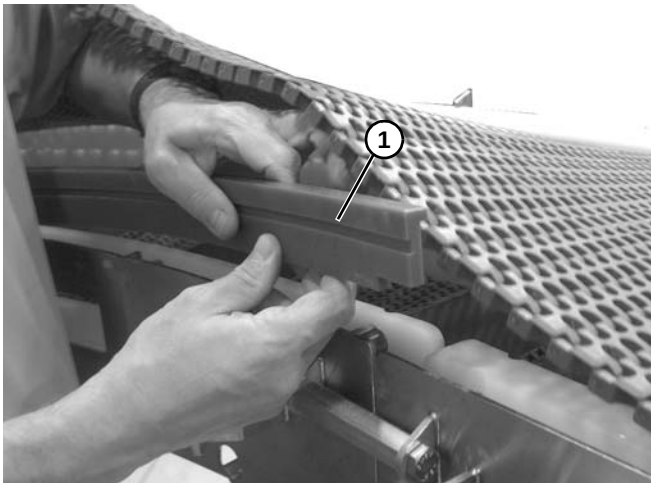


Figure 50

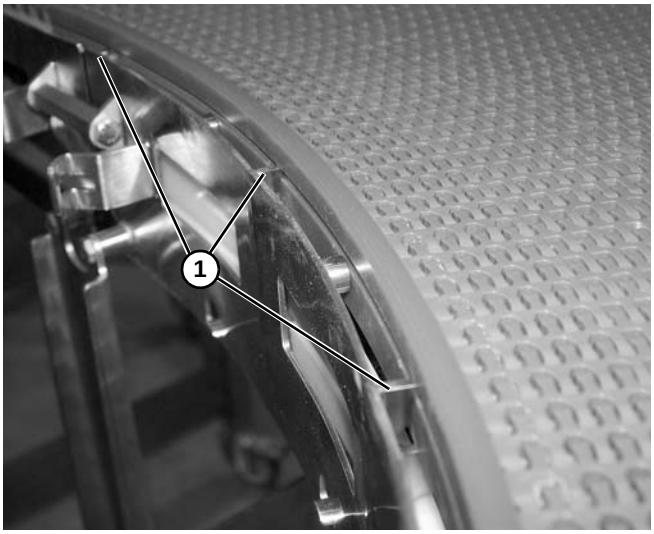


Figure 51

Curve Wear Strips

1. Open conveyor belt. Refer to "Conveyor Belt Replacement" on page 14.
2. Remove worn wear strips **(Figure 52, item 1)** from the frame notches.

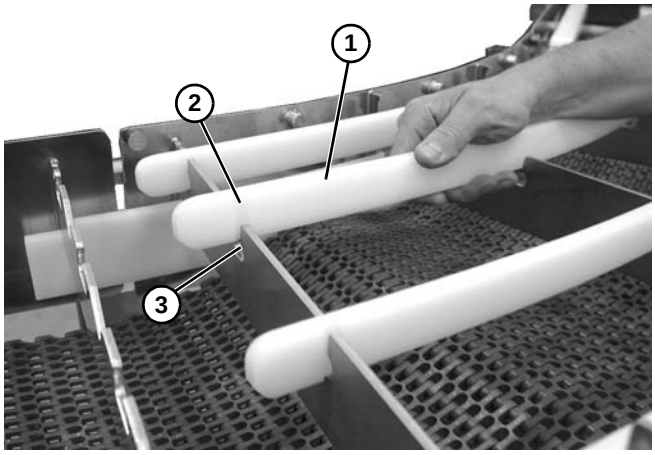


Figure 52

3. Attach new wear strips by installing the locating slot **(Figure 52, item 2)** onto the bracket tab **(Figure 52, item 3)** on the crossmember.

Inner Curve Wear Strip

1. Open conveyor belt. Refer to "Conveyor Belt Replacement" on page 14.
2. Remove the inner curve wear strip **(Figure 53, item 1)** from the frame rails **(Figure 53, item 2)**.

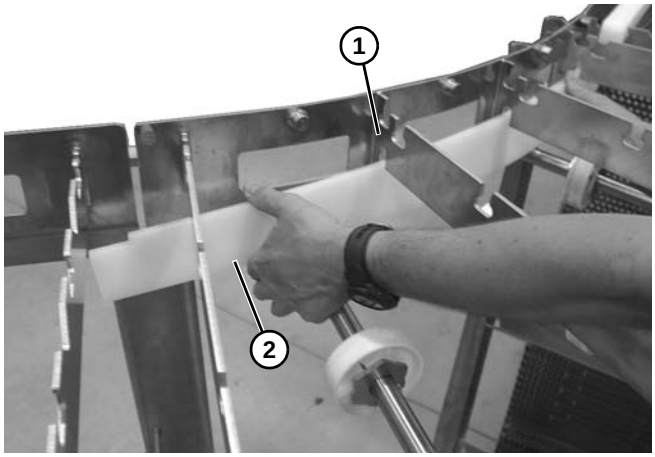


Figure 53

3. Install new inner curve wear strip, engaging top **(Figure 54, item 1)** of wear strip with frame rails **(Figure 54, item 2)**, and making sure that slot **(Figure 55, item 1)** of wear strip is engaged with frame tabs **(Figure 55, item 2)**.

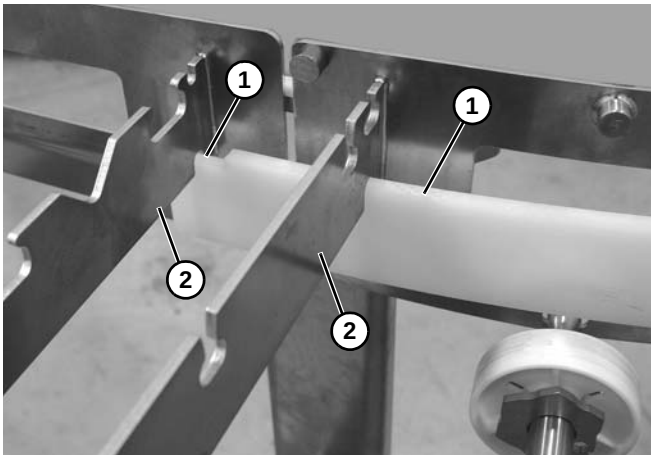


Figure 54

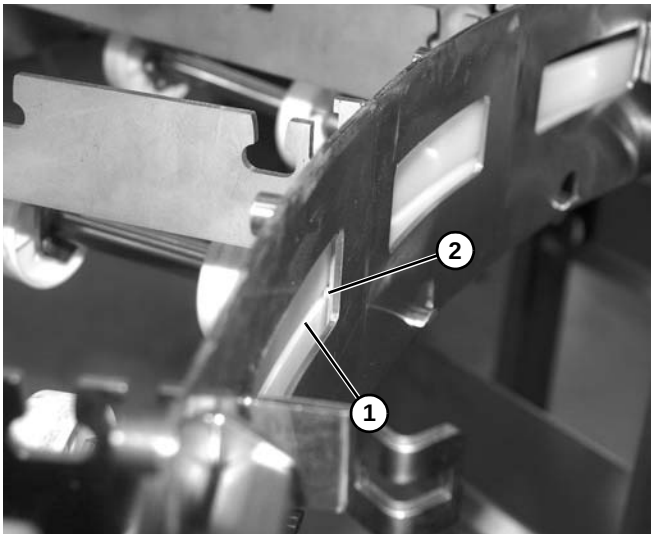


Figure 55

Drive Sprocket and Spindle Replacement

⚠ WARNING

SEVERE HAZARD!

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

1. Loosen the four screws **(Figure 57, item 1)**. Rotate and remove the gearmotor. (For further detailed instructions, refer to drive package manual 851-947.)

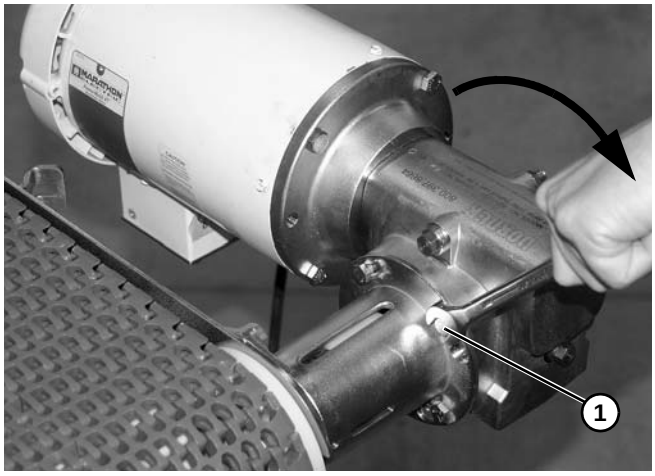


Figure 56

2. Open conveyor belt. Refer to "Conveyor Belt Replacement" on page 14.
3. Remove the three screws **(Figure 57, item 1)** on both sides of the conveyor.

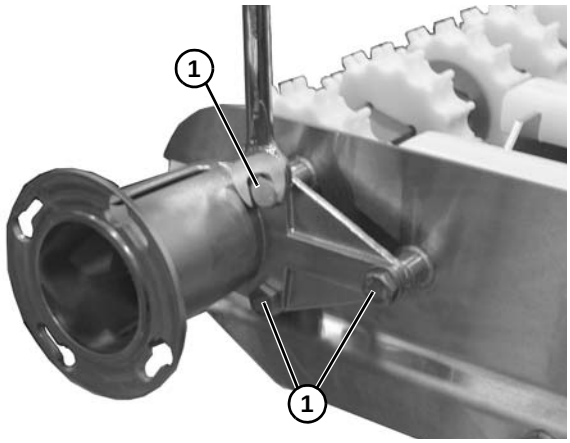


Figure 57

4. Remove drive tail assembly **(Figure 58, item 1)**.

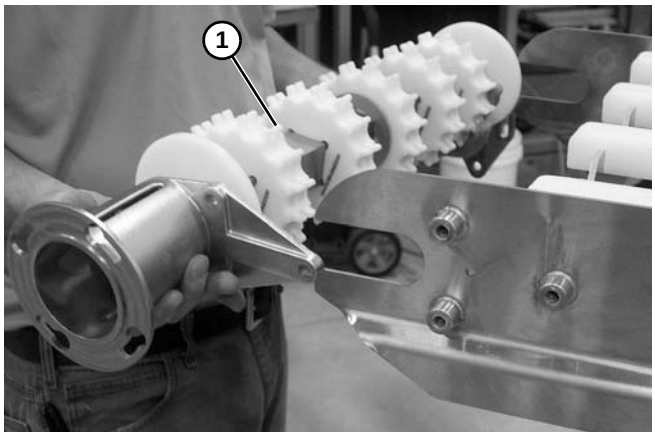


Figure 58

5. Remove bearing cover **(Figure 59, item 1)**.

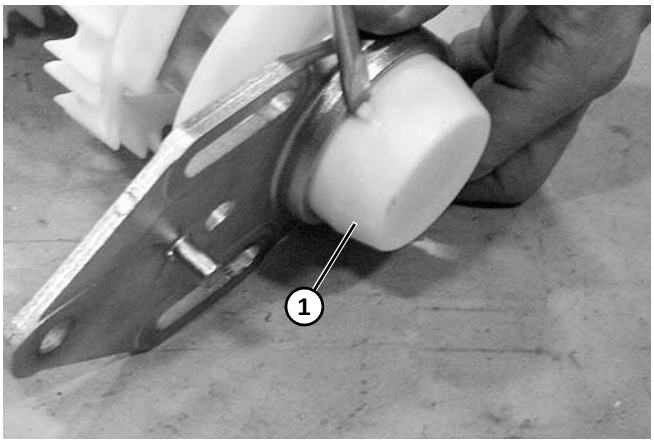


Figure 59

6. Loosen two set screws **(Figure 60, item 1)**.

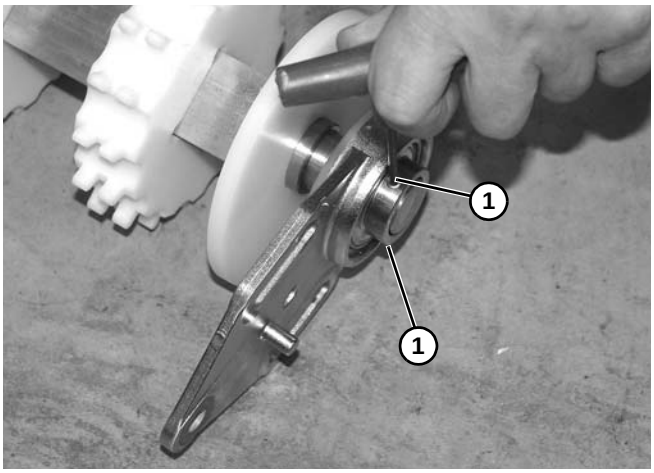


Figure 60

7. Slide the headplate with bearing **(Figure 61, item 1)** off the shaft. Replace bearing if worn. Refer to "Bearing Replacement" on page 25.

Figure 61

8. Use a hex key wrench through slotted access **(Figure 62, item 1)** of motor mount end to loosen two set screws **(Figure 62, item 2)** from the center drive gear.

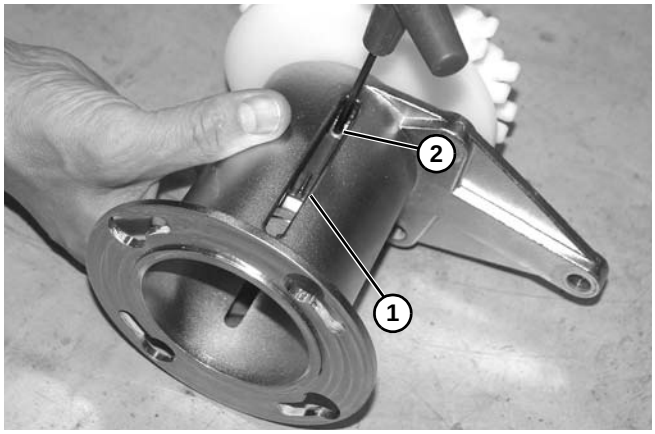


Figure 62

9. Remove drive gear **(Figure 63, item 1)** and key **(Figure 63, item 2)** from the drive spindle shaft.

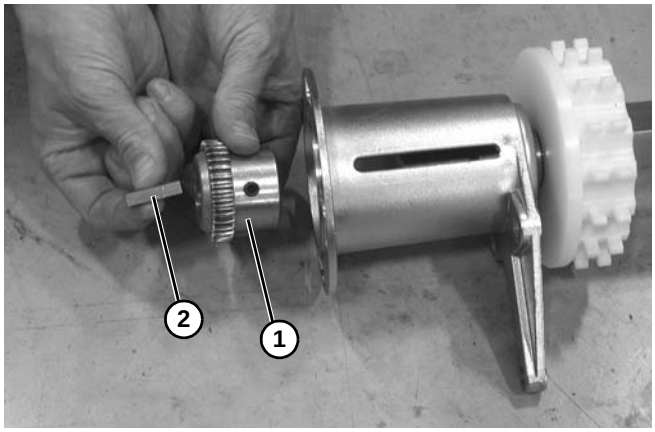


Figure 63

10. Slide the motor mount **(Figure 64, item 1)** (with bearing) off the shaft. Replace bearing if worn. Refer to "Bearing Replacement" on page 25.

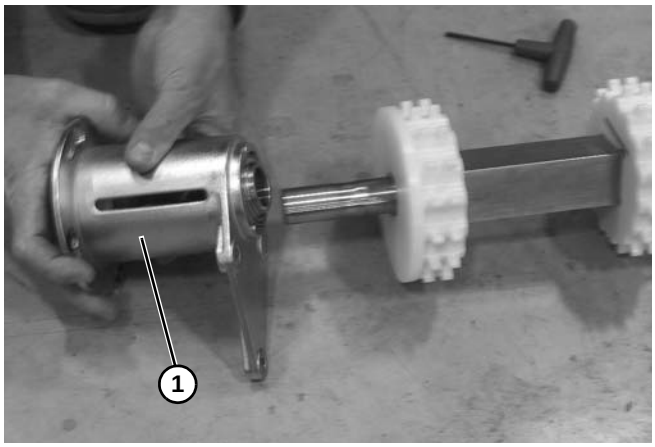


Figure 64

11. Remove guard **(Figure 65, item 1)** from both ends of drive spindle.

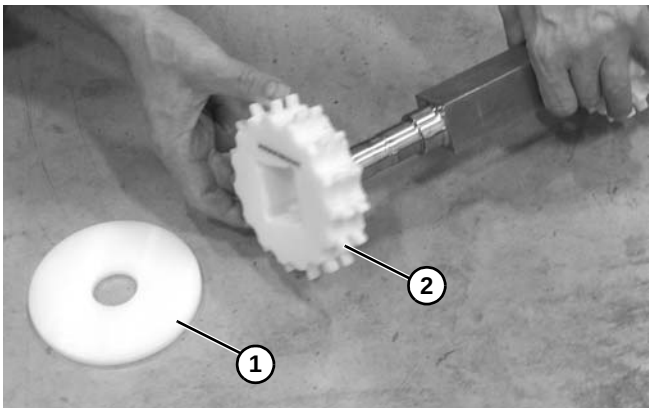


Figure 65

12. Remove the first sprocket **(Figure 65, item 2)** off the drive spindle.

NOTE

*Make note of the position of the sprockets and orientation of retaining ring in the latched position as shown in **(Figure 66)** before removing.*

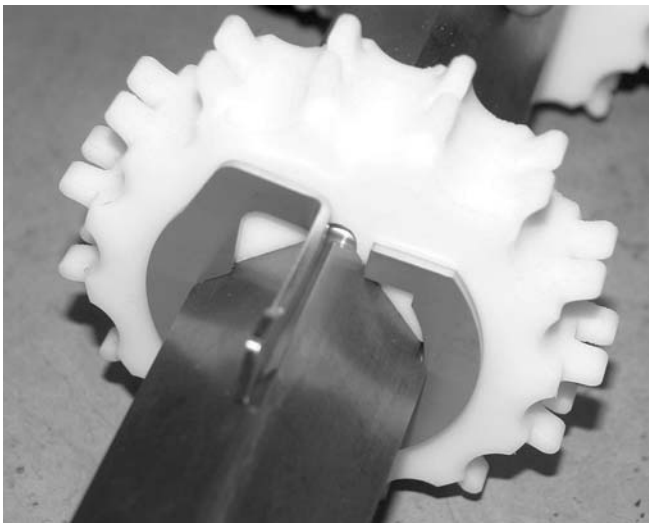


Figure 66

13. Rotate each retaining ring **(Figure 67, item 1)** and **(Figure 68, item 1)** in direction shown, so that retaining rings are unlatched from corner **(Figure 67, item 2)** of drive spindle shaft.

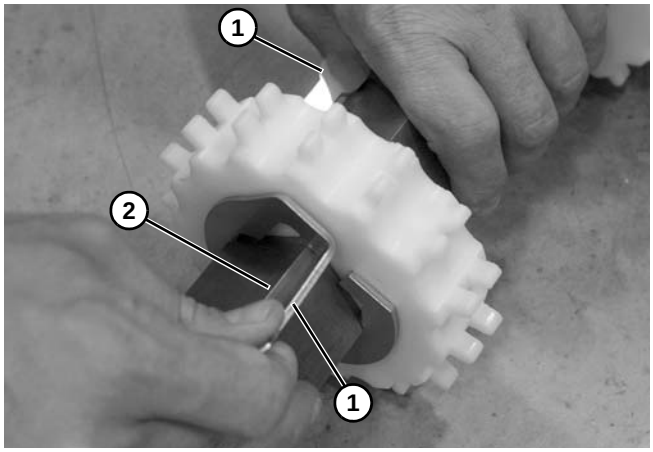


Figure 67

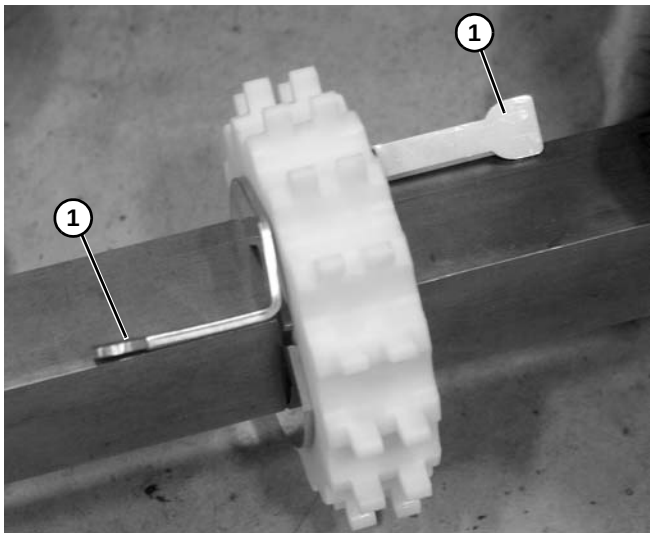


Figure 68

14. Remove remaining retaining rings and sprockets off of the drive spindle.
15. Replace components, as needed **(Figure 69)**.

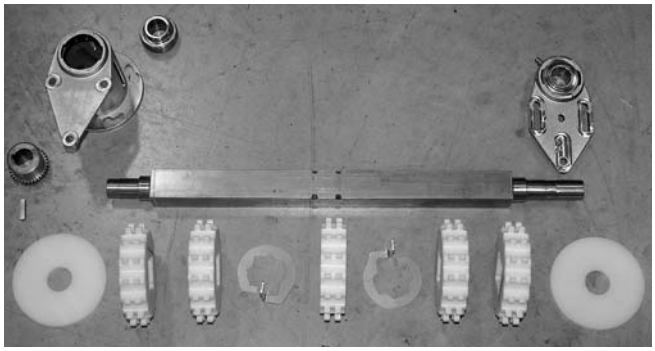


Figure 69

16. Install parts in reverse order of removal.

Idler Puck and Spindle Replacement

⚠ WARNING

SEVERE HAZARD!

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

NOTE

Idler tails are equipped with plain bushing pucks. Replace when worn.

1. Open conveyor belt. Refer to "Conveyor Belt Replacement" on page 14.
2. Remove screw **(Figure 70, item 1)** and washer **(Figure 70, item 2)** on each side of idler end.

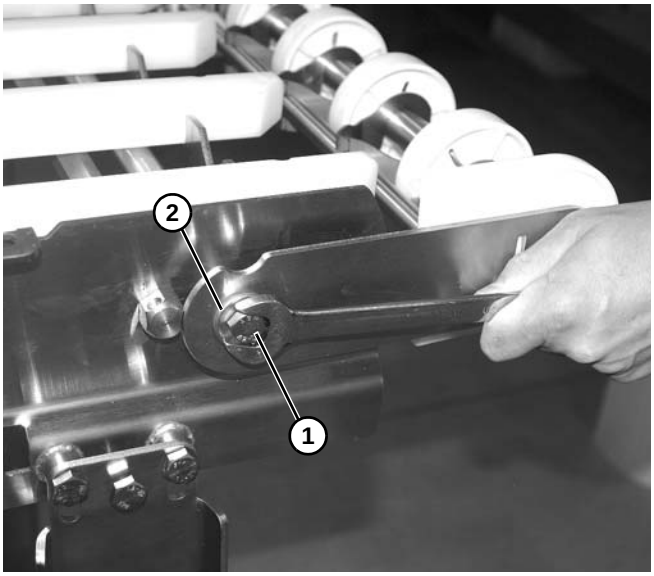


Figure 70

NOTE

*Make note of curved notch **(Figure 71, item 1)** and notched end **(Figure 71, item 2)** on each end of tail plate before removing assembly.*

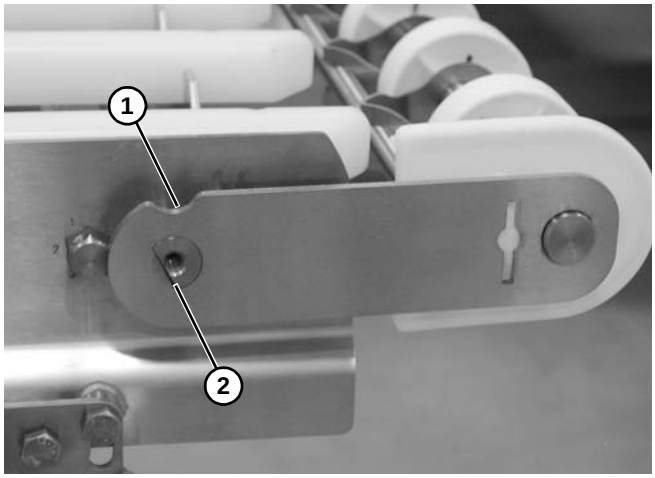


Figure 71

3. Remove idler assembly **(Figure 72, item 1)** from each end of tip up assembly **(Figure 72, item 2)** on conveyor frame.

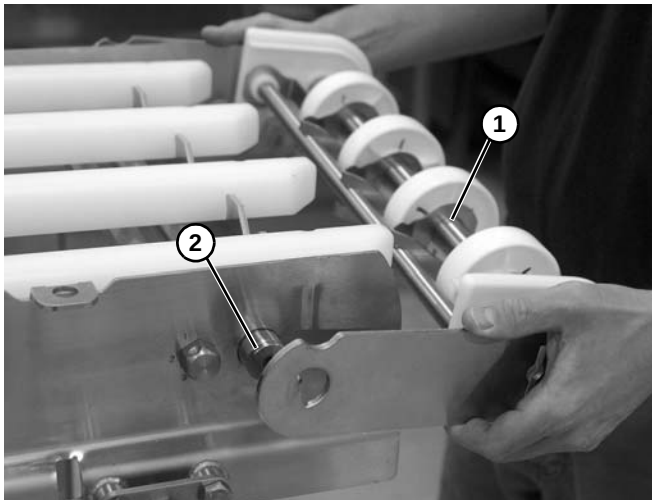


Figure 72

4. Place entire assembly on work surface **(Figure 73)**.

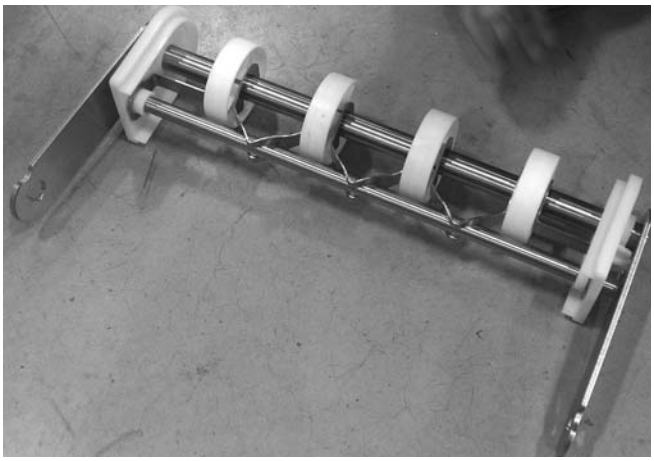


Figure 73

5. Remove tail plate **(Figure 74, item 1)** from assembly, making note of orientation of tab **(Figure 74, item 2)** and mating surfaces of puck rod **(Figure 74, item 3)** and tail plate.

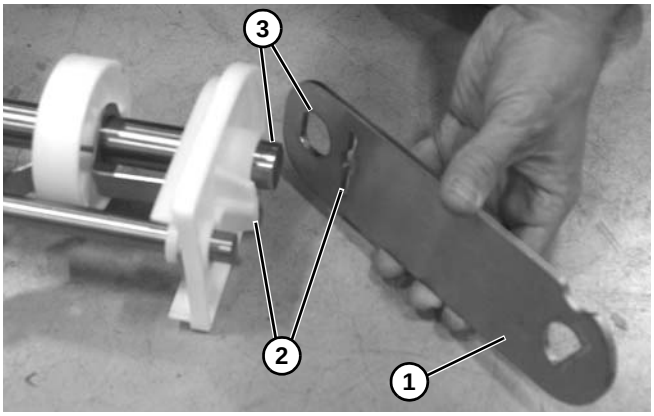


Figure 74

6. Remove tracking plate **(Figure 75, item 1)** from puck rod **(Figure 75, item 2)** and idler shaft **(Figure 75, item 3)**.

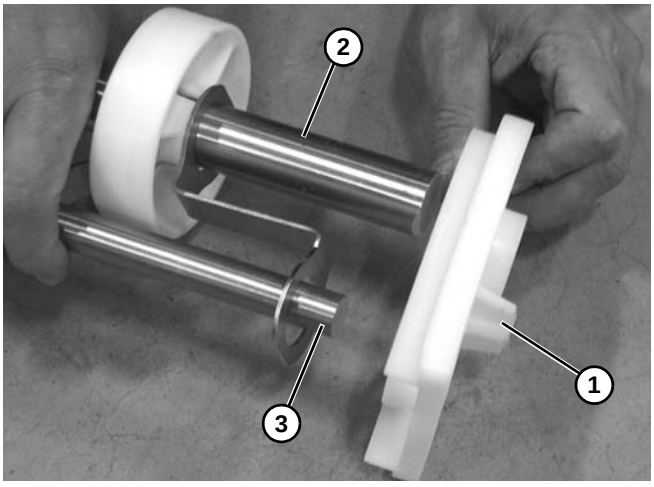


Figure 75

7. Remove outside puck end spacer **(Figure 76, item 1)**.

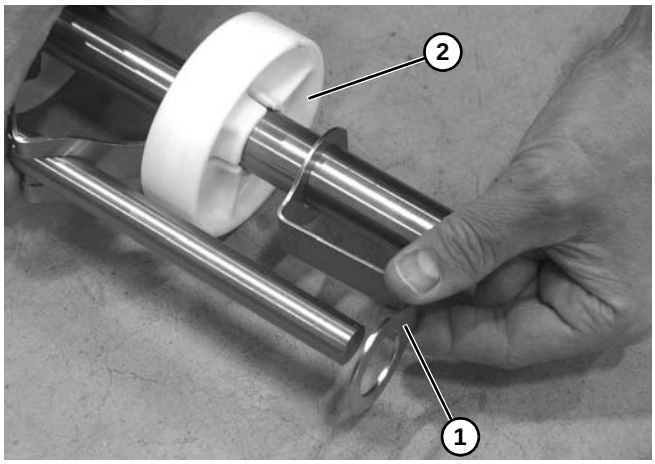


Figure 76

8. Slide off the puck **(Figure 76, item 2)** from the puck rod.
9. Remove U-spacer **(Figure 77, item 1)** from puck rod and idler shaft.

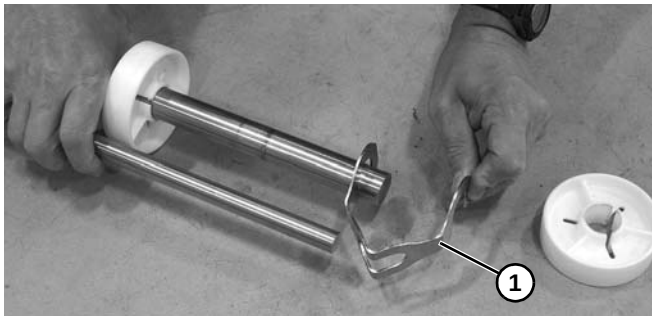


Figure 77

10. Repeat as needed to remove remaining pucks.
11. Replace components, as needed **(Figure 78)**.

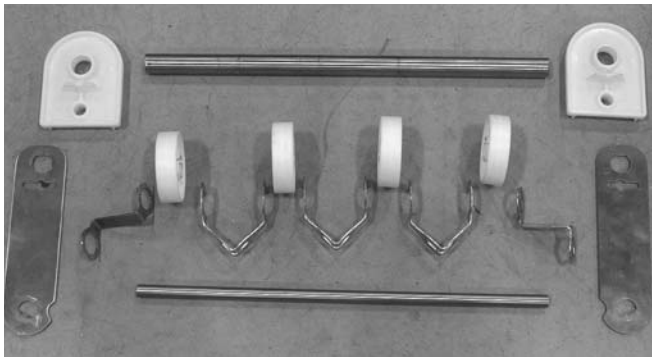


Figure 78

12. Install parts in reverse order of removal.

NOTE
To reassemble please note the placement of the inside U-spacers and outside end spacers between pucks.

Bearing Replacement

WARNING

SEVERE HAZARD!

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

Drive Bearing Removal and Replacement

WARNING

PUNCTURE HAZARD!

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

1. Refer to "Drive Sprocket and Spindle Replacement" on page 20. Follow steps 1 through 7.
2. Turn bearing **(Figure 79, item 1)** to align with slots **(Figure 79, item 2)** and anti-rotation nub **(Figure 79, item 3)**, as shown, in motor mount. Then remove bearing.

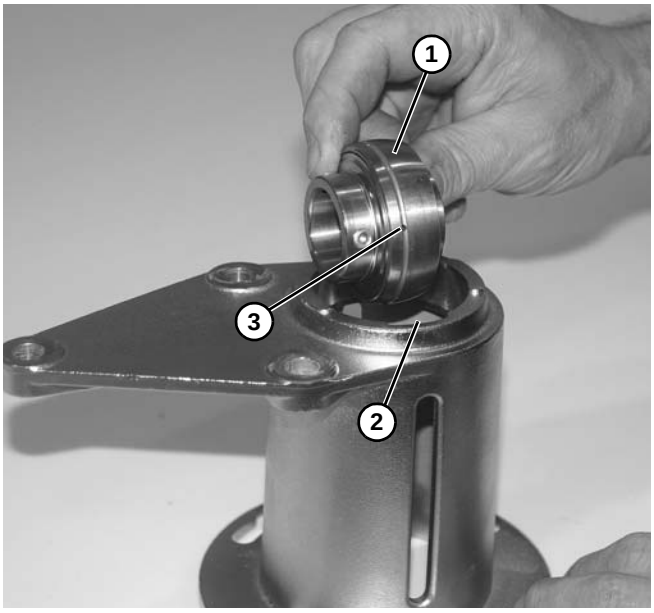


Figure 79

3. Inspect motor mount bearing surface. Replace if worn or damaged. Refer to "Service Parts" on page 27.
4. Install in reverse order of removal.

Belt Return Maintenance

WARNING

SEVERE HAZARD!

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

Belt Returns 650 mm Wide and Wider

1. Remove belt return assembly **(Figure 80, item 1)** from slotted holes **(Figure 80, item 2)** on each side of conveyor frame.

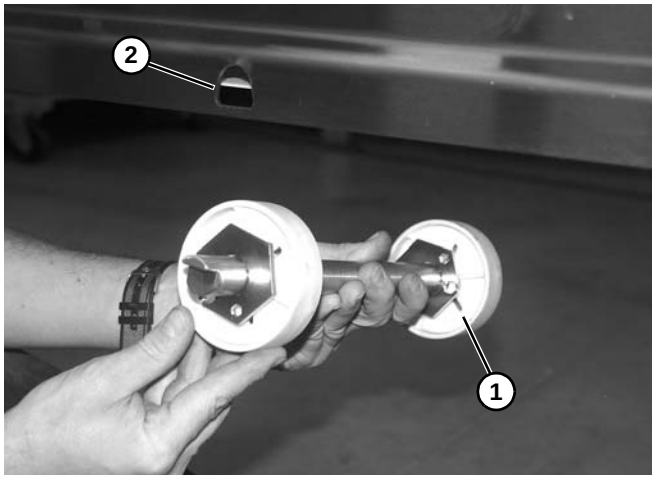


Figure 80

2. Insert an 8 mm **(Figure 81, item 1)** and 6 mm **(Figure 81, item 2)** hex wrench into the retainer plate.

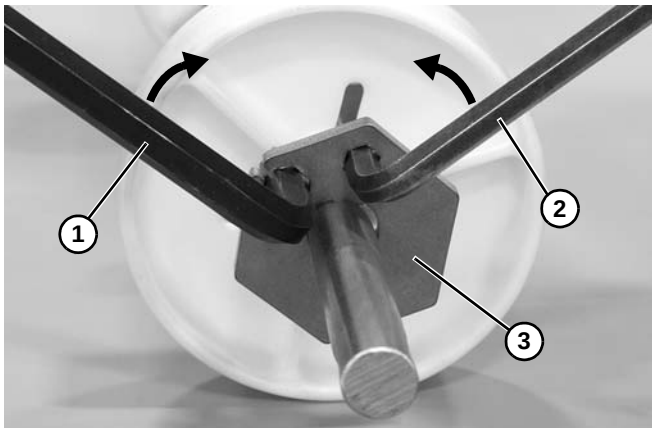


Figure 81

3. Move wrenches toward each other to unlock the retainer plate **(Figure 81, item 3)** and remove from the shaft.

4. Remove puck **(Figure 82, item 1)** from the shaft.

Figure 82

5. Repeat steps 3 through 5 as needed.
6. Install new pucks with retainer plates on both sides.

    a. Insert an 8 mm **(Figure 83, item 1)** and 6 mm **(Figure 83, item 2)** hex wrench into the retainer plate.

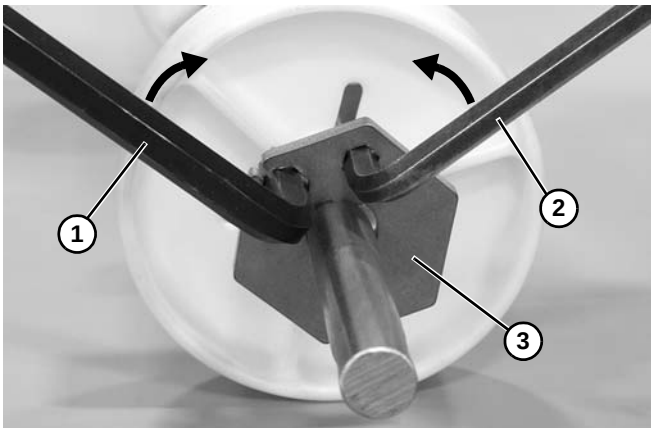


Figure 83

    b. Move wrenches toward each other to open the retainer plate **(Figure 83, item 3)** and install onto the shaft. Position retainer plate where needed.

    c. To lock the retainer plate **(Figure 84, item 1)** in place, move the wrenches **(Figure 84, item 2)** away from each other.

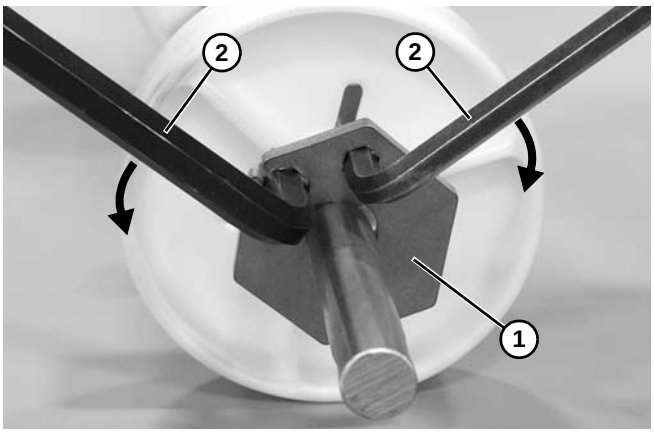


Figure 84

NOTE

*When assembling pucks **(Figure 85, item 1)** with retainer plates **(Figure 85, item 2)**, make certain that there a minimum of 38 mm (1.5") of clearance **(Figure 85, item 3)** on each end.*

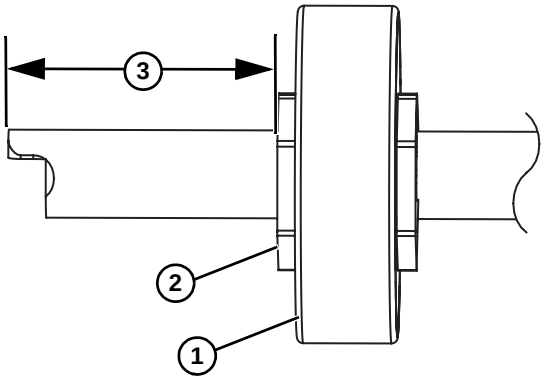


Figure 85

7. Install belt return assembly in reverse order of removal.

Belt Returns Under 650 mm Wide

1. Remove the notched end of the return shaft **(Figure 86, item 1)** from the small hole **(Figure 86, item 2)** in the inside of the conveyor frame.

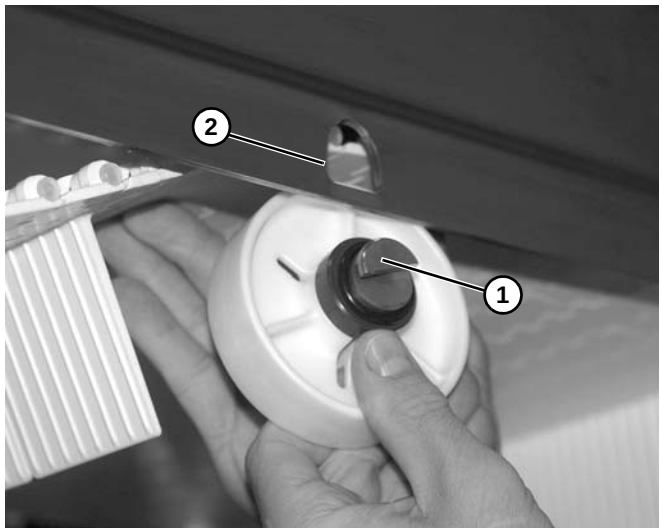


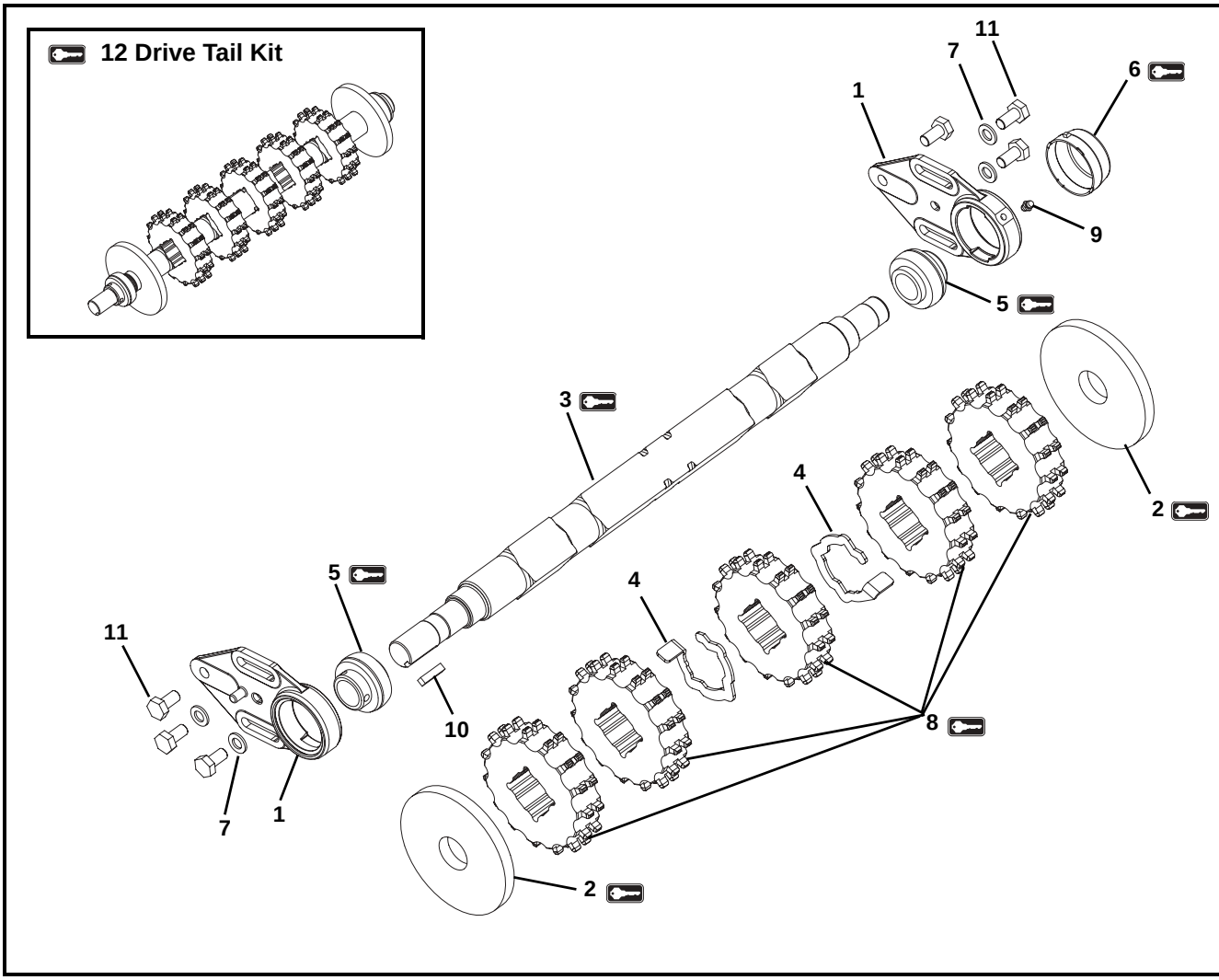
Figure 86

2. Repeat the procedure for all other belt returns.
3. Remove puck from stub shaft.
4. Replace worn or damaged parts.
5. Install parts in reverse order of removal.

NOTE

For replacement parts other than those shown in this section, contact an authorized Dorner distributor or Dorner directly. Recommended Critical Service Parts and Kits are identified by the Key Service Parts symbol . Dorner recommends keeping these parts on hand.

End Drive Tail

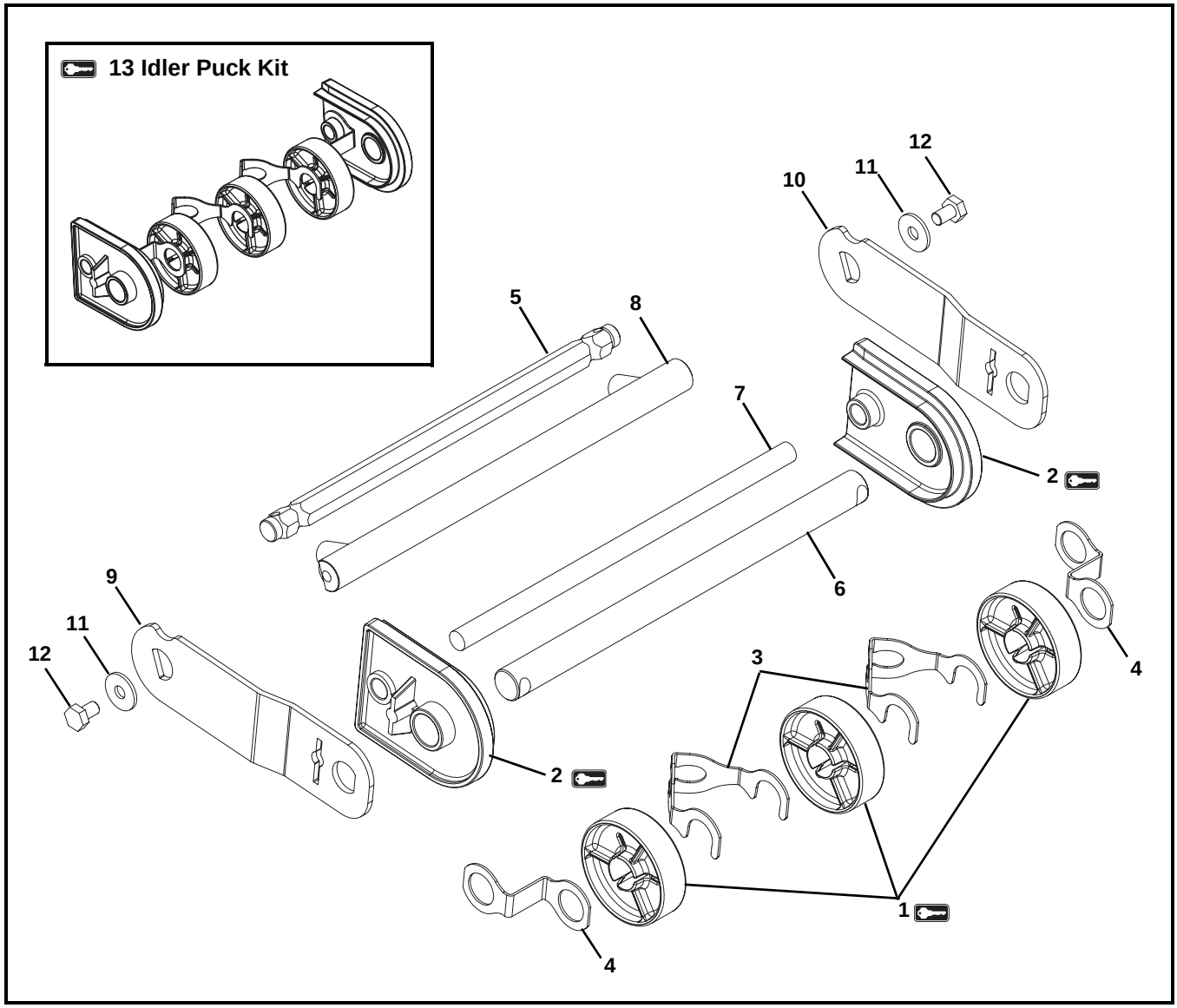


Item	Part Number	Description
1	529901-M	Bearing Housing
2	530486	Guard
3	530065-WWWW-M	Spindle
4	530481	Retaining Ring
5	802-162	Bearing
6	807-1454	Bearing Cover
7	807-1880	Washer
8	807-4893	Sprocket

Item	Part Number	Description
9	801-187	Grease Fitting
10	912-108SS	Square Key, .25" x 1.00"
11	961020MSS	Hex Head Cap Screw, M10-150 x 20 mm
12	530876-WWWWN	Drive Tail Kit (Includes items 2, 3, 5, 8, and 10)
	530877-WWWWN	Dual Shaft Drive Tail Kit (Includes items 2, 3, 5, 8, and 10)
WWWW = Conveyor width reference in mm 0152 - 914		
See Specifications chart on page 4 for conveyor belt widths.		
Service parts can be obtained through your distributor or directly from Dorner Mfg. Corp. (800) 397-8664 or customerservice@dorner.com		

Service Parts

Idler Tail



Item	Part Number	Description
1	506297	Idler Puck
2	529898	Tracking Plate
3	530387	U-Spacer
4	530388-A	End Spacer, 39 mm wide
	530388-B	End Spacer, 64 mm wide
	530388-C	End Spacer, 15 mm wide
5	530465-WWWWN	Hex Bar Stop for Standard Conveyor
6	530466-WWWW-M	Puck Rod
7	530467-WWWWN	Idler Shaft for Standard Conveyor
8	530468-WWWW-M	Tip Up Assembly

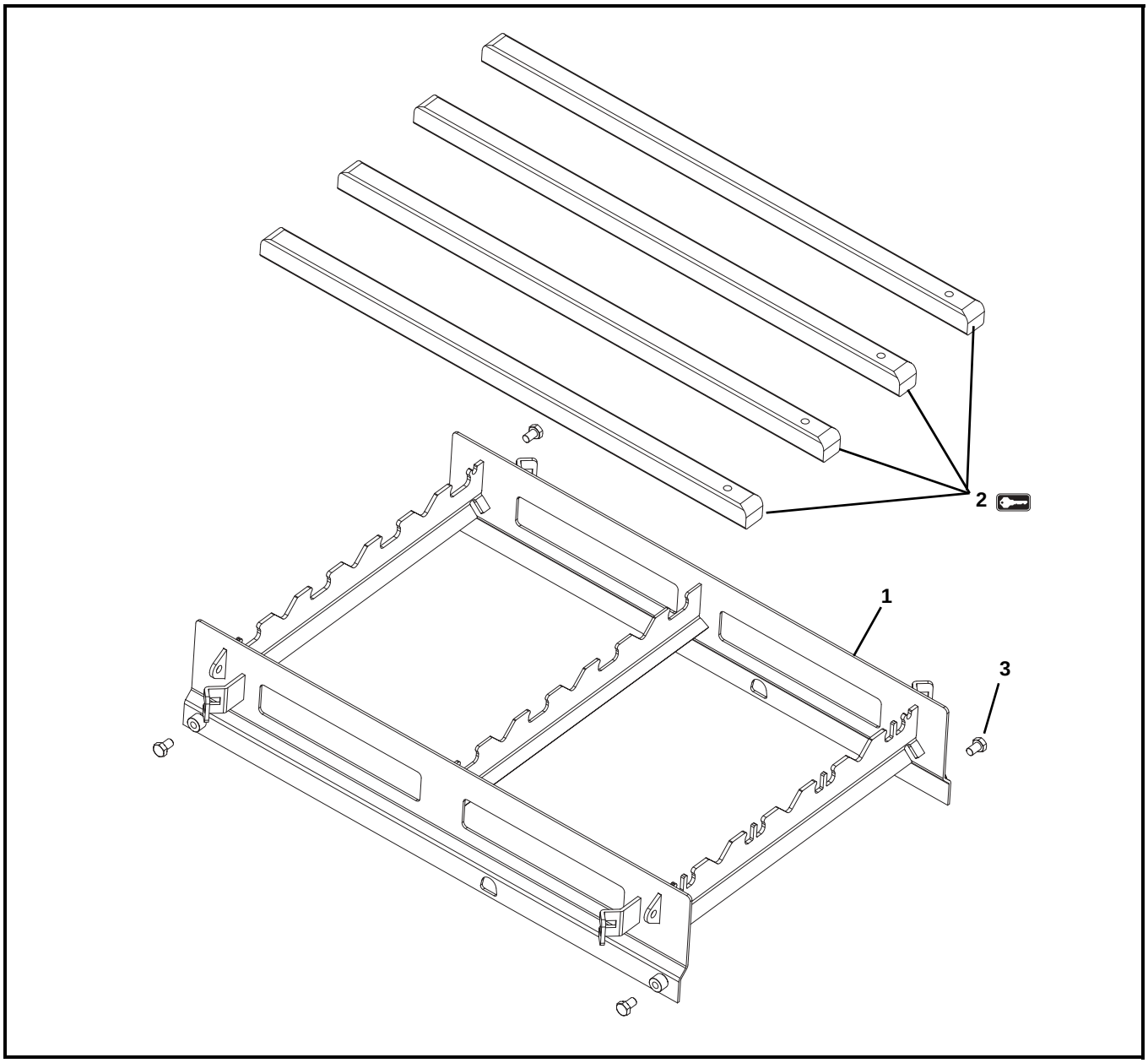
Item	Part Number	Description
9	530498-LH	Tail Plate, Left Hand
10	530498-RH	Tail Plate, Right Hand
11	911-723	Washer
12	961016MSS	Hex Head Cap Screw, M10-1.50 x 16 mm
13	530878-WWWWN	Idler Puck Kit (Includes items 1, 2, 3, and 4)

WWWW = Conveyor width reference in mm 0152 - 914

See Specifications chart on page 4 for conveyor belt widths.

Service parts can be obtained through your distributor or directly from Dorner Mfg. Corp. (800) 397-8664 or customerservice@dorner.com

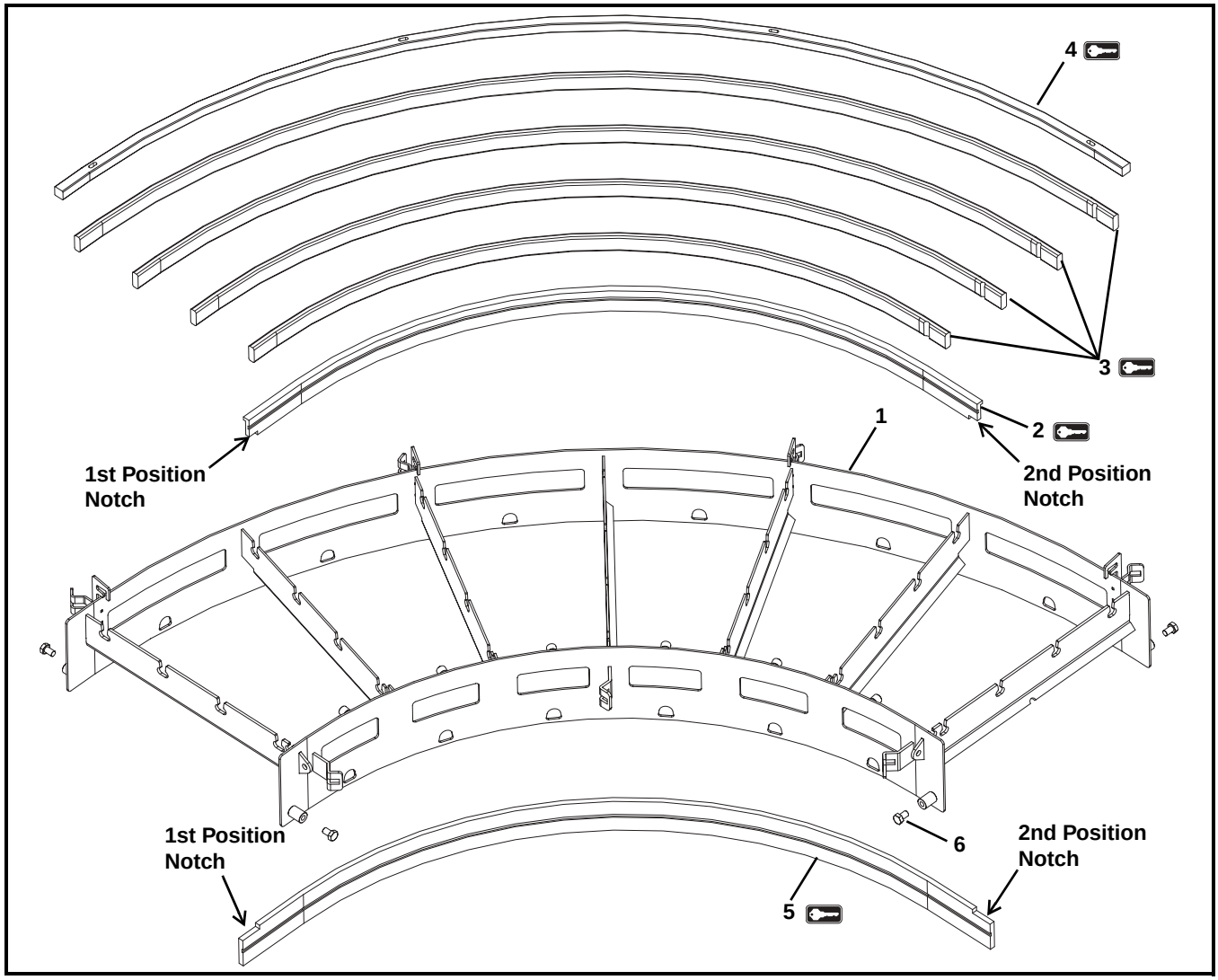
Straight Frame



Item	Part Number	Description
1	----------	Consult Factory for Frame Part Number
2	530062-A-LLLLL-M	Wear Strip for Multiple Piece Frames
	530062-B-LLLLL-M	Wear Strip for Single Piece Frames
3	961016MSS	Hex Head Cap Screw, M10-1.50 x 16 mm
LLLLL = Part length in mm.		
Example: Part length = 1000 mm LLLLL = 01000		
Service parts can be obtained through your distributor or directly from Dorner Mfg. Corp. (800) 397-8664 or customerservice@dorner.com		

Service Parts

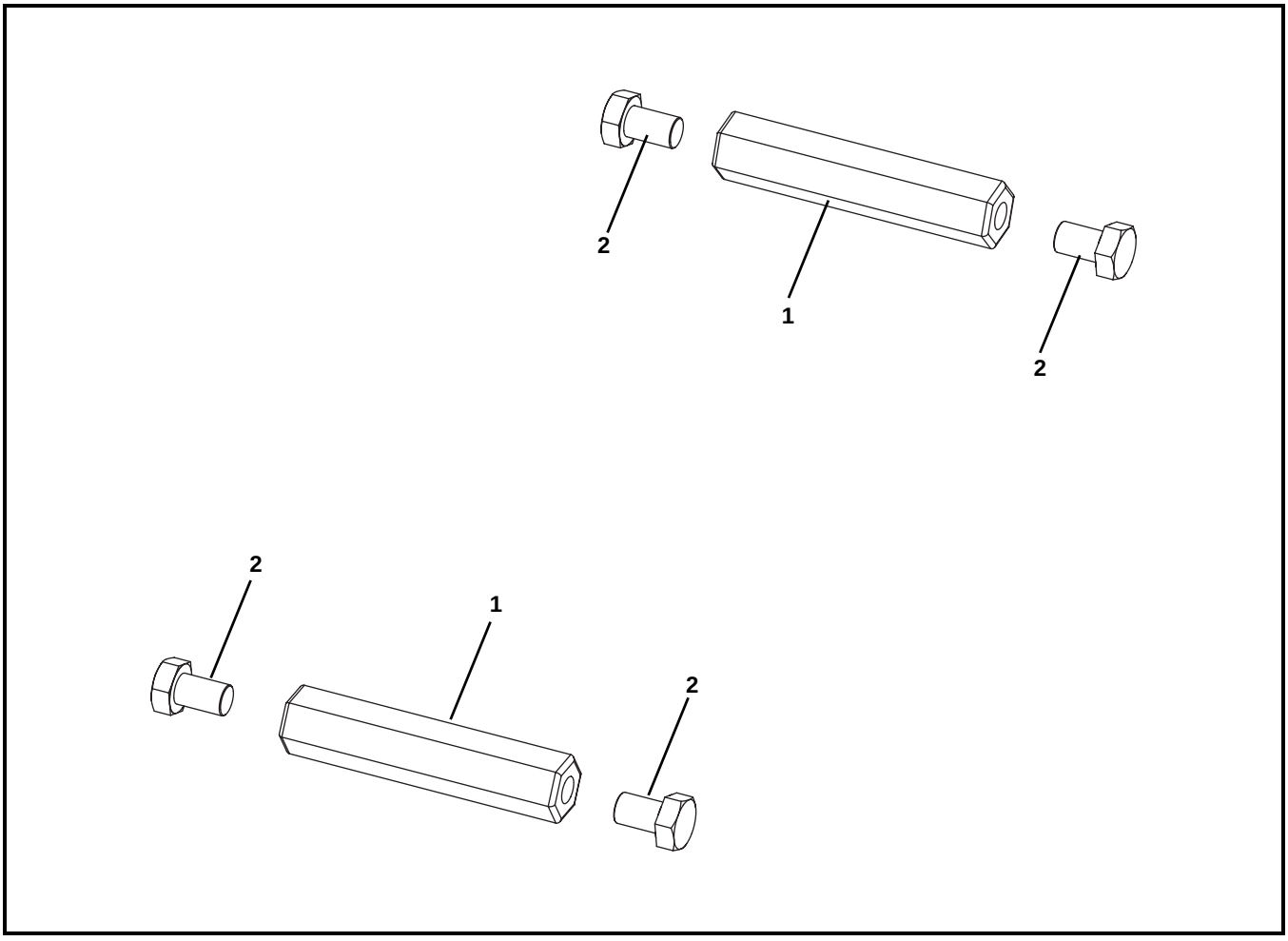
Curve Frame



Item	Part Number	Description
1	----------	Consult Factory for Frame Part Number
2	530482-A-WWWWAAA-LLLLL	Inner Hold Down Wear Strip (A)*
	530482-B-WWWWAAA-LLLLL	Inner Hold Down Wear Strip (B)*
	530482-C-WWWWAAA-LLLLL	Inner Hold Down Wear Strip (C)*
	530482-D-WWWWAAA-LLLLL	Inner Hold Down Wear Strip (D)*
3	530471-LLLLL-M	Wear Strip
4	530470-WWWW-AAA	Upper Hold Down Wear Strip
5	530472-A-WWWWAAA-LLLLL	Inner Curve Wear Strip (A)*
	530472-B-WWWWAAA-LLLLL	Inner Curve Wear Strip (B)*
	530472-C-WWWWAAA-LLLLL	Inner Curve Wear Strip (C)*
	530472-D-WWWWAAA-LLLLL	Inner Curve Wear Strip (D)*

Item	Part Number	Description
6	961016MSS	Hex Head Cap Screw, M10-1.50 x 16 mm
WWWW = Conveyor width reference in mm 0152 - 914		
See Specifications chart on page 4 for conveyor belt widths.		
AAA = Conveyor Angle reference: 015, 030, 045, 060, 075, 090, 135, 180		
LLLLL = Part length in mm.		
Example: Part length = 1000 mm LLLLL = 01000		
* A = Notch in Both Positions B = Notch in 1st Positions C = Notch in 2nd Positions D = Without Notches		
Service parts can be obtained through your distributor or directly from Dorner Mfg. Corp. (800) 397-8664 or customerservice@dorner.com		

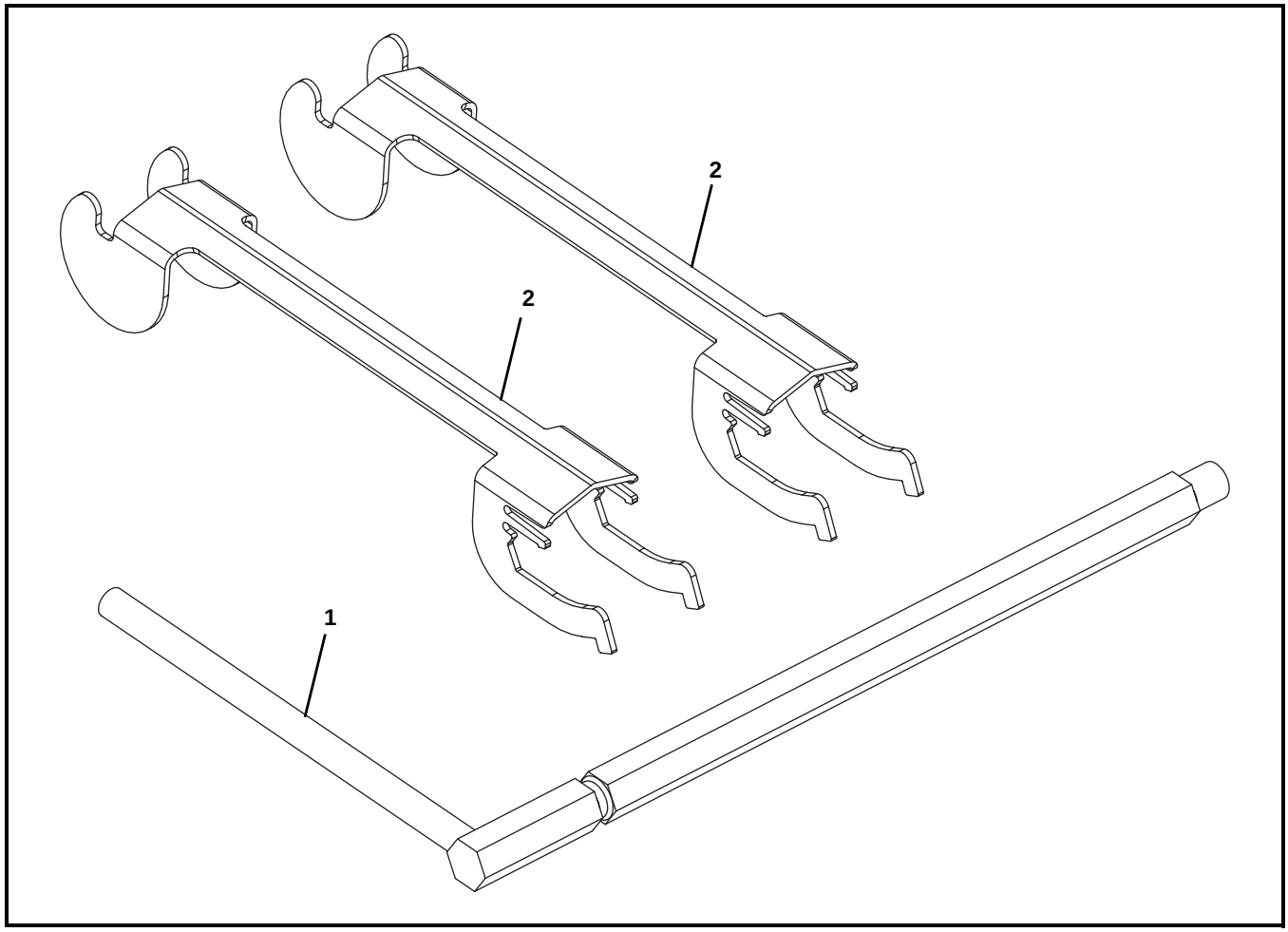
Connecting Assembly



Item	Part Number	Description
1	500193	Connectors
2	961016MSS	Hex Head Cap Screw, M10-1.50 x 16 mm
Service parts can be obtained through your distributor or directly from Dorner Mfg. Corp. (800) 397-8664 or customerservice@dorner.com		

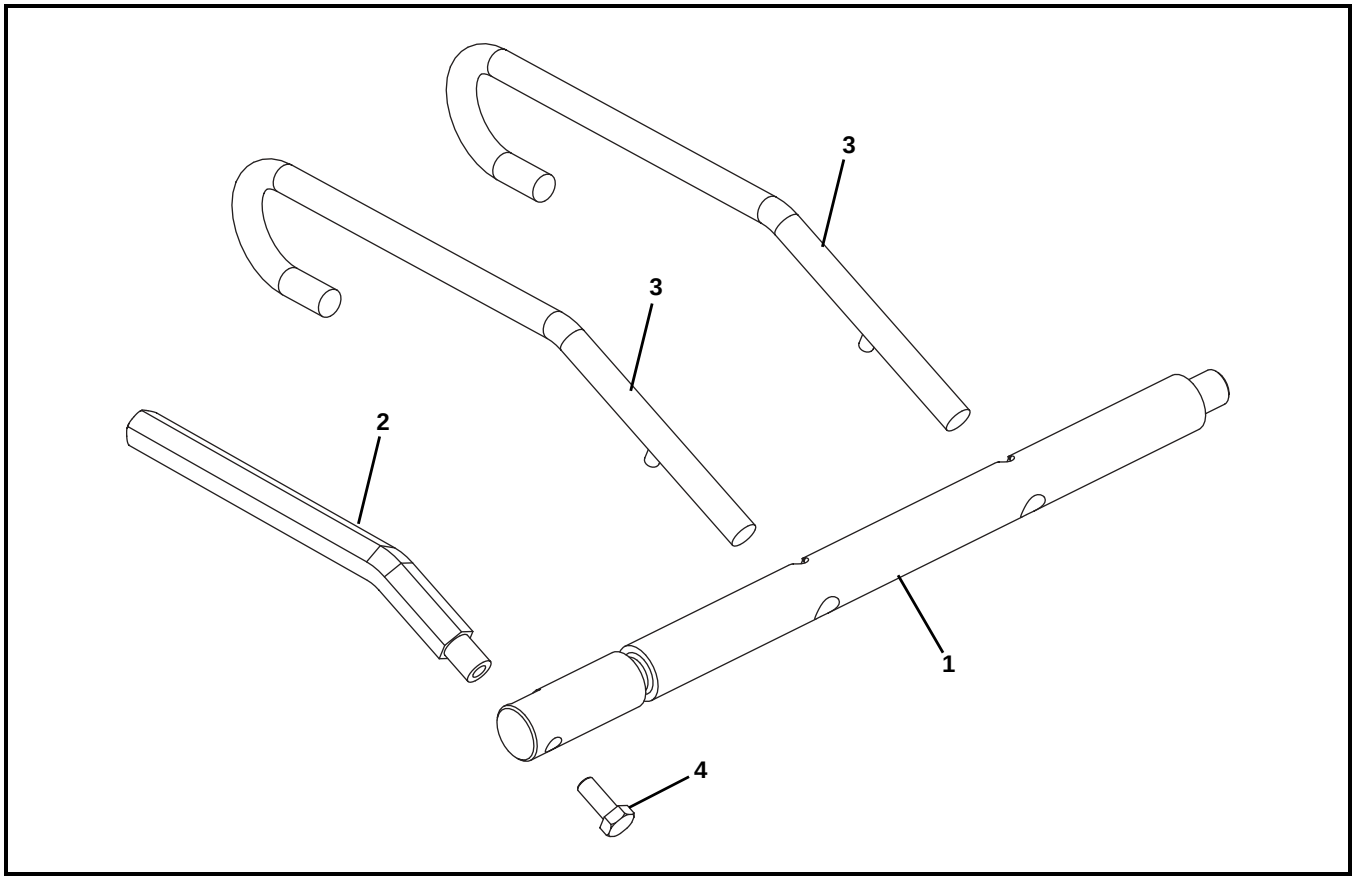
Service Parts

Belt Lifters for Standard Conveyors



Item	Part Number	Description
1	530766-WWWWN	Lifter Bar
2	530605	Lifter
WWWW = Conveyor width reference in mm 0152 - 914		
See Specifications chart on page 4 for conveyor belt widths.		
Service parts can be obtained through your distributor or directly from Dorner Mfg. Corp. (800) 397-8664 or customerservice@dorner.com		

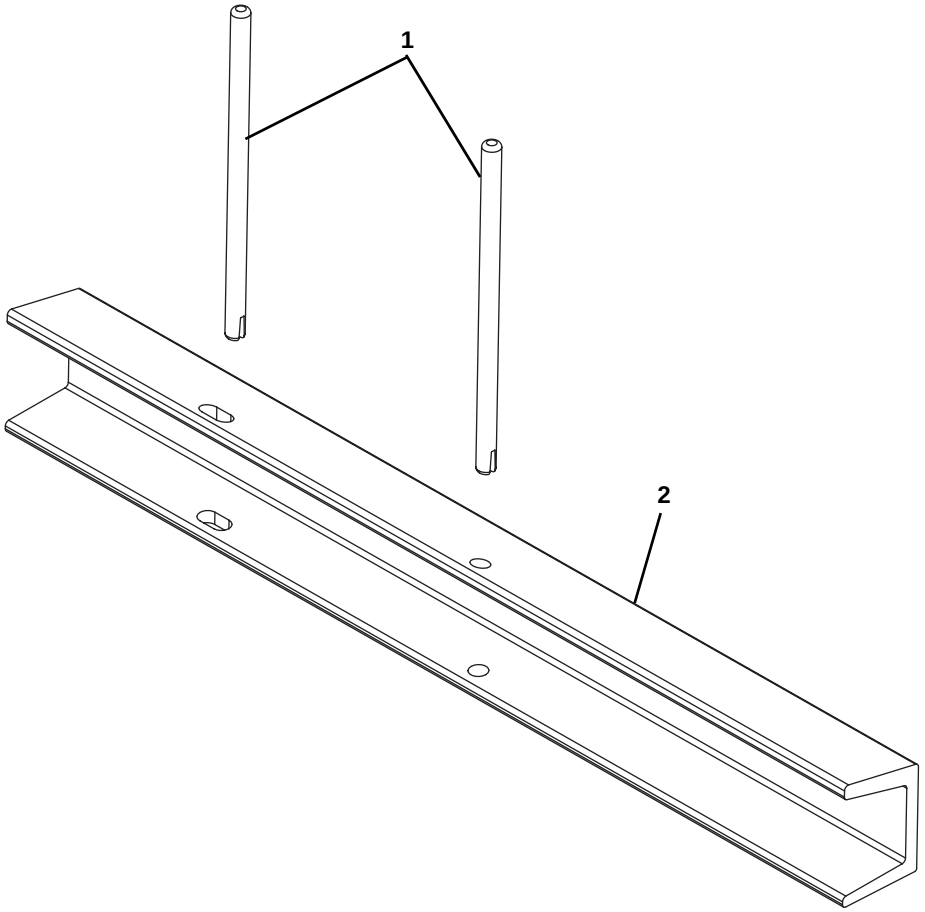
Belt Lifters for Ultimate 3A Conveyors



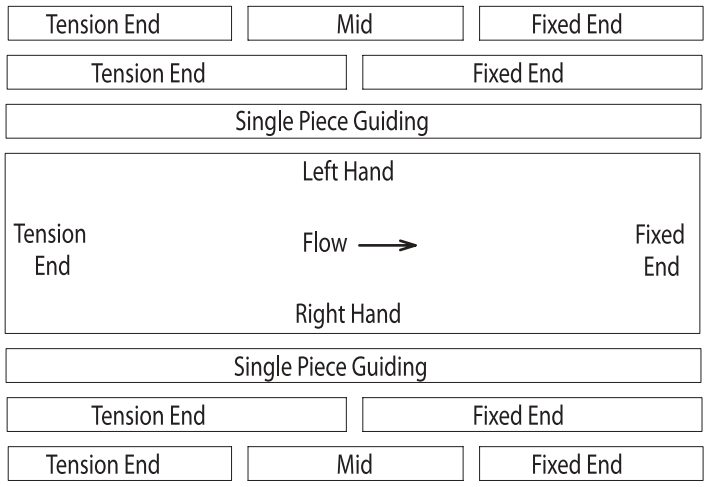
Item	Part Number	Description
1	530286-WWWWY	Lifter Bar
2	500491	Lifter Handle
3	501376	Lifter
4	960820MSS	Hex Head Cap Screw, M8-1.25 x 20 mm
WWWW = Conveyor width reference in mm 0152 - 914		
See Specifications chart on page 4 for conveyor belt widths.		
Service parts can be obtained through your distributor or directly from Dorner Mfg. Corp. (800) 397-8664 or customerservice@dorner.com		

Service Parts

75 mm Tall UHMW High Sides



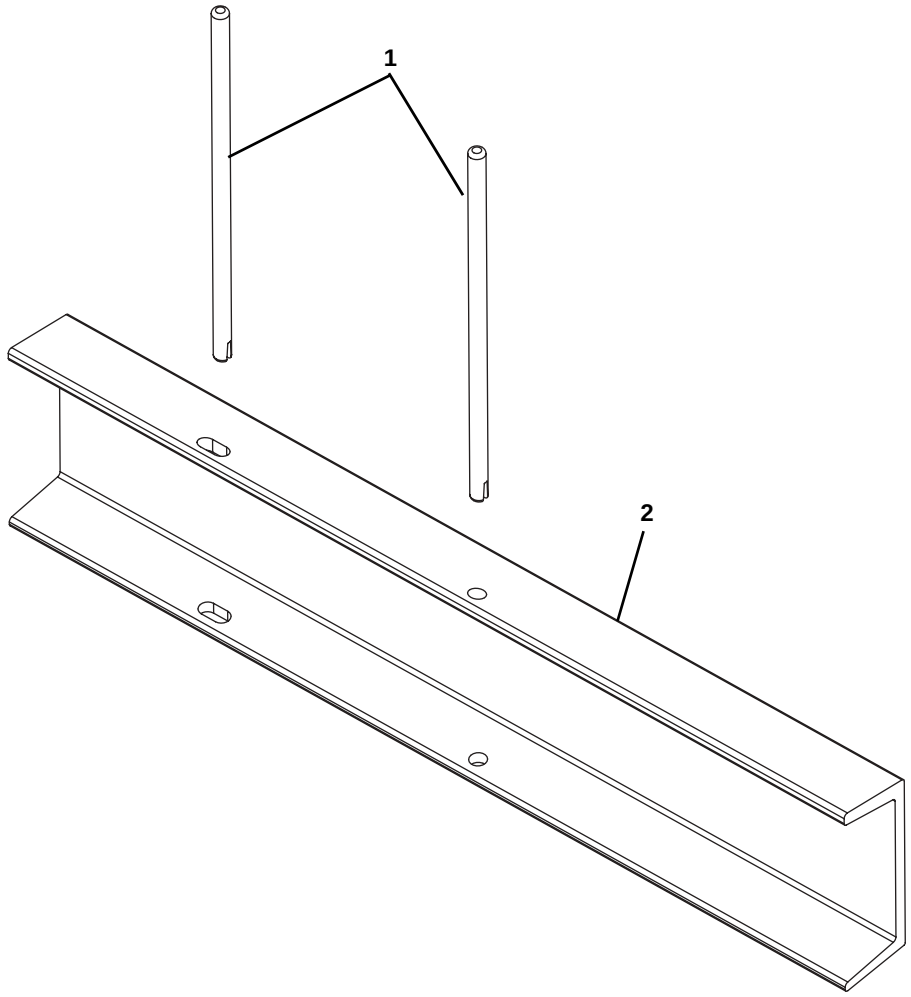
Item 2
Guide
Section
Description



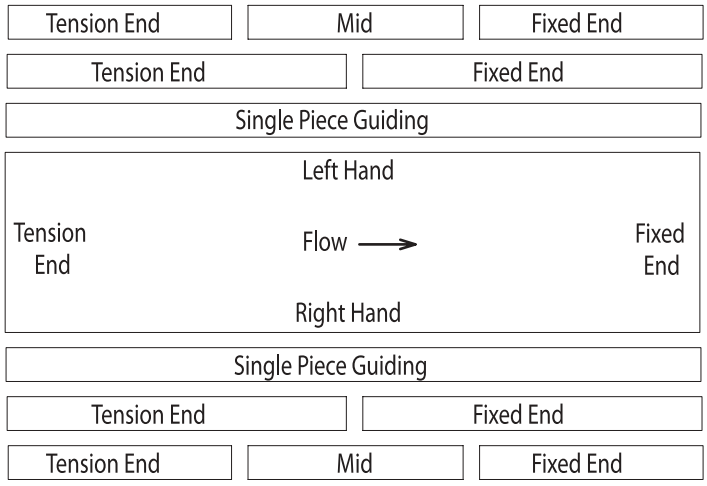
Item	Part Number	Description
1	529796-02480-M	Guide Post
2	530666-EE-7ALLLLL	Single Piece Guiding for Flat Belt Conveyors, Left Hand
	530666-EE-7DLLLLL	Single Piece Guiding for Flat Belt Conveyors, Right Hand
	530666-FE-7ALLLLL	Tension End Guiding for Flat Belt Multi Section Conveyors, Left Hand
	530666-EF-7DLLLLL	Tension End Guiding for Flat Belt Multi Section Conveyors, Right Hand
	530666-FF-7ALLLLL	Mid Guiding for Flat Belt Multi Section Conveyors, Left Hand
	530666-FF-7DLLLLL	Mid Guiding for Flat Belt Multi Section Conveyors, Right Hand
	530666-EF-7ALLLLL	Fixed End Guiding for Flat Belt Multi Section Conveyors, Left Hand
	530666-FE-7DLLLLL	Fixed End Guiding for Flat Belt Multi Section Conveyors, Right Hand
	530686-EA-7ALLLLL	Single Piece Guiding for Cleated Belt Conveyors, Left Hand
	530686-AE-7DLLLLL	Single Piece Guiding for Cleated Belt Conveyors, Right Hand
	530686-FA-7ALLLLL	Tension End Guiding for Cleated Belt Multi Section Conveyors, Left Hand
	530686-AF-7DLLLLL	Tension End Guiding for Cleated Belt Multi Section Conveyors, Right Hand
	530686-FF-7ALLLLL	Mid Guiding for Cleated Belt Multi Section Conveyors, Left Hand
	530686-FF-7DLLLLL	Mid Guiding for Cleated Belt Multi Section Conveyors, Right Hand
	530686-EF-7ALLLLL	Fixed End Guiding for Cleated Belt Multi Section Conveyors, Left Hand
	530686-FE-7DLLLLL	Fixed End Guiding for Cleated Belt Multi Section Conveyors, Right Hand
LLLLL = Part length in mm.		
Example: Part length = 1000 mm LLLLL = 01000		
Service parts can be obtained through your distributor or directly from Dorner Mfg. Corp. (800) 397-8664 or customerservice@dorner.com		

Service Parts

152 mm Tall UHMW High Sides



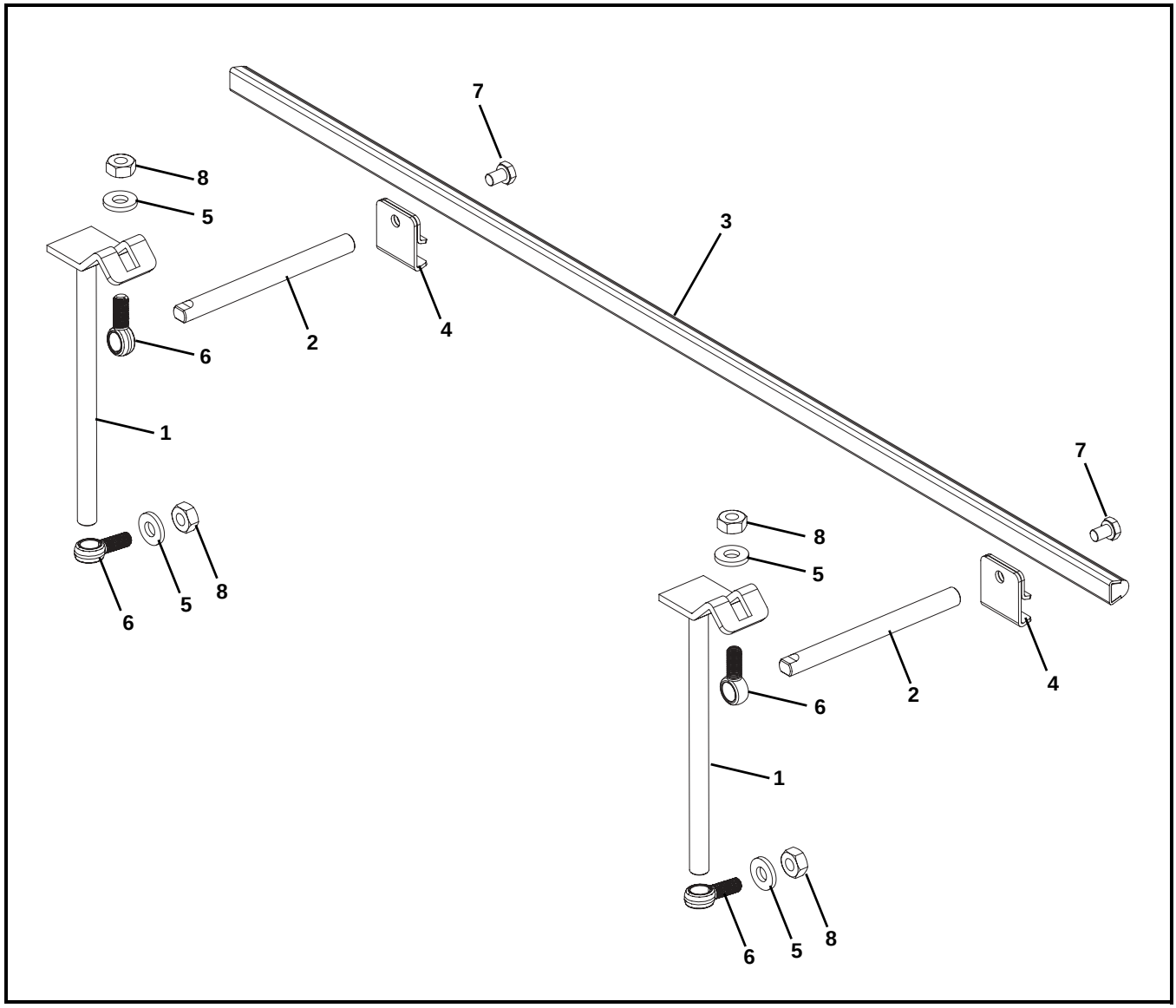
Item 2
Guide
Section
Description



Item	Part Number	Description
1	529796-03250-M	Guide Post
2	530666-EE-8ALLLLL	Single Piece Guiding for Flat Belt Conveyors, Left Hand
	530666-EE-8DLLLLL	Single Piece Guiding for Flat Belt Conveyors, Right Hand
	530666-FE-8ALLLLL	Tension End Guiding for Flat Belt Multi Section Conveyors, Left Hand
	530666-EF-8DLLLLL	Tension End Guiding for Flat Belt Multi Section Conveyors, Right Hand
	530666-FF-8ALLLLL	Mid Guiding for Flat Belt Multi Section Conveyors, Left Hand
	530666-FF-8DLLLLL	Mid Guiding for Flat Belt Multi Section Conveyors, Right Hand
	530666-EF-8ALLLLL	Fixed End Guiding for Flat Belt Multi Section Conveyors, Left Hand
	530666-FE-8DLLLLL	Fixed End Guiding for Flat Belt Multi Section Conveyors, Right Hand
	530686-EA-8ALLLLL	Single Piece Guiding for Cleated Belt Conveyors, Left Hand
	530686-AE-8DLLLLL	Single Piece Guiding for Cleated Belt Conveyors, Right Hand
	530686-FA-8ALLLLL	Tension End Guiding for Cleated Belt Multi Section Conveyors, Left Hand
	530686-AF-8DLLLLL	Tension End Guiding for Cleated Belt Multi Section Conveyors, Right Hand
	530686-FF-8ALLLLL	Mid Guiding for Cleated Belt Multi Section Conveyors, Left Hand
	530686-FF-8DLLLLL	Mid Guiding for Cleated Belt Multi Section Conveyors, Right Hand
	530686-EF-8ALLLLL	Fixed End Guiding for Cleated Belt Multi Section Conveyors, Left Hand
	530686-FE-8DLLLLL	Fixed End Guiding for Cleated Belt Multi Section Conveyors, Right Hand
LLLLL = Part length in mm.		
Example: Part length = 1000 mm LLLLL = 01000		
Service parts can be obtained through your distributor or directly from Dorner Mfg. Corp. (800) 397-8664 or customerservice@dorner.com		

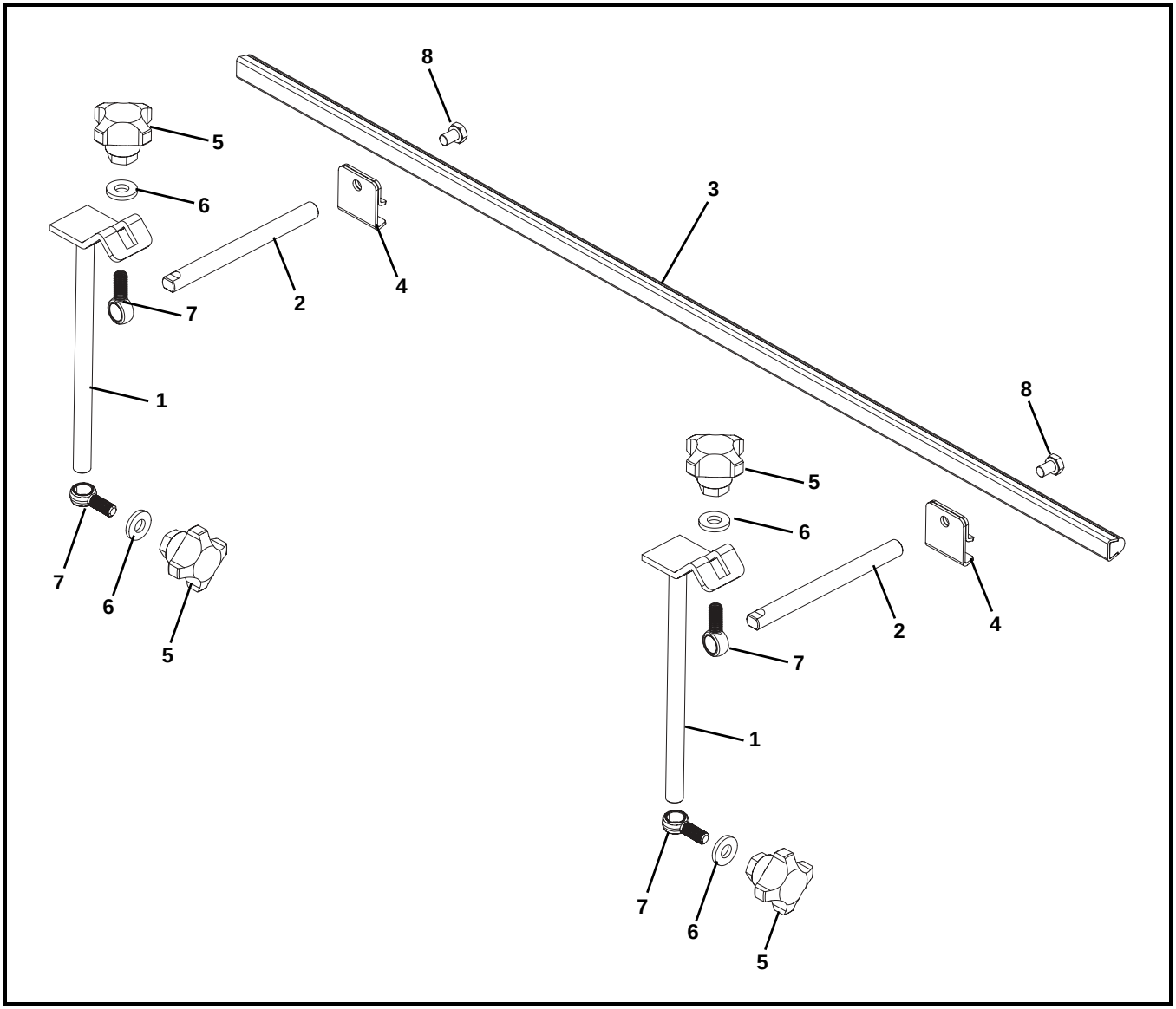
Service Parts

Fully Adjustable Round Guides



Item	Part Number	Description
1	509876	Vertical Post Assembly
2	532300	Guide Post
3	532167-LLLLL	Round Guide Rail
4	807-015	Rail Clamp
5	807-1821	Washer
6	807-1994	Eye Bolt, M10 x 1.50
7	960812MSS	Hex Head Cap Screw, M8-1.25 x 12 mm
8	991001MSS	Hex Nut, M10 - 1.50
LLLLL = Part length in mm.		
Example: Part length = 1000 mm LLLLL = 01000		
Service parts can be obtained through your distributor or directly from Dorner Mfg. Corp. (800) 397-8664 or customerservice@dorner.com		

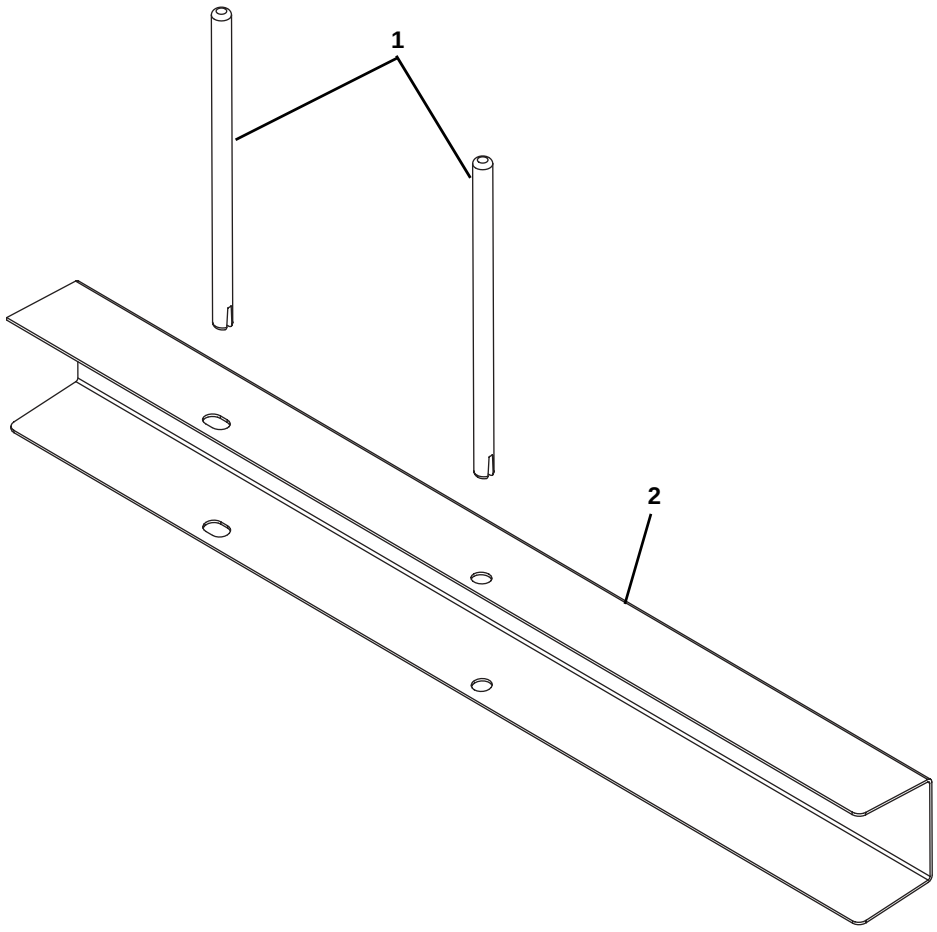
Tool-Less Fully Adjustable Round Guides



Item	Part Number	Description
1	509876	Vertical Post Assembly
2	532300	Guide Post
3	532167-LLLLL	Round Guide Rail
4	807-015	Rail Clamp
5	807-1057	Handle
6	807-1821	Washer
7	807-1994	Eye Bolt, M10 x 1.50
8	960812MSS	Hex Head Cap Screw, M8-1.25 x 12 mm
LLLLL = Part length in mm.		
Example: Part length = 1000 mm LLLLL = 01000		
Service parts can be obtained through your distributor or directly from Dorner Mfg. Corp. (800) 397-8664 or customerservice@dorner.com		

Service Parts

75 mm Tall Stainless Steel High Sides



Item 2
Guide
Section
Description

Tension End | Mid | Fixed End

Tension End | Fixed End

Single Piece Guiding

Left Hand

Tension End — Flow → — Fixed End

Right Hand

Single Piece Guiding

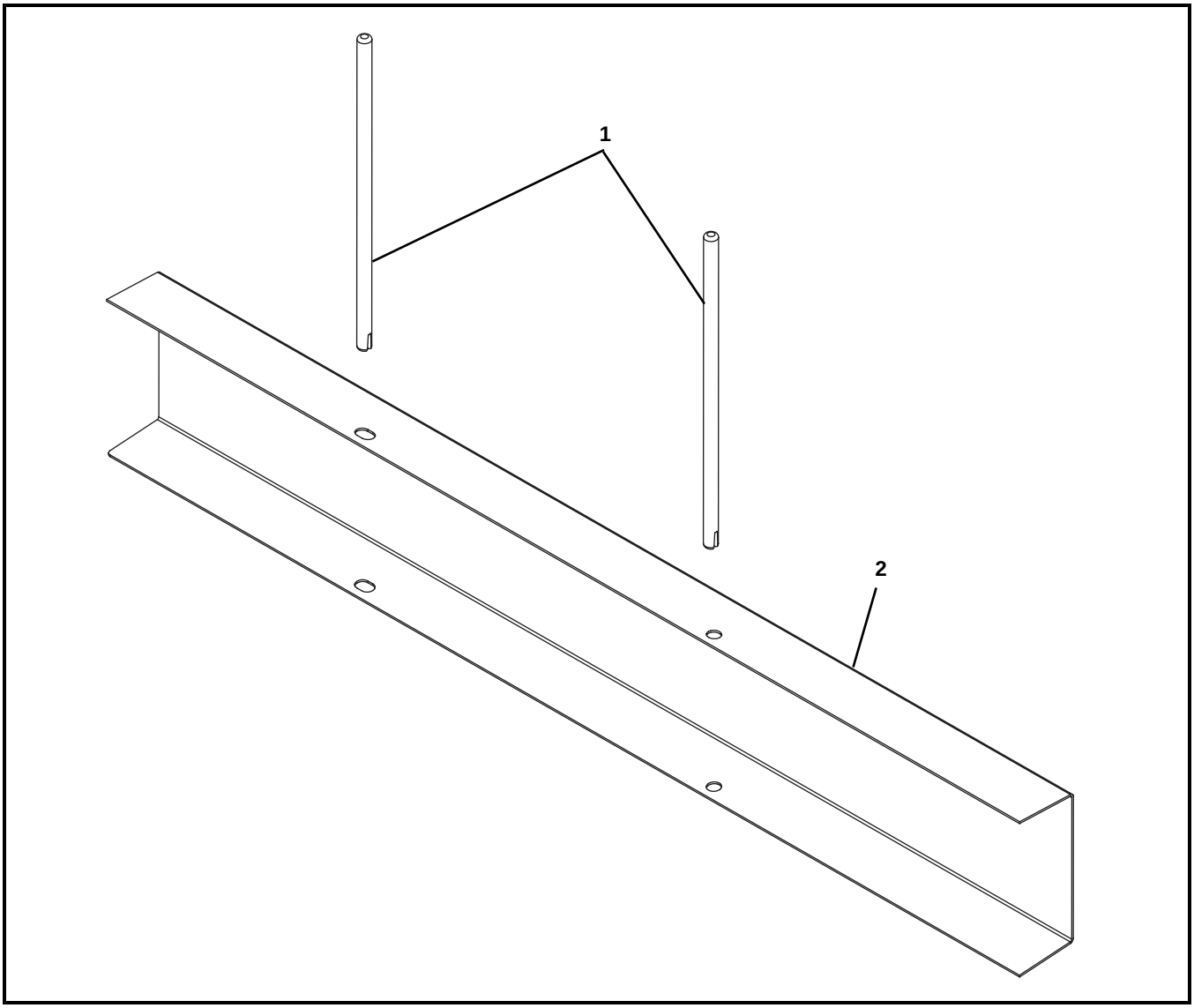
Tension End | Fixed End

Tension End | Mid | Fixed End

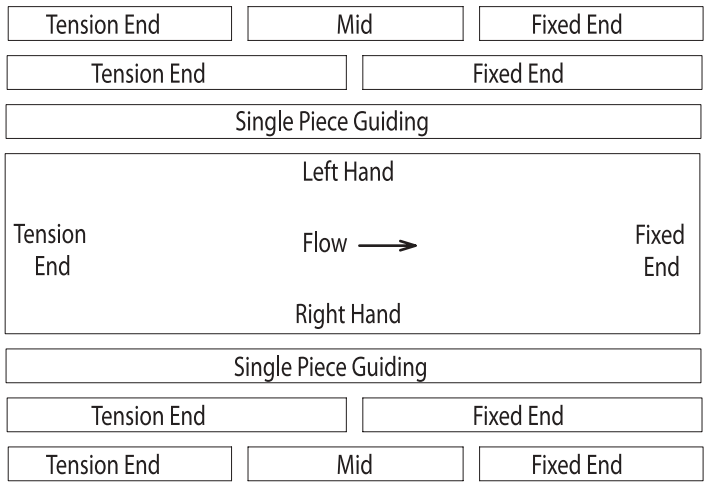
Item	Part Number	Description
1	529796-02480-M	Guide Post
2	530364-EE-7ALLLLL	Single Piece Guiding for Flat Belt Conveyors, Left Hand
	530364-EE-7DLLLLL	Single Piece Guiding for Flat Belt Conveyors, Right Hand
	530364-FE-7ALLLLL	Tension End Guiding for Flat Belt Multi Section Conveyors, Left Hand
	530364-EF-7DLLLLL	Tension End Guiding for Flat Belt Multi Section Conveyors, Right Hand
	530364-FF-7ALLLLL	Mid Guiding for Flat Belt Multi Section Conveyors, Left Hand
	530364-FF-7DLLLLL	Mid Guiding for Flat Belt Multi Section Conveyors, Right Hand
	530364-EF-7ALLLLL	Fixed End Guiding for Flat Belt Multi Section Conveyors, Left Hand
	530364-FE-7DLLLLL	Fixed End Guiding for Flat Belt Multi Section Conveyors, Right Hand
	530627-EA-7ALLLLL	Single Piece Guiding for Cleated Belt Conveyors, Left Hand
	530627-AE-7DLLLLL	Single Piece Guiding for Cleated Belt Conveyors, Right Hand
	530627-FA-7ALLLLL	Tension End Guiding for Cleated Belt Multi Section Conveyors, Left Hand
	530627-AF-7DLLLLL	Tension End Guiding for Cleated Belt Multi Section Conveyors, Right Hand
	530627-FF-7ALLLLL	Mid Guiding for Cleated Belt Multi Section Conveyors, Left Hand
	530627-FF-7DLLLLL	Mid Guiding for Cleated Belt Multi Section Conveyors, Right Hand
	530627-EF-7ALLLLL	Fixed End Guiding for Cleated Belt Multi Section Conveyors, Left Hand
	530627-FE-7DLLLLL	Fixed End Guiding for Cleated Belt Multi Section Conveyors, Right Hand
	------	Consult Factory for LPZ Conveyor Guiding Part Numbers
LLLLL = Part length in mm.		
Example: Part length = 1000 mm LLLLL = 01000		
Service parts can be obtained through your distributor or directly from Dorner Mfg. Corp. (800) 397-8664 or customerservice@dorner.com		

Service Parts

152 mm Tall Stainless Steel High Sides



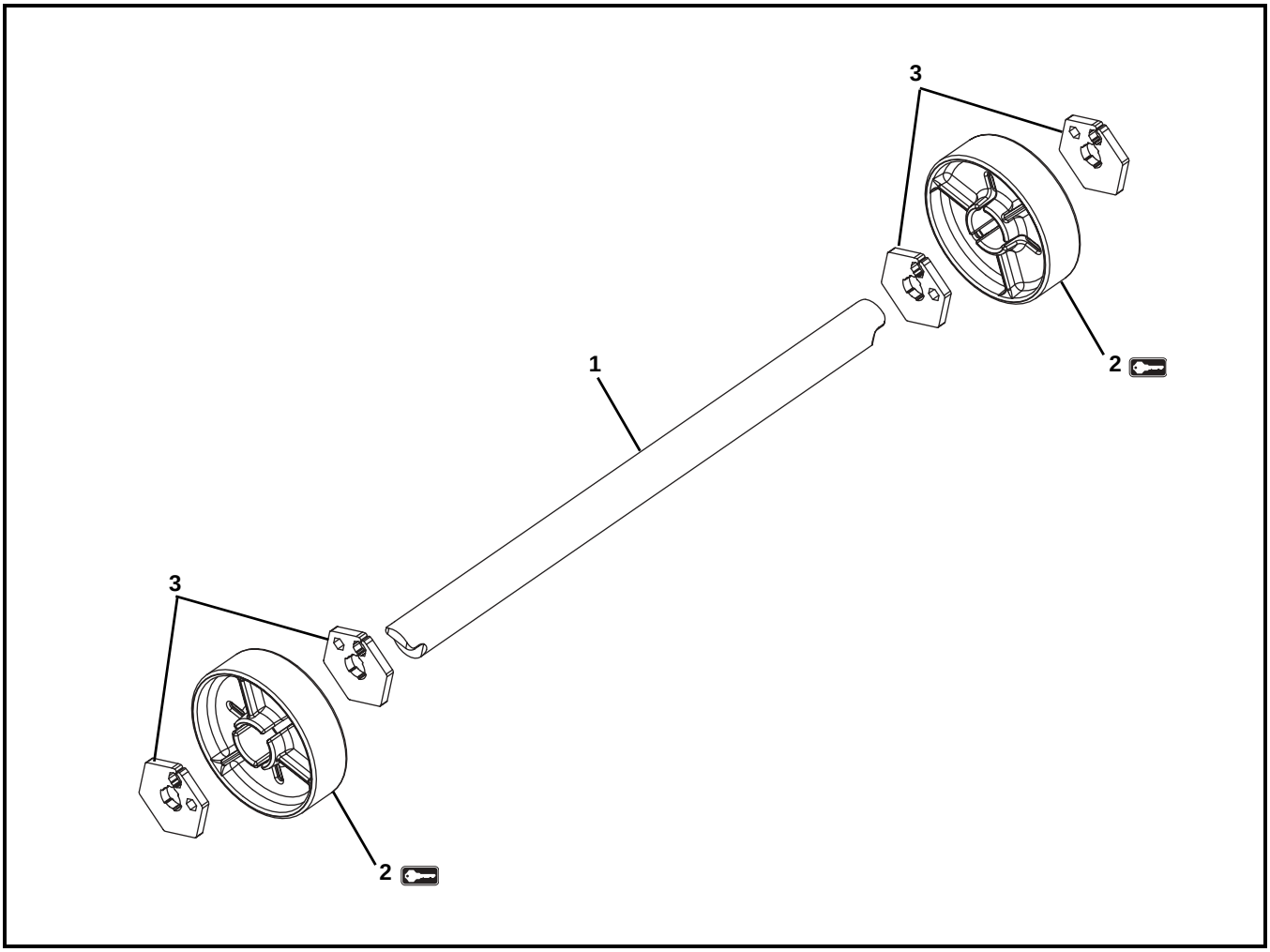
Item 2
Guide
Section
Description



Item	Part Number	Description
1	529796-03250-M	Guide Post
2	530364-EE-8ALLLLL	Single Piece Guiding for Flat Belt Conveyors, Left Hand
	530364-EE-8DLLLLL	Single Piece Guiding for Flat Belt Conveyors, Right Hand
	530364-FE-8ALLLLL	Tension End Guiding for Flat Belt Multi Section Conveyors, Left Hand
	530364-EF-8DLLLLL	Tension End Guiding for Flat Belt Multi Section Conveyors, Right Hand
	530364-FF-8ALLLLL	Mid Guiding for Flat Belt Multi Section Conveyors, Left Hand
	530364-FF-8DLLLLL	Mid Guiding for Flat Belt Multi Section Conveyors, Right Hand
	530364-EF-8ALLLLL	Fixed End Guiding for Flat Belt Multi Section Conveyors, Left Hand
	530364-FE-8DLLLLL	Fixed End Guiding for Flat Belt Multi Section Conveyors, Right Hand
	530627-EA-8ALLLLL	Single Piece Guiding for Cleated Belt Conveyors, Left Hand
	530627-AE-8DLLLLL	Single Piece Guiding for Cleated Belt Conveyors, Right Hand
	530627-FA-8ALLLLL	Tension End Guiding for Cleated Belt Multi Section Conveyors, Left Hand
	530627-AF-8DLLLLL	Tension End Guiding for Cleated Belt Multi Section Conveyors, Right Hand
	530627-FF-8ALLLLL	Mid Guiding for Cleated Belt Multi Section Conveyors, Left Hand
	530627-FF-8DLLLLL	Mid Guiding for Cleated Belt Multi Section Conveyors, Right Hand
	530627-EF-8ALLLLL	Fixed End Guiding for Cleated Belt Multi Section Conveyors, Left Hand
	530627-FE-8DLLLLL	Fixed End Guiding for Cleated Belt Multi Section Conveyors, Right Hand
	------	Consult Factory for LPZ Conveyor Guiding Part Numbers
LLLLL = Part length in mm.		
Example: Part length = 1000 mm LLLLL = 01000		
Service parts can be obtained through your distributor or directly from Dorner Mfg. Corp. (800) 397-8664 or customerservice@dorner.com		

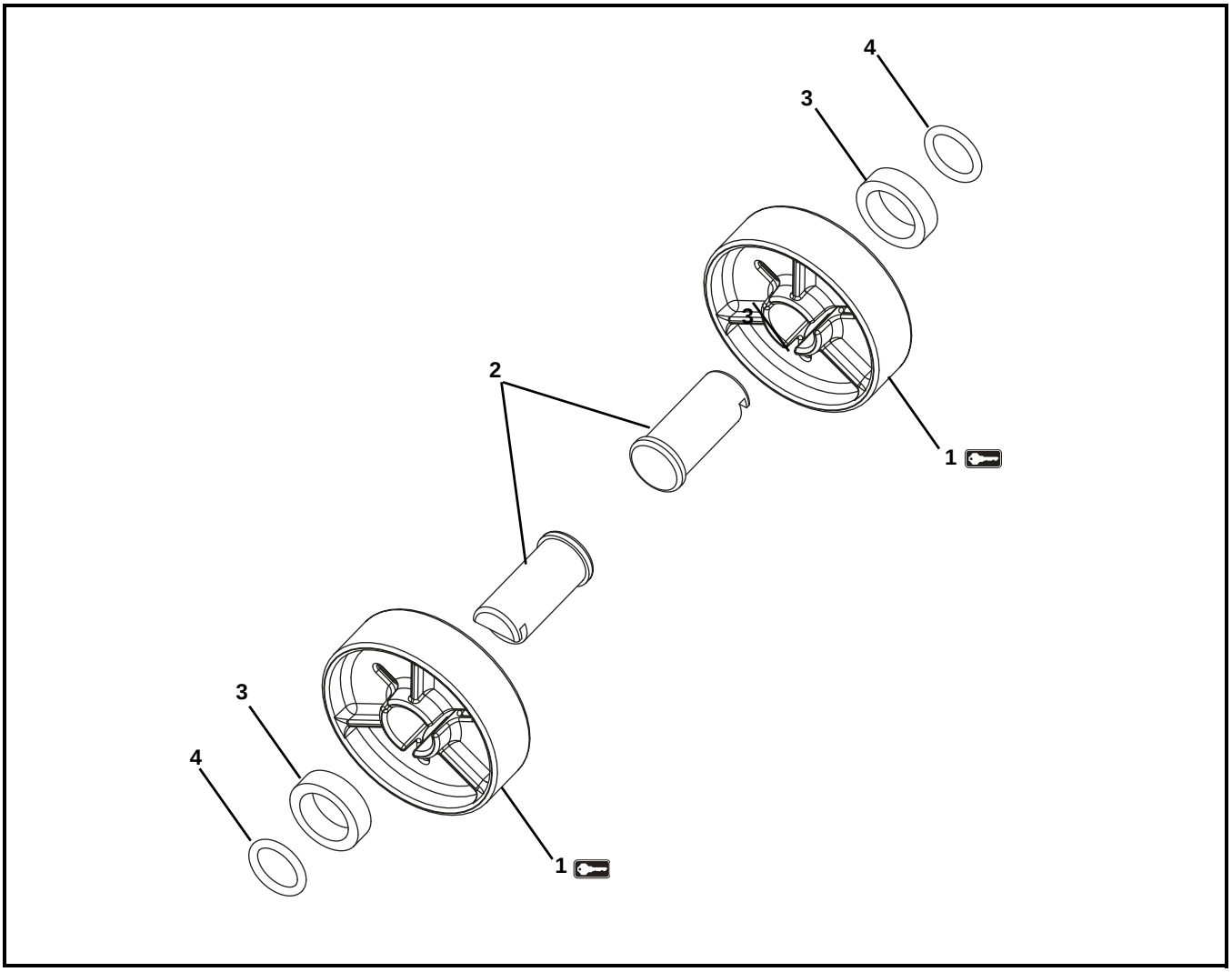
Service Parts

Belt Returns 650 mm Wide and Wider



Item	Part Number	Description
1	530178-WWWW-M	Return Shaft
2	506296	Puck
3	517575	Retaining Plate
WWWW = Conveyor width reference in mm 0152 - 0914		
See Specifications chart on page 4 for conveyor belt widths.		
Service parts can be obtained through your distributor or directly from Dorner Mfg. Corp. (800) 397-8664 or customerservice@dorner.com		

Belt Returns Under 650 mm Wide



Item	Part Number	Description
1	506296	Puck
2	501097	Shaft
3	530273	Spacer
4	812-107	O-Ring
Service parts can be obtained through your distributor or directly from Dorner Mfg. Corp. (800) 397-8664 or customerservice@dorner.com		

Service Parts

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-WWWW

BB = Chain reference number (Refer to belt type in part number. See Page 5 for details.)

WWWW = Conveyor width ref: 0152-0914 in 50 mm increments

Flat Belt Chain Repair Kit

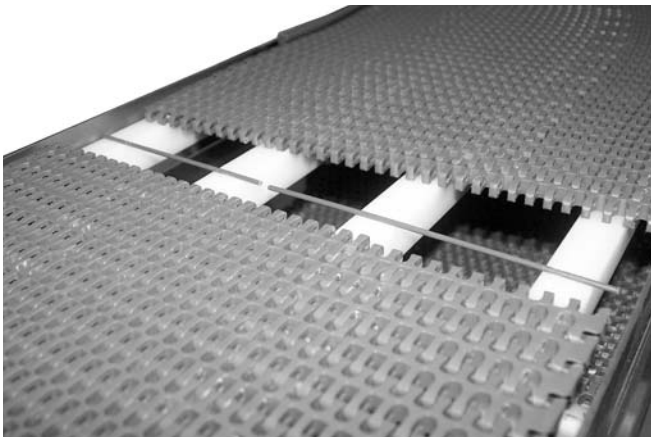


Figure 87

Item	Part Number	Description
1	74BB-WWWW	Flat Belt Chain Repair Kit (Includes 1 ft (305 mm) of flat belt chain and assembly pins)
BB = Chain Reference number		
WWWW = Conveyor width reference in mm 0152 - 914		

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. Include part serial number if available.

A representative will discuss action to be taken on the returned items and provide a Returned Materials 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.

<table>
<tr><td></td><td colspan="9">Product Type</td></tr>
<tr><td></td><td colspan="8">Standard Products</td><td>Engineered to order parts</td></tr>
<tr><td>Product Line</td><td>Conveyors</td><td>Gearmotors & Mounting Packages</td><td>Support Stands</td><td>Accessories</td><td>Spare Parts (non-belt)</td><td>Spare Belts - Standard Flat Fabric</td><td>Spare Belts - Cleated & Spec. Fabric</td><td>Spare Belts - Plastic Chain</td><td>All equipment and parts</td></tr>
<tr><td>1100 Series</td><td colspan="6" rowspan="7">30% return fee for all products except:
50% return fee for conveyors with modular belt, cleated belt or speciality belts

All Electrical items are assigned original manufacturers return policy.</td><td colspan="2" rowspan="11">non-returnable</td><td rowspan="11">case-by-case</td></tr>
<tr><td>2200 Series</td></tr>
<tr><td>3200 Series</td></tr>
<tr><td>Pallet Systems</td></tr>
<tr><td>FlexMove/SmartFlex</td></tr>
<tr><td>GAL Series</td></tr>
<tr><td>All Electrical</td></tr>
<tr><td>7100 Series</td><td colspan="6" rowspan="4">50% return fee for all products</td></tr>
<tr><td>7200/7300 Series</td></tr>
<tr><td>AquaGard 7350 Series Version 2</td></tr>
<tr><td>GES Series</td></tr>
<tr><td>AquaGard 7350/7360 Series</td><td colspan="8" rowspan="2">non-returnable</td></tr>
<tr><td>AquaPruf Series</td></tr>
</table>

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 Dorner, an authorized sales channel or visit our website: www.dorner.com.

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

www.dorner.com

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