5300 Series DustPruf Curve Conveyors

Installation, Maintenance and Parts Manual

Featuring: SmartSlot™

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851-706 Rev. E

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Introduction

⚠ CAUTION

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

Upon receipt of shipment:

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

The Dorner Limited Warranty applies.

Dorner 5300 Series conveyors are covered by Patent Number 7,874,419.

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

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

⚠ DANGER

SEVERE HAZARD!

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

⚠ DANGER

EXPLOSION HAZARD!

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

⚠ WARNING

CRUSH HAZARD!

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

⚠ WARNING

CRUSH HAZARD!

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

⚠ WARNING

SEVERE HAZARD!

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

⚠ WARNING

BURN HAZARD!

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

⚠ WARNING

PUNCTURE HAZARD!

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

⚠ WARNING

SEVERE HAZARD!

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

Product Description

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

Typical Components	
1	Conveyor
2	Gearmotor
3	Belt (Flat Belt Shown)
4	Motor Controller
5	Drive End
6	Idler End

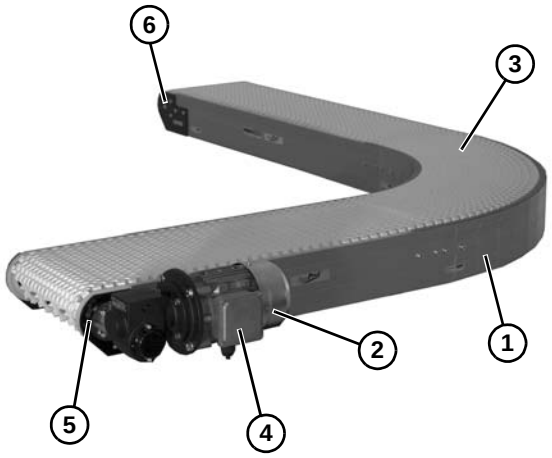


Figure 1

Specifications

Flat Belt Conveyor Width Reference (WW)	08 - 36 in 02 increments
Flat Belt Conveyor Belt Width	8" (203 mm) - 36" (914 mm) in 2" (51 mm) increments
LPZ Conveyor Width Reference (WW)	08 - 24 in 02 increments
LPZ Conveyor Belt Width	8" (103 mm) - 24" (610 mm) in 2" (51 mm) increments
Maximum Conveyor Load	20 lbs. / ft^2 (97 kg/ m^2) with a maximum of 500 lbs. (227 kg)
Belt Travel	12" (305 mm) per revolution of pulley
Maximum Belt Speed	250 ft/minute (76 m/minute)

Conveyor Module Length Reference (LLL)	021 - 999 in 001 increments
Conveyor Module Length	21" (533 mm) - 999" (25.4 m) in 1" (25 mm) increments
LPZ Section Length (LLL)	024 - 288 in 001 increments
LPZ Section Length	24" (610 mm) - 288" (7315 mm) in 1" (25 mm) increments

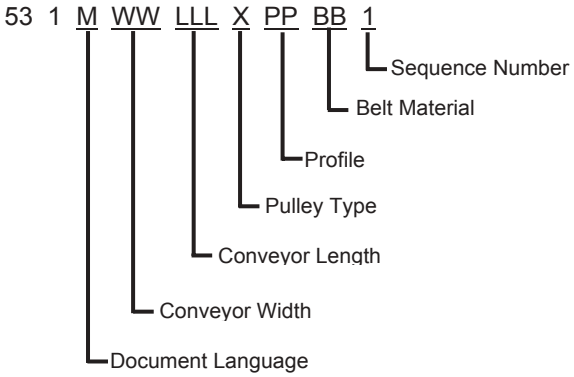
IMPORTANT

Maximum conveyor loads are based on:

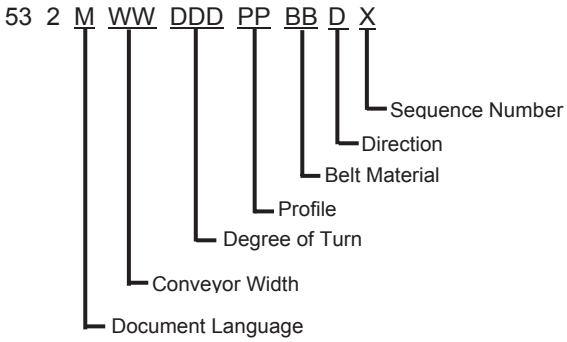
- *Non-accumulating product*
- *Product moving toward gearmotor*
- *Conveyor being mounted horizontally*
- *Conveyor being located in a dry environment*
- *Conveyor equipped with standard belt only*

5300 Series Curve Conveyor Modules

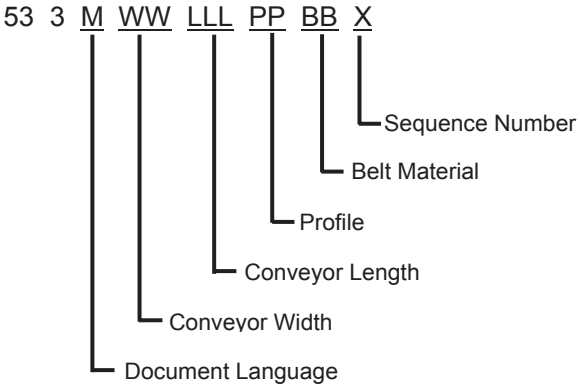
5300 Series Infeed / Idler Module



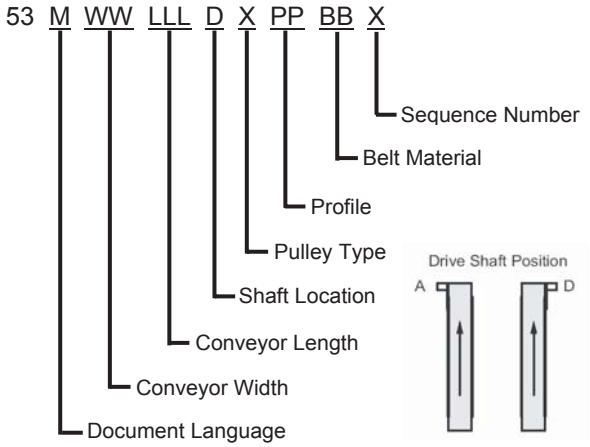
5300 Series Curve Module



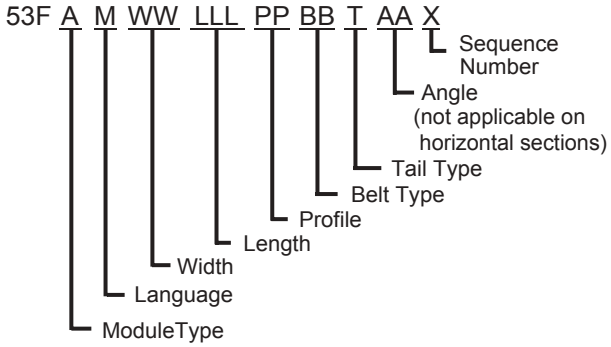
5300 Series Intermediate Module



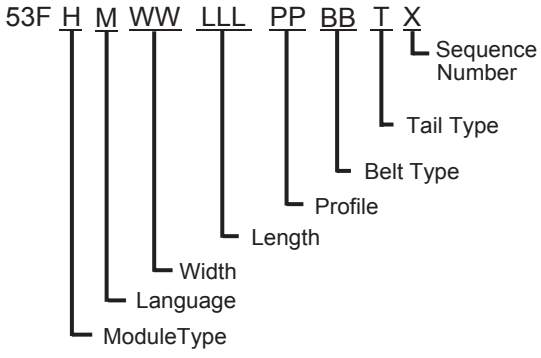
5300 Series Exit / Drive Module



LPZ 5300 Series Curve Conveyor (Infeed Section to Knuckle)

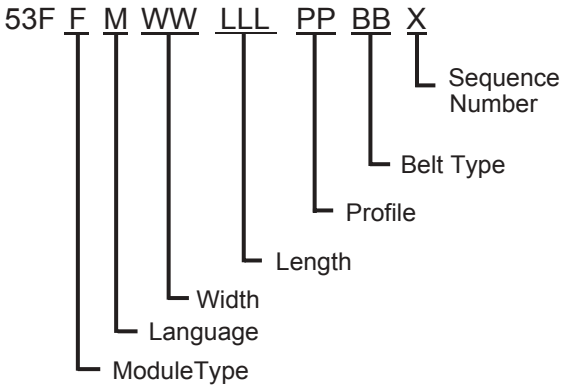


LPZ 5300 Series Curve Conveyor (Infeed Section to Curve)

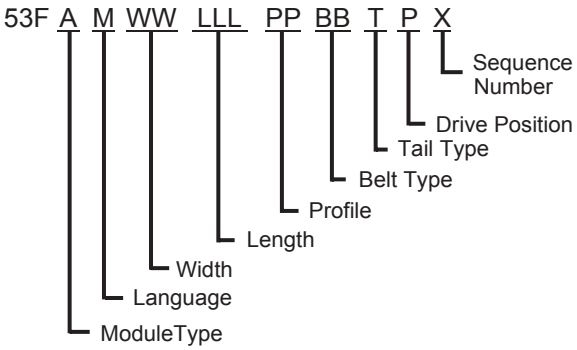


Specifications

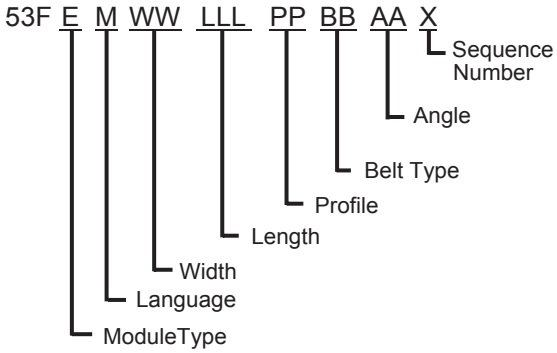
LPZ 5300 Series Curve Conveyor (Mid Section Between Knuckle and Curve)



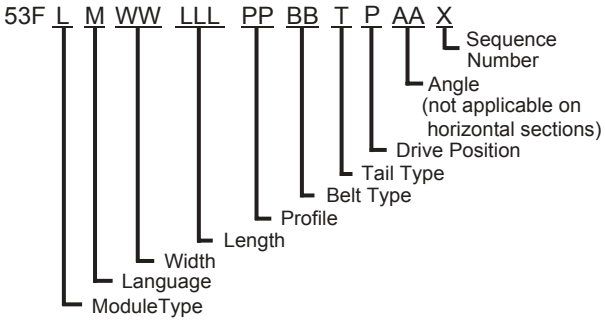
LPZ 5300 Series Curve Conveyor (Discharge Section from Curve)



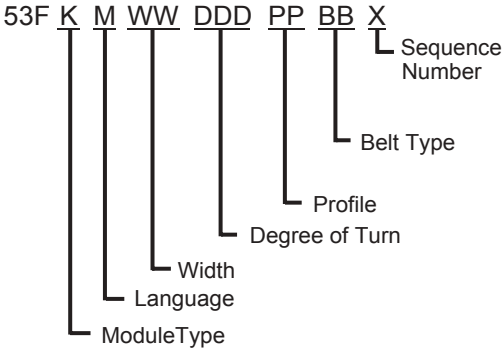
LPZ 5300 Series Curve Conveyor (Mid Section Between Knuckles)



LPZ 5300 Series Curve Conveyor (Discharge Section from Knuckle)



LPZ 5300 Series Curve Conveyor (Curve Section)



Conveyor Supports

Infeed / Idler Module:

- "A" = 3 ft (914 mm) maximum (See Figure 2)
- Modules up to 72" long get 1 support stand
- All other lengths get 2 support stands, evenly spaced, plus an additional support stand at each straight section break (over 13' straight frame module)

Intermediate Module:

- Modules up to 84" long get 1 support stand
- All other lengths get 2 support stands, evenly spaced, plus an additional support stand at each straight section break (modules over 13')

Exit / Drive Module:

- "B" = 3 ft (914 mm) maximum (See Figure 2)
- Modules up to 65" long get 1 support stand
- All other lengths get 2 support stands, evenly spaced, plus an additional support stand at each straight section break (modules over 13')

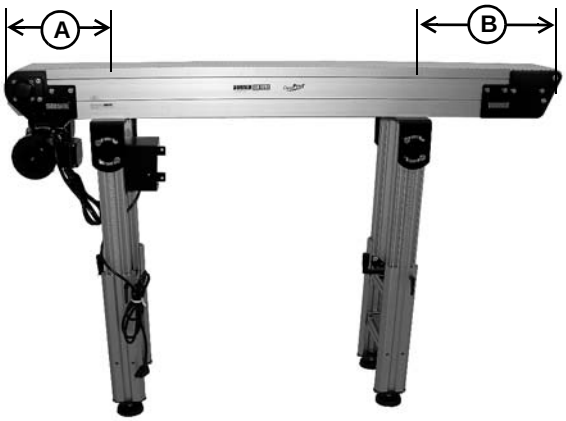


Figure 2

Curve Module:

- Reference chart for support stand quantities, evenly spaced along curve (see chart).

Width / Degree	8"	10"	12"	14"	16"	18"	20"	22"	24"	26"	28"	30"	32"	34"	36"
45°	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1
90°	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2
135°	1	1	1	1	1	1	2	2	2	2	2	2	2	3	3
180°	1	1	1	2	2	2	2	2	2	3	3	3	3	3	3

Installation

⚠ CAUTION

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

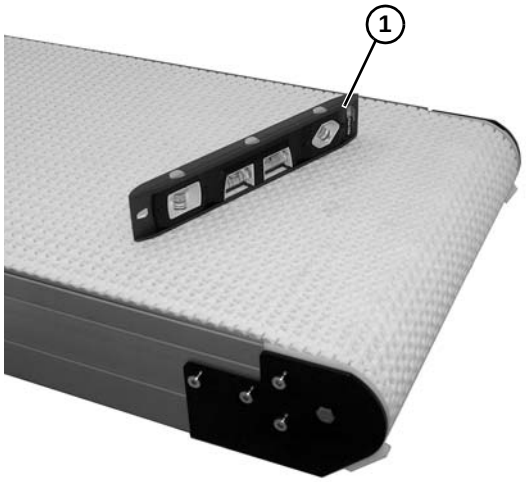


Figure 3

Required Tools

- Level
- Torque wrench
- 4 mm hex wrench
- 5 mm hex wrench

Recommended Installation Sequence

1. Assemble the conveyor (if required). Refer to "Conveyor Sections Longer than 12 ft (3658 mm)" on page 8 and "All Conveyors" on page 10.
2. Attach the stands. Refer to "Stand Installation" on page 10.
3. Install the belt. Refer to "Belt Installation" on page 11.
4. Install the guiding. Refer to "Guiding" on page 14.
5. Install the gearmotor. Refer to "Drive Package Installation" on page 14.

Conveyor Sections Longer than 12 ft (3658 mm)

Connecting Components

Typical Connecting Components **(Figure 4)**

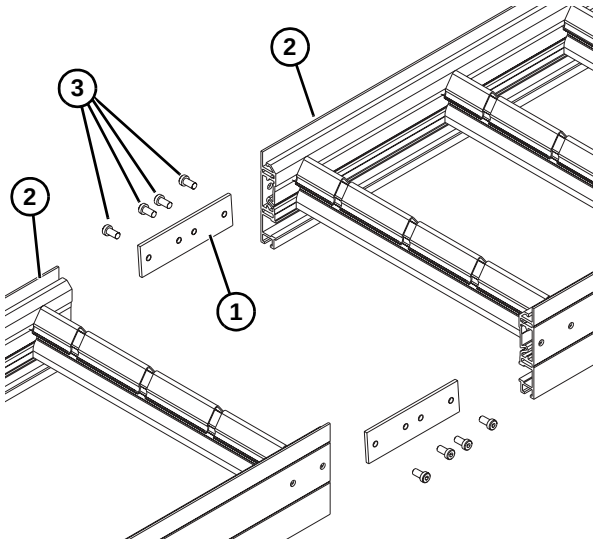


Figure 4

1	Clamp Plate
2	Conveyor frames
3	Low Head Cap Screw, M8 - 1.25 x 16 mm

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

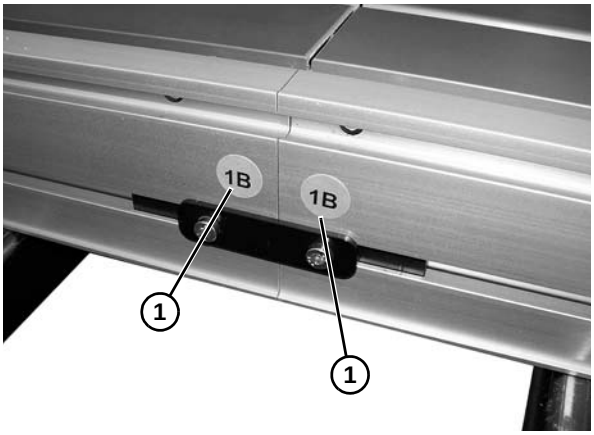


Figure 5

2. Install two clamp plates **(Figure 4, item 1)** into one conveyor section **(Figure 4, item 2)** by lining up two holes in clamp plate with two holes in conveyor frame. Install two M8x16 low head cap screws **(Figure 4, item 3)** to secure each clamp plate.
3. Join both conveyor sections, and secure with two M8x16 low head cap screws **(Figure 4, item 3)** on both sides. Tighten all cap screws to 84 in-lb (9 Nm).

LPZ Conveyors

NOTE
Be sure all frame sections are properly supported during LPZ assembly.

Upper Knuckle

1. Be sure that the upper edge wearstrip **(Figure 6, item 1)** and the return strip **(Figure 6, item 2)** are inserted into the proper frame channel on each side of conveyor.

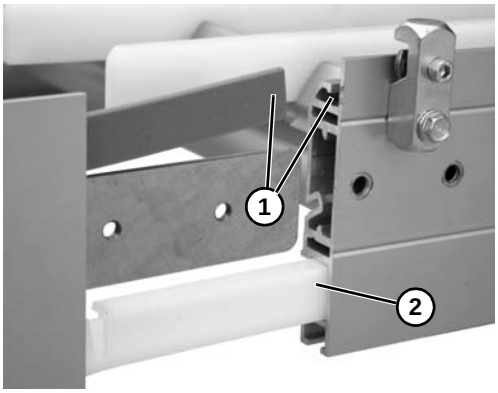


Figure 6

2. Attach upper knuckle **(Figure 7, item 1)** to frame **(Figure 7, item 2)** with socket head screws **(Figure 7, item 3)**. Repeat on other side.

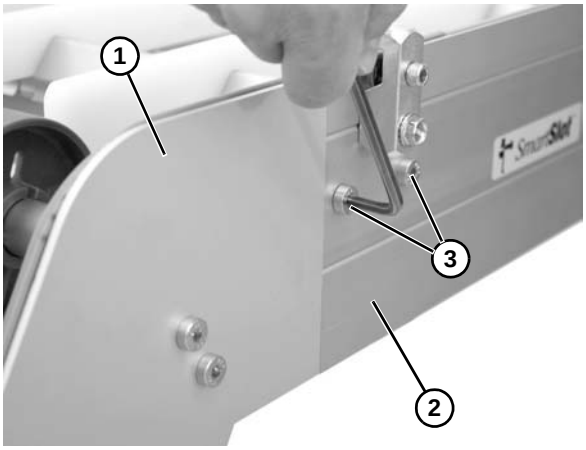


Figure 7

3. Tighten all screws to 60 in-lb (7 Nm).

Lower knuckle

1. Be sure that the return strip **(Figure 8, item 1)** is inserted into the proper frame channel on each side of conveyor.

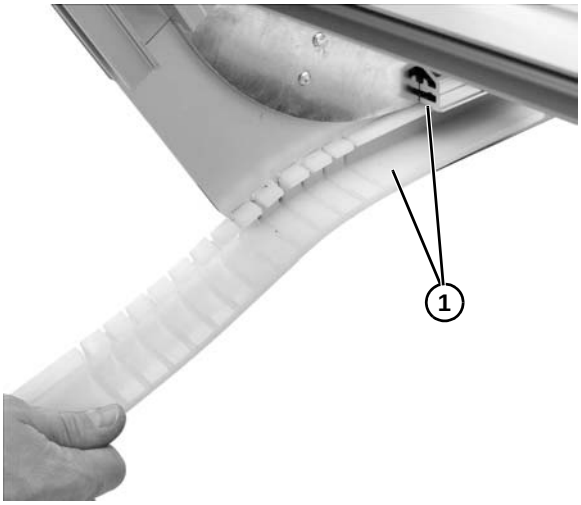


Figure 8

2. Attach lower knuckle **(Figure 9, item 1)** to frame **(Figure 9, item 2)** by using socket head screws **(Figure 9, item 3)**. Repeat on other side.

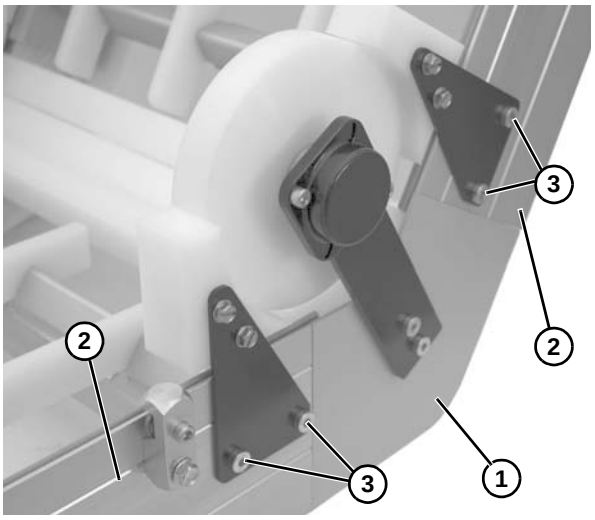


Figure 9

3. Tighten all screws to 60 in-lb (7 Nm).

Installation

All Conveyors

Curve Connecting Components

Typical Curve Connecting Components **(Figure 10)**

1	Clamp Plate
2	Conveyor frames
3	Low Head Cap Screw, M8 - 1.25 x 16 mm

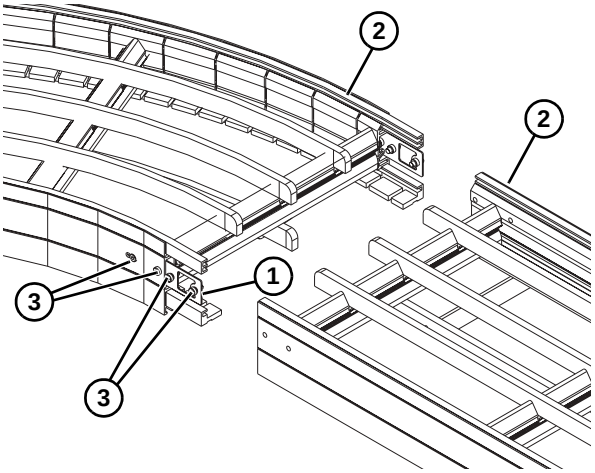


Figure 10

1. Locate and arrange conveyor sections by section labels **(Figure 11, item 1)**.

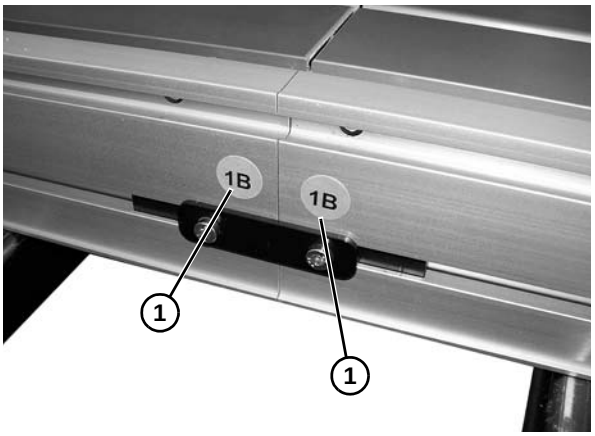


Figure 11

2. Install two clamp plates **(Figure 10, item 1)** into one conveyor section **(Figure 10, item 2)** by lining up two holes in clamp plate with two holes in conveyor frame. Install two M8x16 low head cap screws **(Figure 10, item 3)** to secure each clamp plate.
3. Join both conveyor sections, and secure with two M8x16 low head cap screws **(Figure 10, item 3)** on both sides. Tighten all cap screws to 84 in-lb (9 Nm).

Stand Installation

NOTE

For detailed assembly instructions, please see your appropriate support stand manual.

Typical stand components **(Figure 12)**

1	Conveyor Frame
2	Stand
3	M6 - 1.0 x 20 mm socket head cap screws (x4)

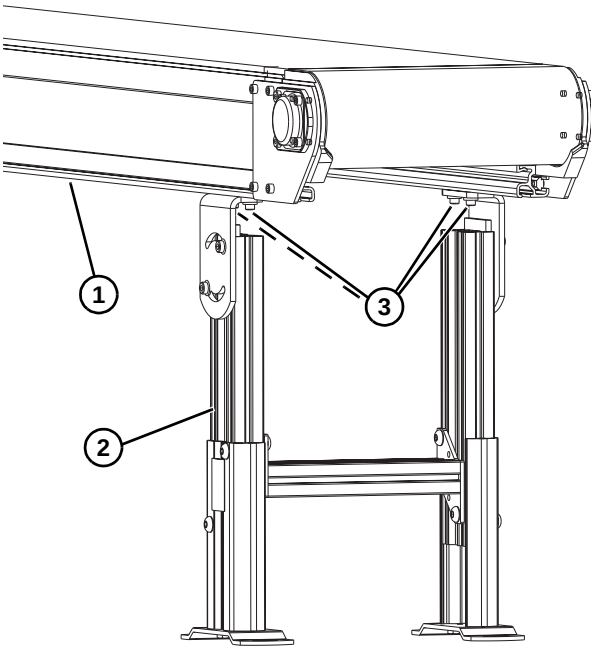


Figure 12

1. Properly support the conveyor.
2. Attach stands **(Figure 13, item 1)** to the bottom of the conveyor frame **(Figure 13, item 2)**. Tighten socket head screws **(Figure 13, item 3)**, on each side, to secure in place.

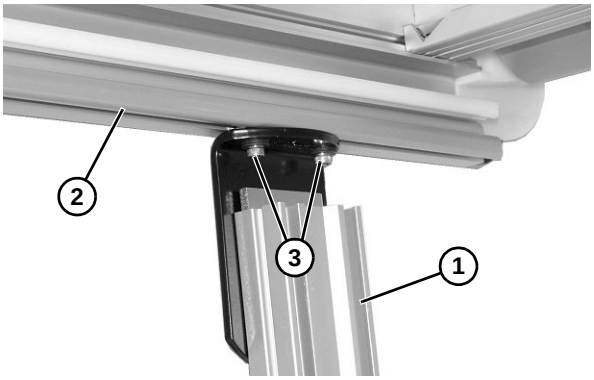


Figure 13

Belt Installation

Typical Belt Components **(Figure 14)**.

1	Chain Belt
2	Belt Rod

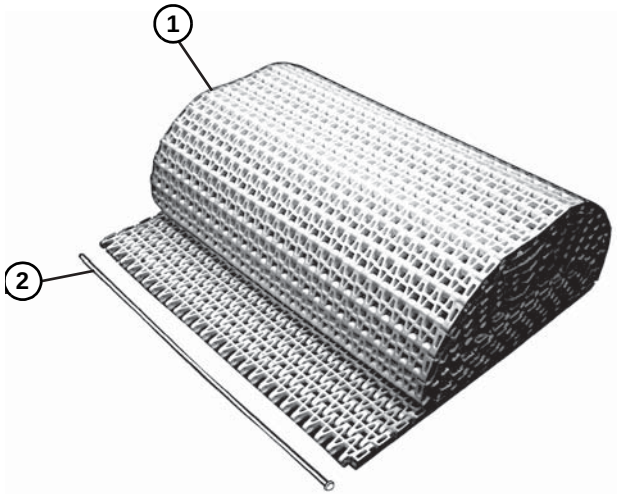


Figure 14

1. Position the belt on the conveyor frame.
2. Orient the belt direction such that the pin heads **(Figure 15, item 1)** are on the outside of the belt radius **(Figure 15, item 2)**. The straight portion on the pin **(Figure 15, item 3)** will be on the inside radius.

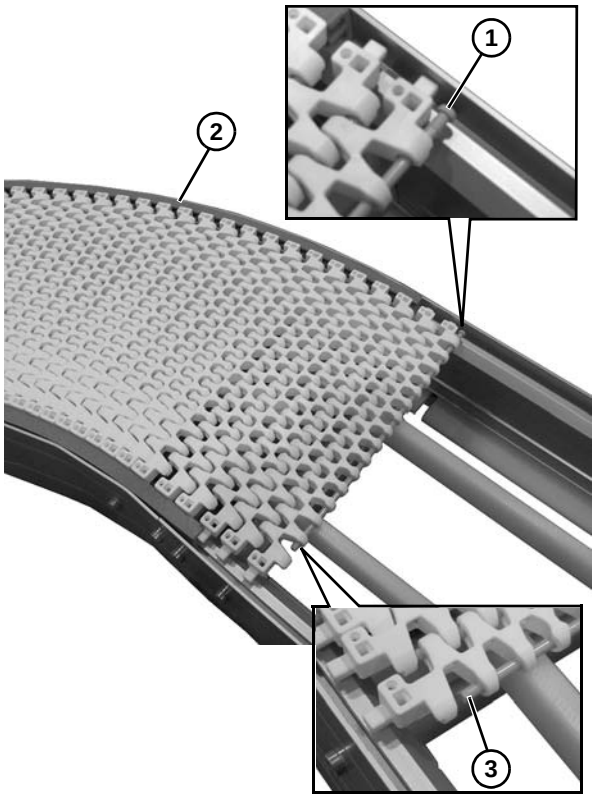


Figure 15

NOTE

For "S" shaped conveyors, the pin heads must be oriented on the outside of the belt radius on the exiting or last curve on the conveyor.

3. Wrap belt around idler tail **(Figure 16, item 1)**.

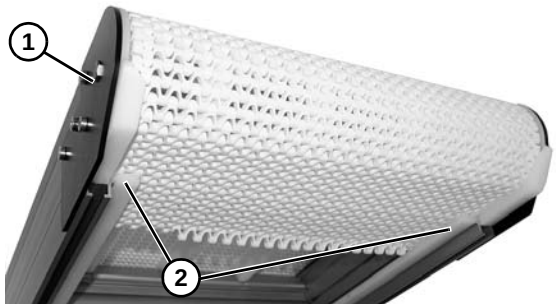


Figure 16

4. Install belt around lower frame section and above lower wear strips **(Figure 16, item 2)**.
5. On curve conveyors, install belt through wear strip **(Figure 17, item 1)** and install wear strip **(Figure 17, item 2)** on straight conveyor sections before installing and connecting belt.

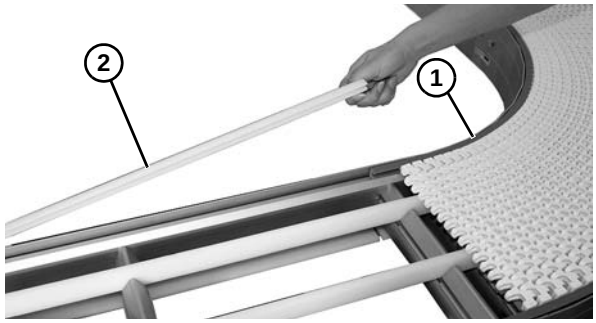


Figure 17

6. Wrap the belt around the drive end of the conveyor, making sure the sprocket teeth have engaged the belt, with concave teeth **(Figure 18, item 1)** mating with rounded section **(Figure 18, item 2)** of belt.

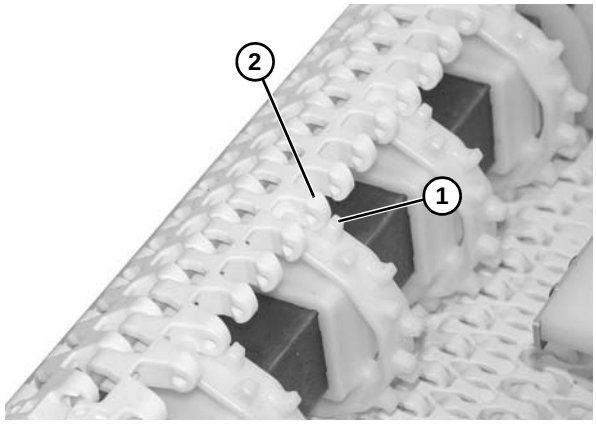


Figure 18

7. Bring the ends of the belt together **(Figure 19)**.

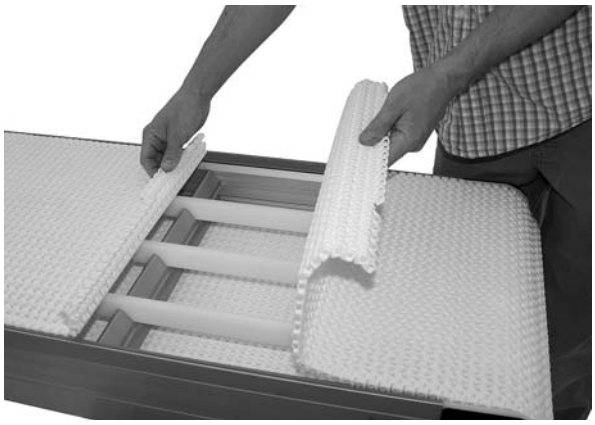


Figure 19

8. Insert the belt rod **(Figure 20, item 1)**.

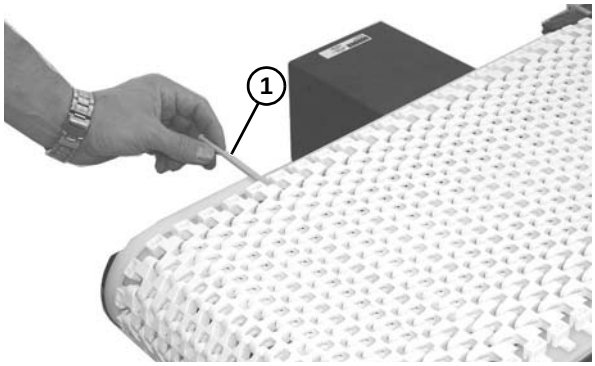


Figure 20

9. Push the belt rod in as far as possible.
10. Lightly tap the head of the rod with a hammer until it snaps into position.
11. Lift belt off of frame and insert each edge strip **(Figure 21, item 1)** into side tabs of belt. Set belt and edge strips back into frame.

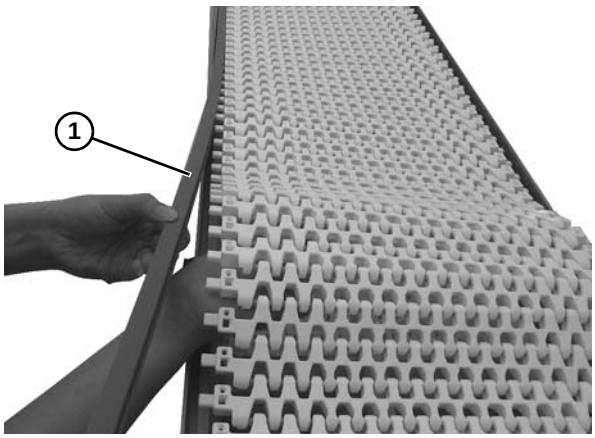


Figure 21

Proper Methods of Attachment to Side Rails

⚠ WARNING

PUNCTURE HAZARD!

Installing self-drilling screws into the dustpruf side rail requires substantial force.

Failure to properly support the conveyor while installing self-drilling screws may cause the operator or conveyor to slip, causing severe injury.

SUPPORT CONVEYOR FRAMES WHILE INSTALLING SELF-DRILLING SCREWS.

The 5300 DustPruf side rail is designed for self-drilling attachment of brackets and accessories. This can be done in two methods: self-drilling screws or pre-drill for standard screws.

Self-Drilling Screws

All Dorner accessories are provided with 1/4-20 self-drilling screws.

1. Locate guide **(Figure 22, item 1)** and retaining clip **(Figure 22, item 2)** and hold to side rail. Hole should line up with notch **(Figure 22, item 3)** in side rail.

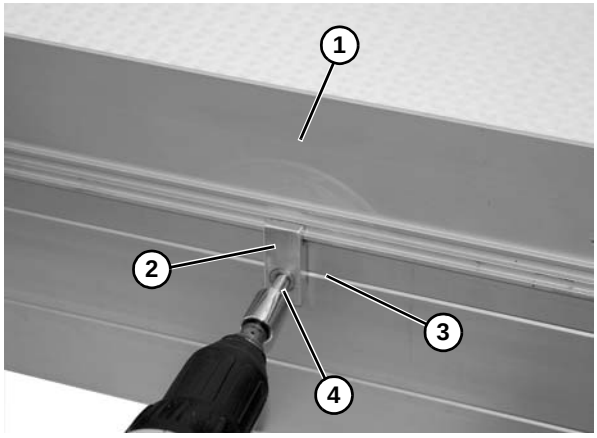


Figure 22

2. With a cordless drill or equivalent install self-drilling screw **(Figure 22, item 4)**. Use high speed setting to drill through side wall. Once the tap portion is started switch drill power to a lower speed. Do not fully tighten with drill.

3. Hand tighten the screws to secure **(Figure 23)**. Recommended torque is 150 in-lb (17 Nm).

Figure 23

Pre-Drill for Standard Screws

The DustPruf side rail will also accept standard screws. M6-1.0 and 1/4-20 are acceptable. Strength grade 8 is recommended.

1. Locate guide **(Figure 24, item 1)** and retaining clip **(Figure 24, item 2)** and hold to side rail. Hole should line up with notch **(Figure 24, item 3)** in side rail. Mark the hole locations with a center punch **(Figure 24, item 4)** and remove the bracket.

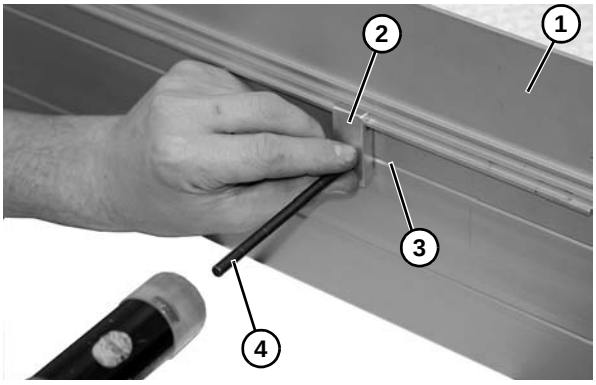


Figure 24

2. Drill the hole locations **(Figure 25, item 1)** with a 3/16" drill bit **(Figure 25, item 2)**.

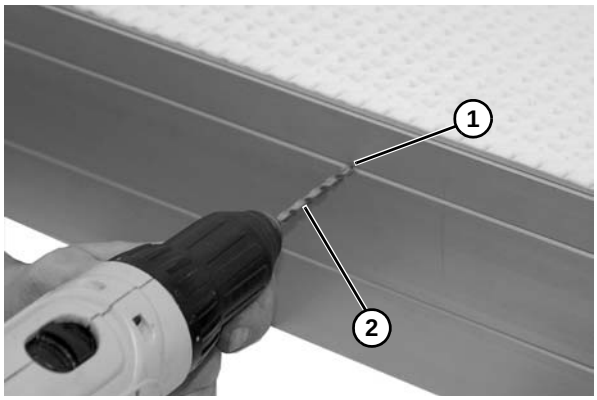


Figure 25

3. Position and hold bracket **(Figure 26, item 1)** to side rail. With a standard M6-1.0 or 1/4-20 screw, install screws **(Figure 26, item 2)** with cordless drill or equivalent. Do not fully tighten with drill.

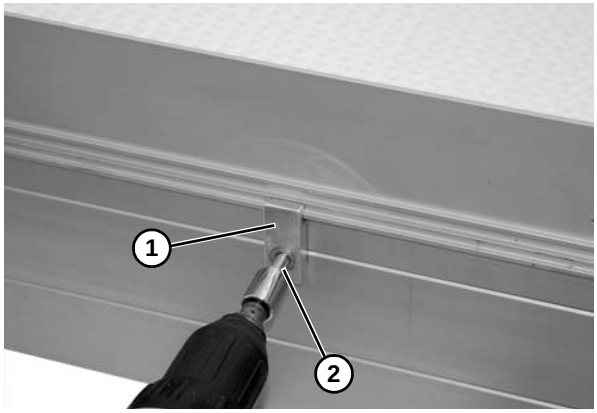


Figure 26

4. Hand tighten the screws to secure **(Figure 27)**. Recommended torque is 150 in-lb (17 Nm).

Figure 27

Installation

Guiding

⚠ WARNING

PUNCTURE HAZARD!

Installing self-drilling screws into the dustpruf side rail requires substantial force.

Failure to properly support the conveyor while installing self-drilling screws may cause the operator or conveyor to slip, causing severe injury.

SUPPORT CONVEYOR FRAMES WHILE INSTALLING SELF-DRILLING SCREWS.

Due to the DustPruf construction ALL guiding must be located and installed by the end user. Take care in locating retaining clips prior to final installation.

1. Lay out retaining clip **(Figure 28, item 1)** locations. The end clips should be no greater than 12" from end of the conveyor. Hole should line up with notch **(Figure 28, item 2)** in side rail.

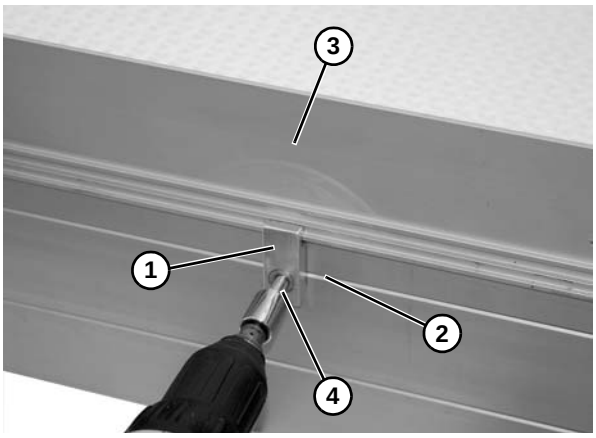


Figure 28

2. Hold guide **(Figure 28, item 3)** and retaining clip **(Figure 28, item 1)** to conveyor side rail. Install self-drilling screws **(Figure 28, item 4)** following the "Proper Methods of Attachment to Side Rails" on page 12 procedure.

Drive Package Installation

NOTE

For detailed assembly instructions, refer to the appropriate Drive Packages Installation, Maintenance and Parts Manual.

1. Attach the motor **(Figure 29, item 1)** to the gear reducer **(Figure 29, item 2)**. (End Drive shown below.)

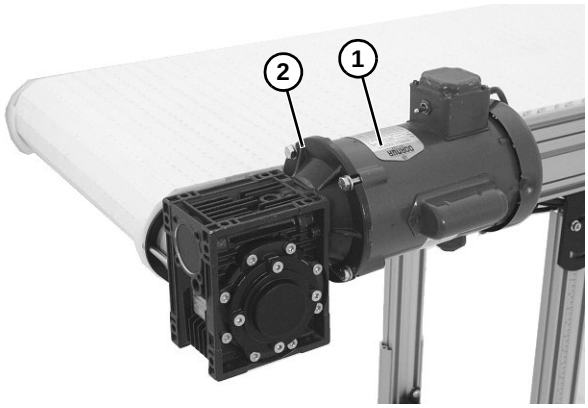


Figure 29

Required Tools

- 4 mm hex wrench
- 5 mm hex wrench
- 6 mm hex wrench
- 8 mm hex wrench
- Punch and hammer (to remove belt rod)

Checklist

- Keep service parts on hand. Refer to the "Service Parts" section starting on page 31 for recommendations.
- Replace any worn or damaged parts.

Lubrication

No lubrication is required. Replace bearings if worn.

Maintaining the Conveyor Belt

Troubleshooting

NOTE

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

Inspect conveyor belt for:

- Surface cuts or wear
- Skipping

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

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

Skipping indicates:

- Excessive load on belt
- Worn 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.

Replacing a Section of Belt

1. Lift belt off of frame and remove each edge strip **(Figure 30, item 1)** from side tabs of belt.

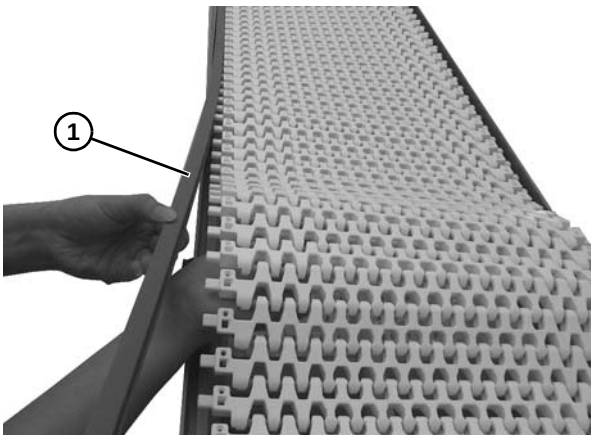


Figure 30

2. Use a punch and hammer to push the belt rod **(Figure 31, item 1)** out by striking the rod end opposite the retaining head.

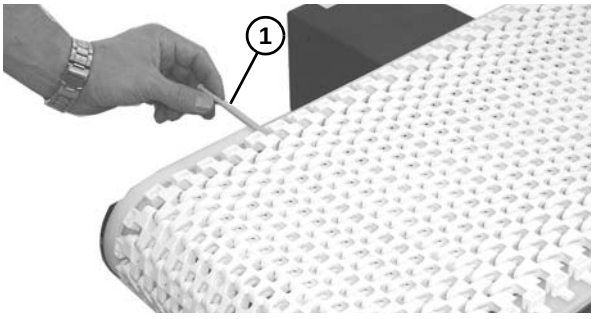


Figure 31

⚠ WARNING

SEVERE HAZARD!

If conveyor belt is damaged or worn, replace belt section.

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

⚠ CAUTION

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

Replacing the Entire Belt

1. Lift belt off of frame and remove each edge strip **(Figure 32, item 1)** from side tabs of belt.

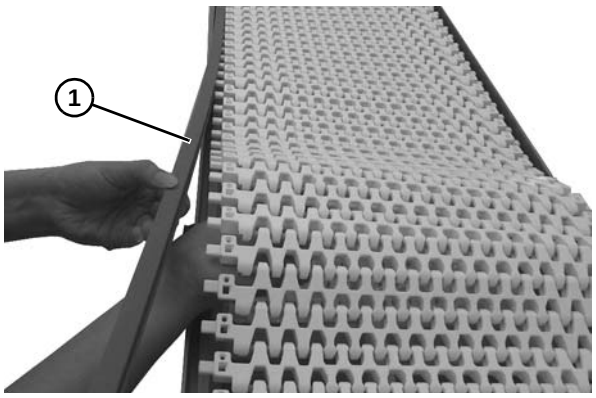


Figure 32

2. Use a punch and hammer to push the belt rod **(Figure 33, item 1)** out by striking the rod end opposite the retaining head.

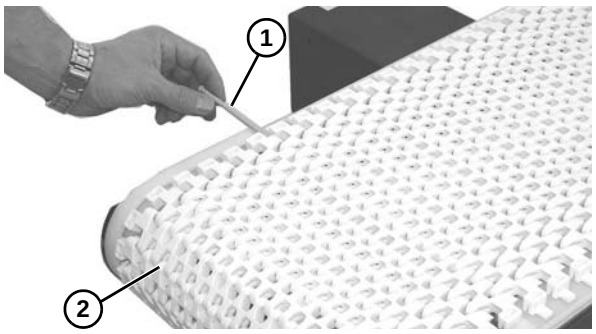


Figure 33

3. Slide the old belt **(Figure 33, item 2)** off the conveyor frame.
4. Replace the old belt with a new one. Refer to "Belt Installation" on page 11.

⚠ 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

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

1. Remove one or more belt links to take up tension. Refer to "Replacing a Section of Belt" on page 15.

Wear Strips

Replace the wear strips if they become worn.

Typical Standard Wear Strips **(Figure 34)**

1	Wear Strips, Side
2	Wear Strips, Upper - Belt Running Surface
3	Wear Strips, Lower - Belt Return Surface

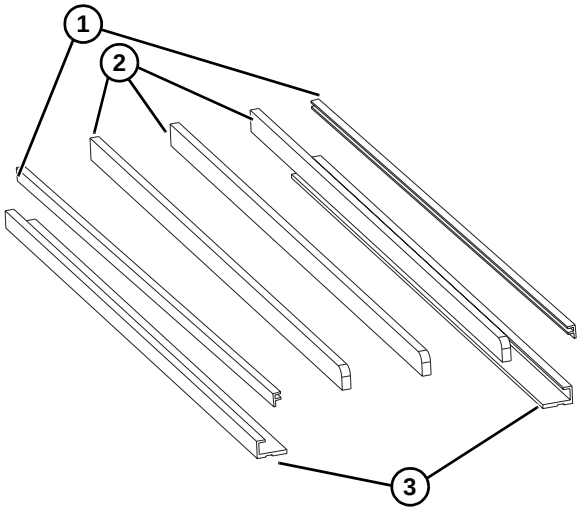


Figure 34

Removal of Upper Wear Strips

1. Remove belt. See “Conveyor Belt Replacement” on page 15.
2. Remove inner spacer **(Figure 35, item 1)** from top of frame assembly.

NOTE

*The upper wearstrips **(Figure 35, item 2)** have a screw **(Figure 35, item 3)** on end of wearstrip that is retained by the inner spacers **(Figure 35, item 1)**.*

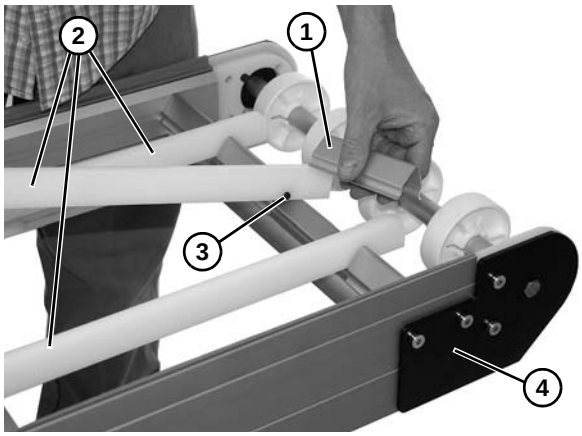


Figure 35

3. Remove upper wear strips **(Figure 35, item 2)**.

Removal of Lower and Side Wear Strips

1. Remove conveyor idler end **(Figure 36, item 1)**. See “C - Idler Spindle Removal” on page 23.

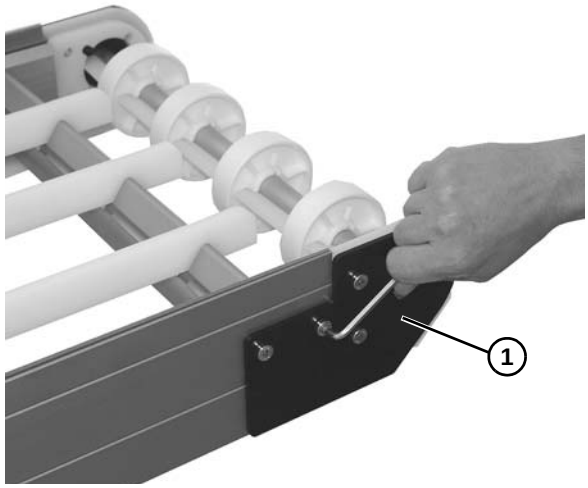


Figure 36

2. Slide lower wear strips **(Figure 37, item 1)**, and raise wear strips **(Figure 37, item 2)** from frame assembly.

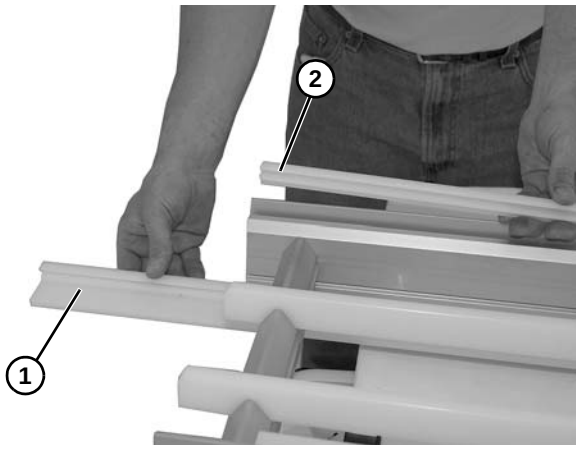


Figure 37

3. Slide lower curve wear strips **(Figure 38, item 1)**, and upper wear strips **(Figure 38, item 2)** from curve frame assembly.

NOTE

These wearstrips extend 3” beyond frame on each end.

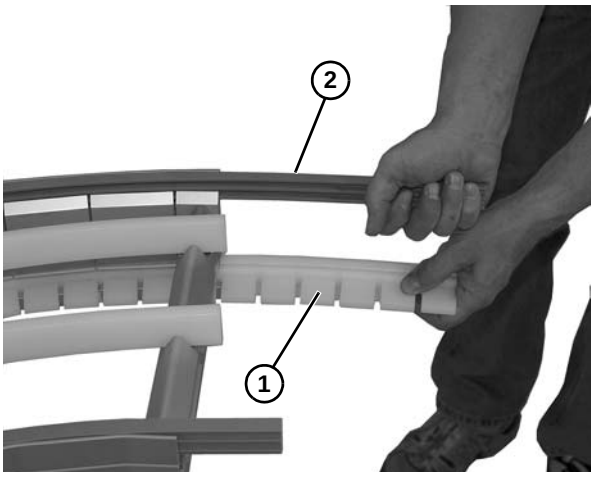


Figure 38

Removal of Belt Returns

Replace the wear strips if they become worn.

Typical Standard Wear Strips **(Figure 39)**

1	Return Support Bracket
2	Return Strip

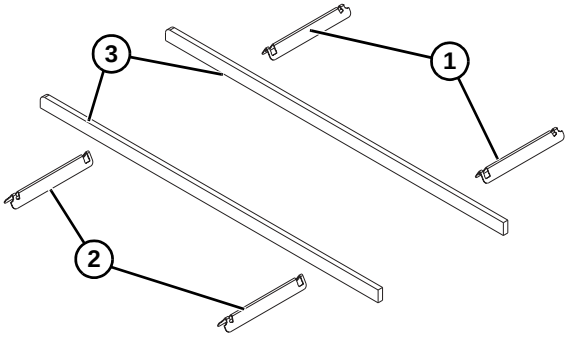


Figure 39

1. Remove return strips **(Figure 40, item 1)**, from brackets **(Figure 40, item 2)**.

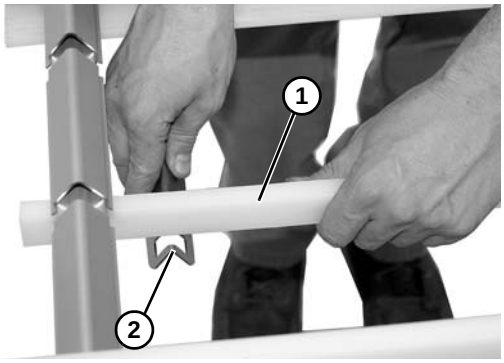


Figure 40

2. If necessary, rotate upward and remove bracket **(Figure 41, item 1)**, from frame channel **(Figure 41, item 2)**.

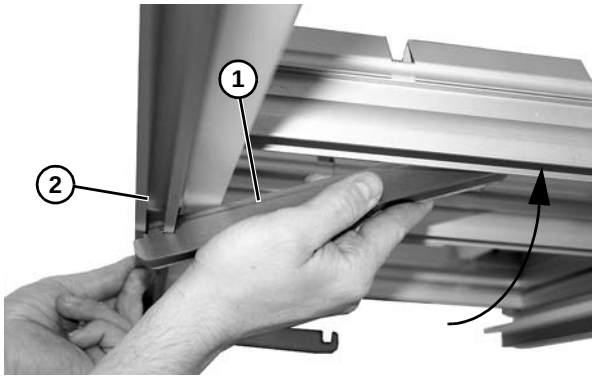


Figure 41

Installation

NOTE

*The rounded ends of top wear strips **(Figure 42, item 1)** faces the idler end **(Figure 42, item 2)** of the conveyor.*

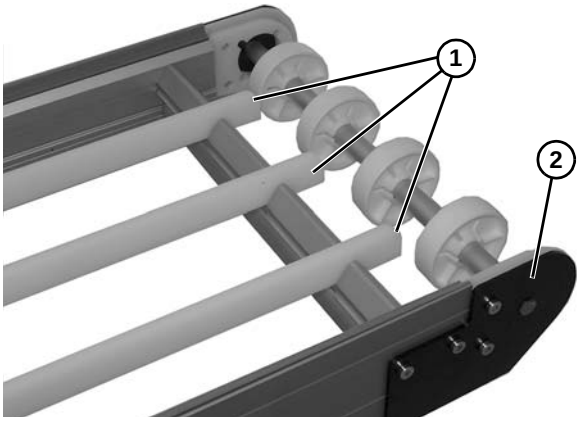


Figure 42

Install components reverse of removal.

Spindle Removal

⚠ WARNING

SEVERE HAZARD!

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

Remove conveyor belt to access spindle(s). See “Replacing the Entire Belt” on page 16. Remove the desired spindle following the corresponding instructions below:

- **A** – Drive Spindle Removal
- **B** – Nose Bar Drive Spindle Removal
- **C** – Idler Spindle Removal
- **D** – Nose Bar Idler Spindle Removal

A – Drive Spindle Removal

⚠ WARNING

Drive shaft keyway may be sharp. HANDLE WITH CARE.

1. Remove the gearmotor. For detailed instructions, refer to the appropriate drive package manual.
2. Remove the two socket head screws **(Figure 43, item 1)**. Repeat on opposite side.

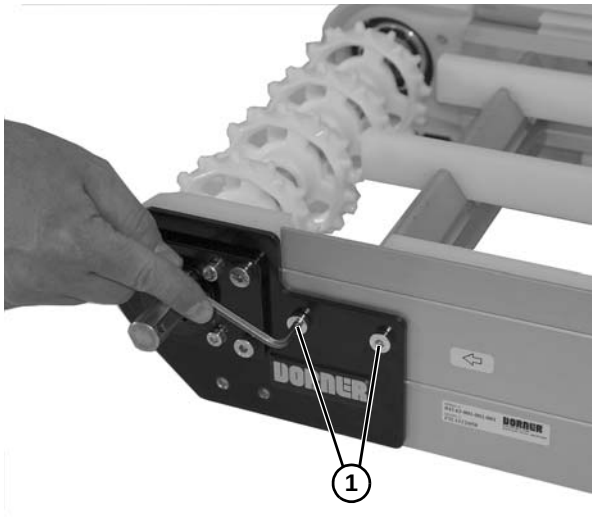


Figure 43

3. Remove the drive tail assembly **(Figure 44, item 1)** from the frame **(Figure 44, item 2)**.

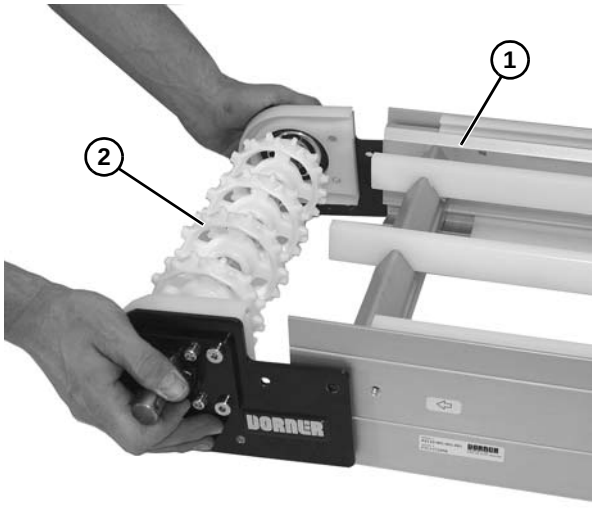


Figure 44

4. Remove the four socket head screws **(Figure 45, item 1)** and cover **(Figure 45, item 2)**.

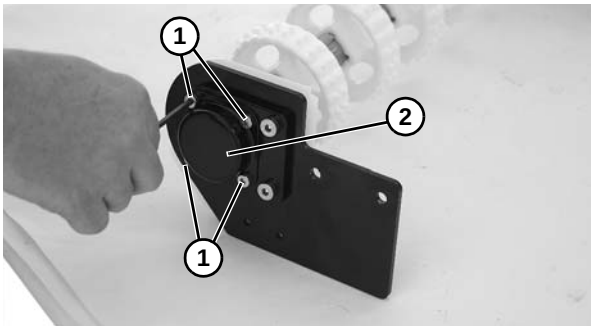


Figure 45

5. Loosen set screw **(Figure 46, item 1)** and remove clamp collar **(Figure 46, item 2)**.

Figure 46

6. Remove end plate **(Figure 47, item 1)** from shaft **(Figure 47, item 2)**.

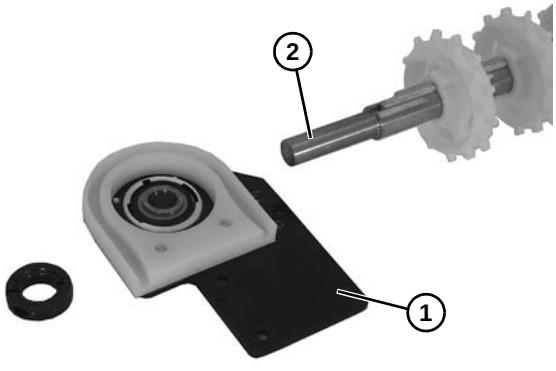


Figure 47

7. Slide entire sprocket assembly slightly outward, and remove the first sprocket **(Figure 48, item 1)** off the drive spindle **(Figure 48, item 2)** and alignment bar **(Figure 48, item 3)**.

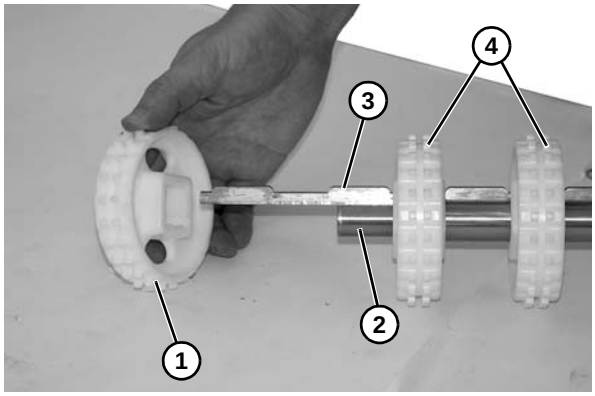


Figure 48

8. Remove remaining sprockets **(Figure 48, item 4)** off the alignment bar as you slide entire assembly off the drive spindle.
9. To assemble sprockets onto drive spindle, slide one sprocket onto alignment bar and slide assembly onto drive spindle.
10. Install second sprocket and subsequent sprockets **(Figure 48, item 4)** one by one, while sliding entire assembly onto alignment bar **(Figure 48, item 3)** and spindle **(Figure 48, item 2)**.
11. Check drive terminal assembly **(Figure 49, item 1)** for wear. If worn, remove two low head cap screws **(Figure 49, item 2)** and replace.

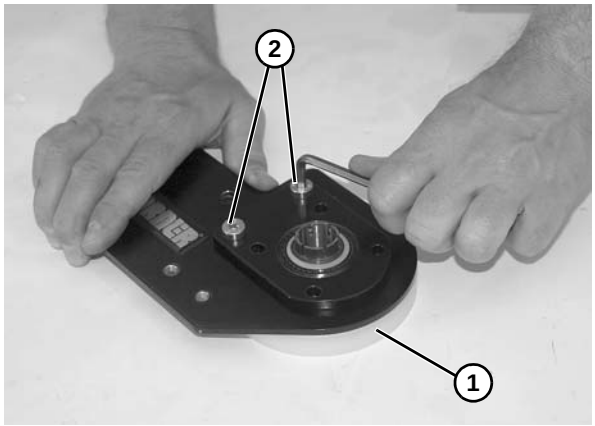


Figure 49

NOTE

*When reinstalling the drive spindle tail assembly, the drive tail assembly **(Figure 50, item 1)** should mate flush with the conveyor frame **(Figure 50, item 2)**.*

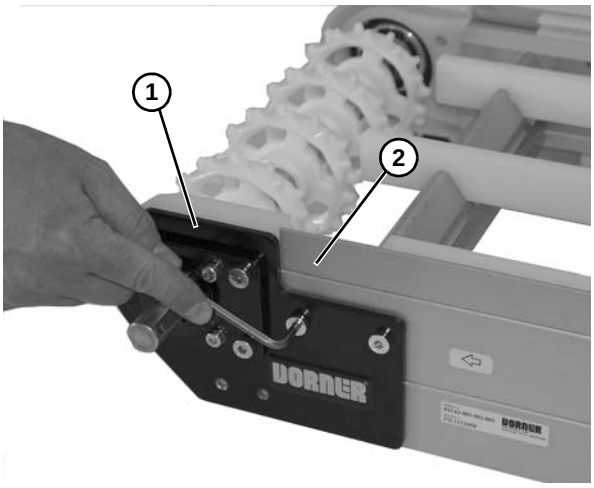


Figure 50

B – Nose Bar Drive Spindle Removal

⚠ WARNING

Drive shaft keyway may be sharp. HANDLE WITH CARE.

1. Remove the gearmotor. For detailed instructions, refer to the appropriate drive package manual.
2. Remove two socket head bolts **(Figure 51, item 1)** on each side of drive tail assembly **(Figure 51, item 2)**.

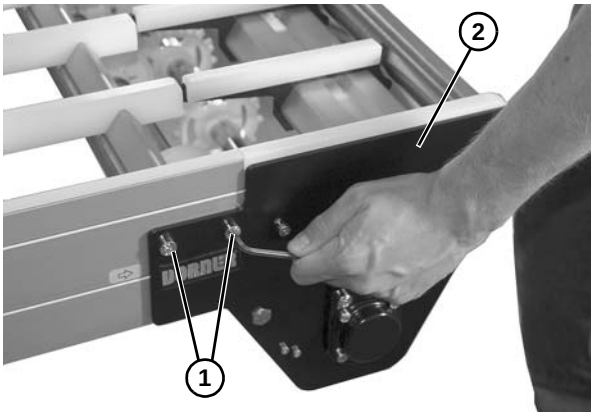


Figure 51

3. Remove the drive tail assembly **(Figure 52, item 1)** from the frame **(Figure 52, item 2)**.

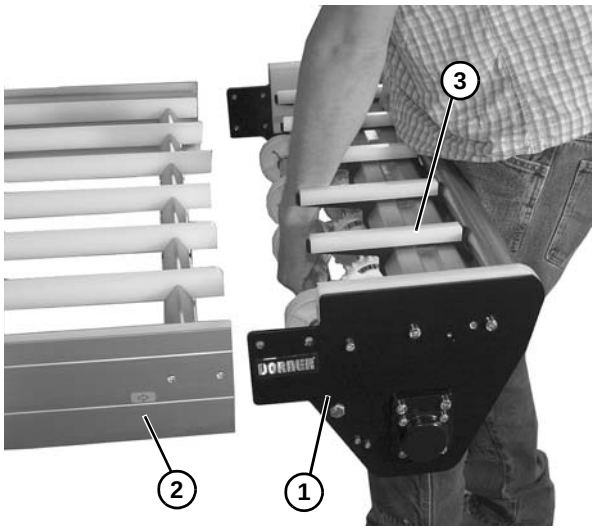


Figure 52

4. Remove wear strips, **(Figure 52, item 3)**, as necessary.
5. Remove two socket head screws **(Figure 53, item 1)** on both sides of the conveyor.

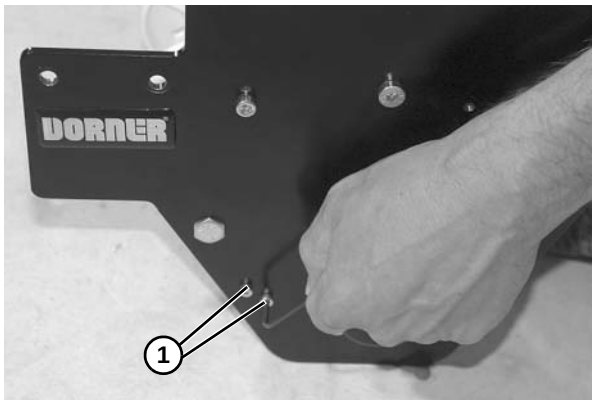


Figure 53

6. Remove pinch guard **(Figure 54, item 1)**.

NOTE
*Note orientation of guard **(Figure 54, item 1)** before removing from end plates.*

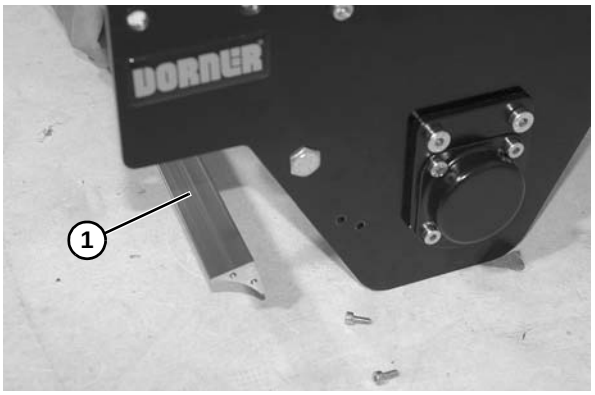


Figure 54

7. On the non-drive side, remove four socket head screws **(Figure 55, item 1)** and cover **(Figure 55, item 2)**.

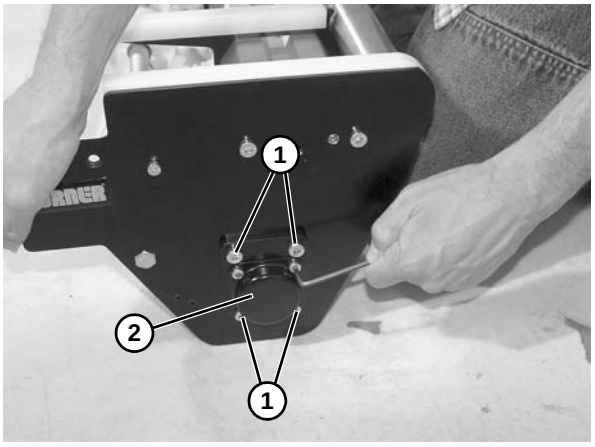


Figure 55

8. Loosen the bearing collar set screw **(Figure 56, item 1)** and remove bearing collar **(Figure 56, item 2)**.

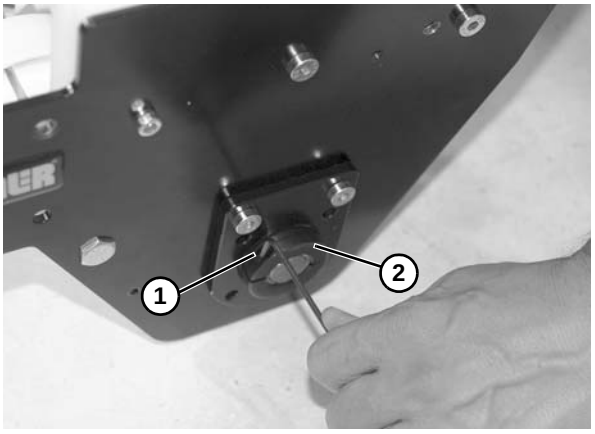


Figure 56

9. Remove two socket head screws **(Figure 57, item 1)** and remove plate **(Figure 57, item 2)**.

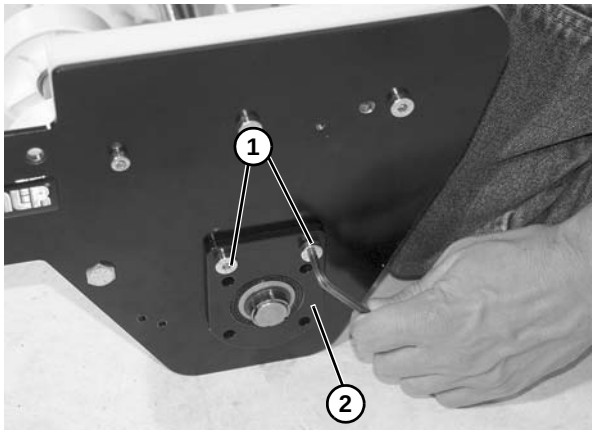


Figure 57

10. Remove two socket head screws **(Figure 58, item 1)** from end plate **(Figure 58, item 2).**

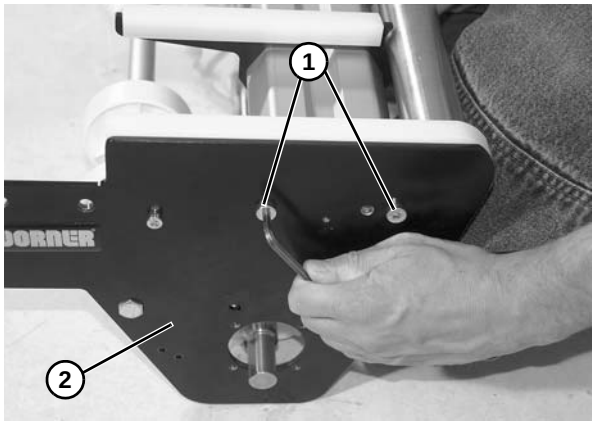


Figure 58

11. Remove end plate **(Figure 59, item 1),** and remove lower roller assembly **(Figure 59, item 2)** from end plate and opposite end plate.

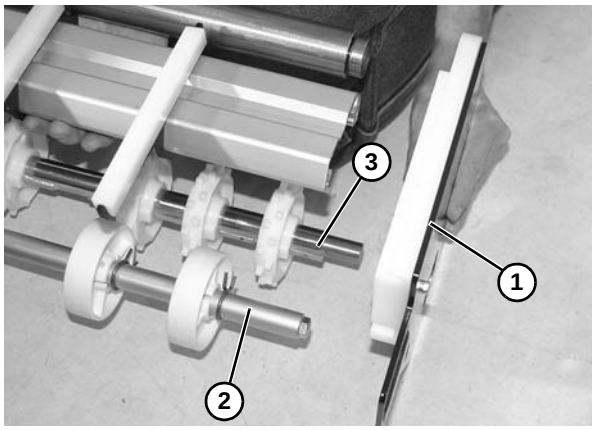


Figure 59

12. Remove drive spindle **(Figure 59, item 3)** from terminal assembly.

13. Remove shaft assembly **(Figure 60, item 1)** from end plate **(Figure 60, item 2)**.

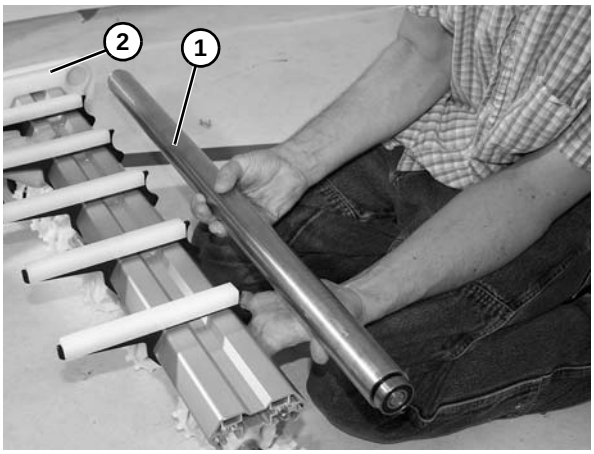


Figure 60

14. Remove each extrusion **(Figure 61, item 1)** and support plate **(Figure 61, item 2)** from crossmember **(Figure 61, item 3)**.

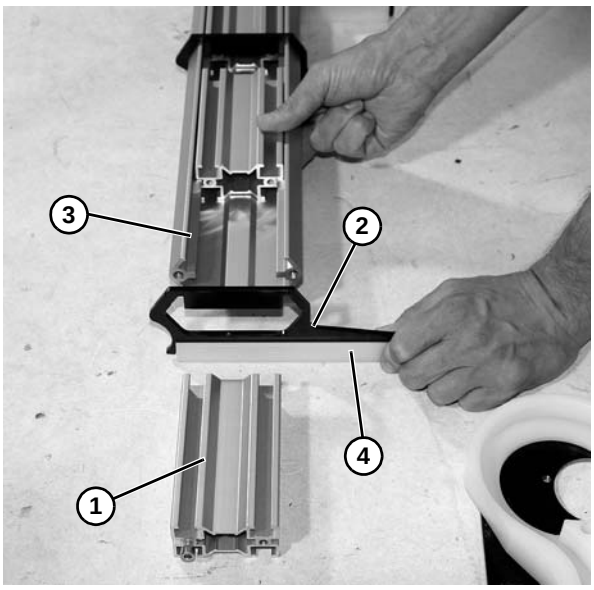


Figure 61

15. Inspect and replace wear strip **(Figure 61, item 4)** if necessary.

16. Check idler terminal assembly **(Figure 62, item 1)** for wear. If worn, remove two low head cap screws **(Figure 62, item 2)** and replace.

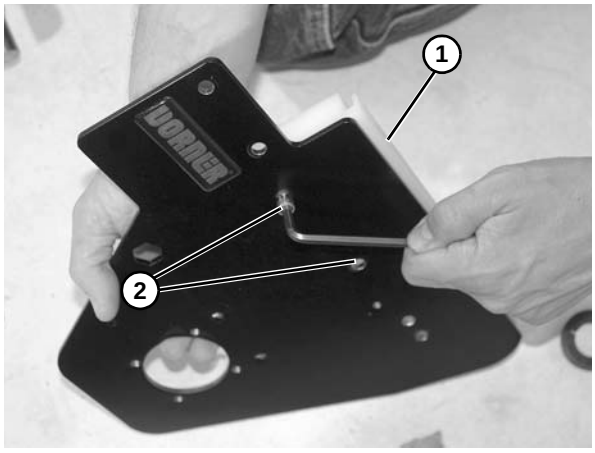


Figure 62

17. Remove rollers **(Figure 63, item 1)** and alignment bar **(Figure 63, item 2)** from shaft **(Figure 63, item 3)**. Inspect and replace if worn.

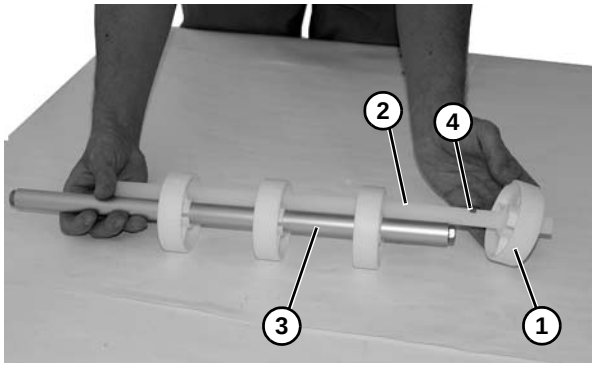


Figure 63

18. Reinstall rollers and alignment bar, with each roller lining up with cutout area **(Figure 63, item 4)** on alignment bar.
19. Slide entire sprocket assembly slightly outward, and remove the first sprocket **(Figure 64, item 1)** off the drive spindle **(Figure 64, item 2)** and alignment bar **(Figure 64, item 3)**.

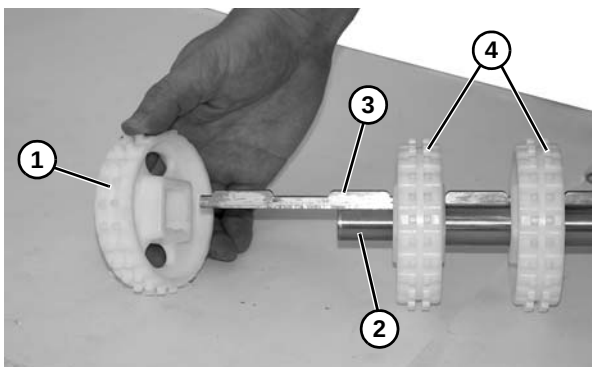


Figure 64

20. Remove remaining sprockets **(Figure 64, item 4)** off the alignment bar as you slide entire assembly off the drive spindle.
21. To assemble sprockets onto drive spindle, slide one sprocket onto alignment bar and slide assembly onto drive spindle.
22. Install second sprocket and subsequent sprockets **(Figure 64, item 4)** one by one, while sliding entire assembly onto alignment bar **(Figure 64, item 3)** and spindle **(Figure 64, item 2)**.

NOTE

*After installing components and belt, secure assembly by backing out socket head screw **(Figure 65, item 1)**. This prevents any rattling of components that may occur during use of conveyor.*

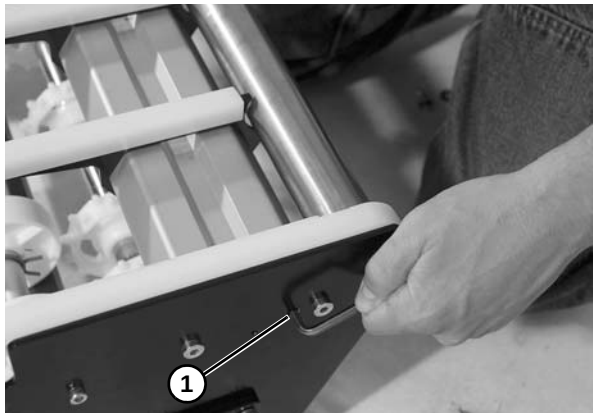


Figure 65

C – Idler Spindle Removal

1. Be sure the conveyor is supported.
2. On one side of conveyor, remove the two socket head screws **(Figure 66, item 1)**.

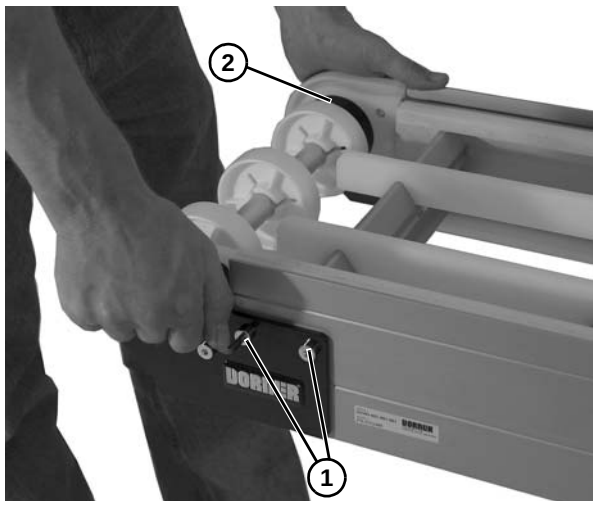


Figure 66

3. Remove idler assembly **(Figure 67, item 1)** from conveyor **(Figure 67, item 2).**

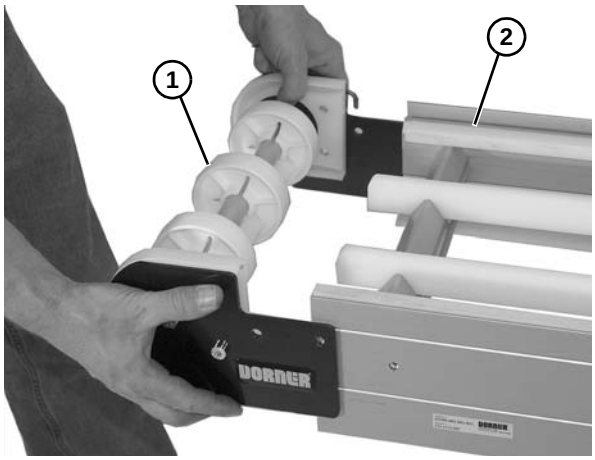


Figure 67

4. Remove end plate **(Figure 68, item 1)** from roller assembly **(Figure 68, item 2)**. Remove opposite end.

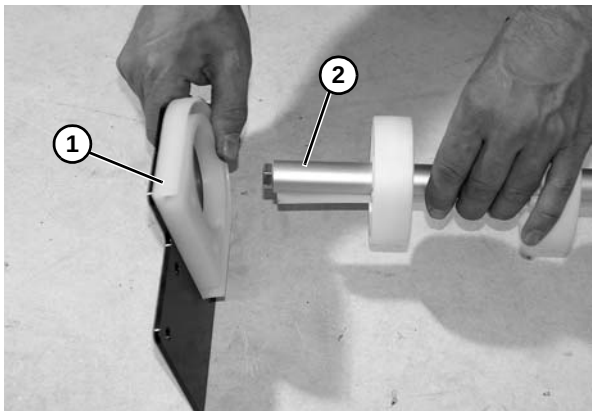


Figure 68

5. Remove rollers **(Figure 69, item 1)** and alignment bar **(Figure 69, item 2)** from shaft **(Figure 69, item 3)**. Inspect and replace if worn.

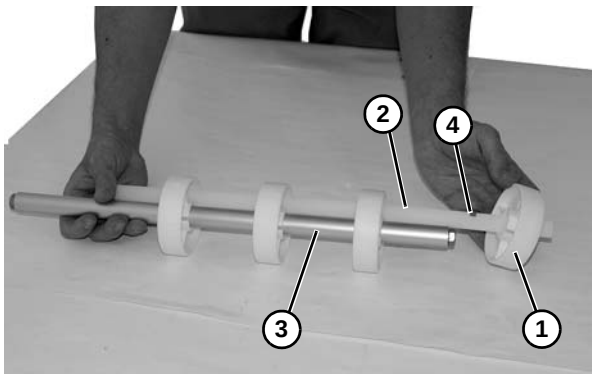


Figure 69

6. Reinstall rollers and alignment bar, with each roller lining up with cutout area **(Figure 69, item 4)** on alignment bar.

7. Check idler terminal assembly **(Figure 70, item 1)** for wear. If worn, remove two low head cap screws **(Figure 70, item 2)** and replace.

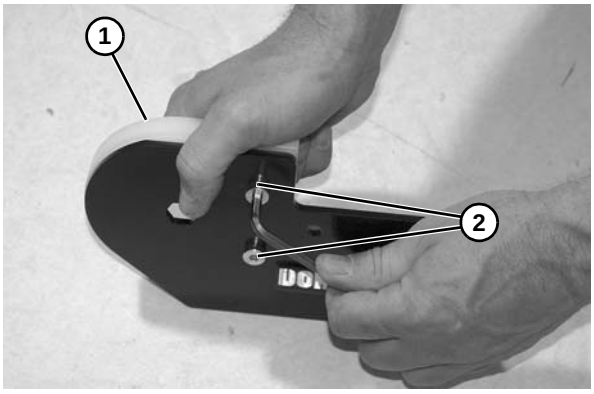


Figure 70

D – Nose Bar Idler Spindle Removal

1. Be sure the conveyor is supported.
2. On one side of conveyor, remove the two socket head screws **(Figure 71, item 1)**. Repeat on opposite side.

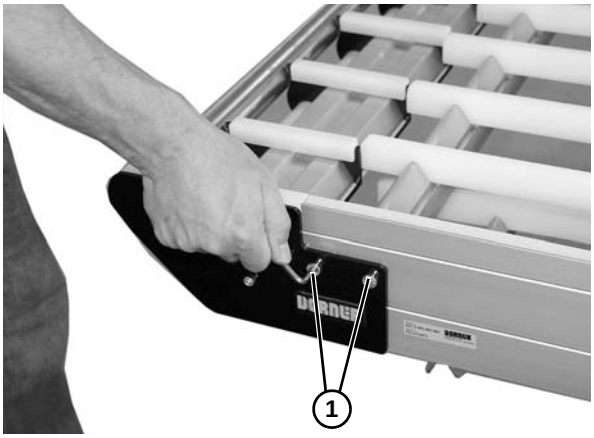


Figure 71

3. Remove idler tail assembly **(Figure 72, item 1)**.

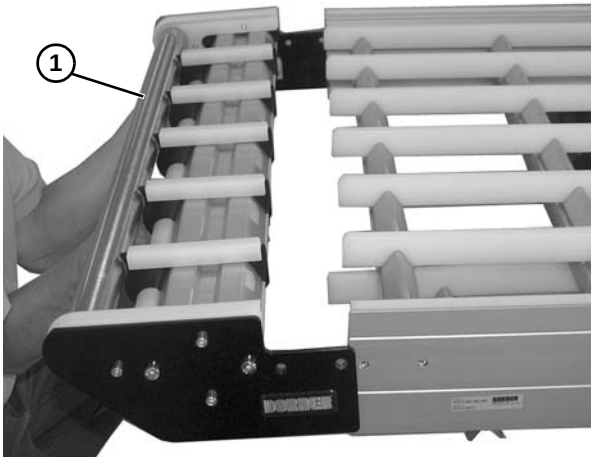


Figure 72

4. Remove two low head cap screws **(Figure 73, item 1)** from plate **(Figure 73, item 2)**. Repeat procedure on opposite side.

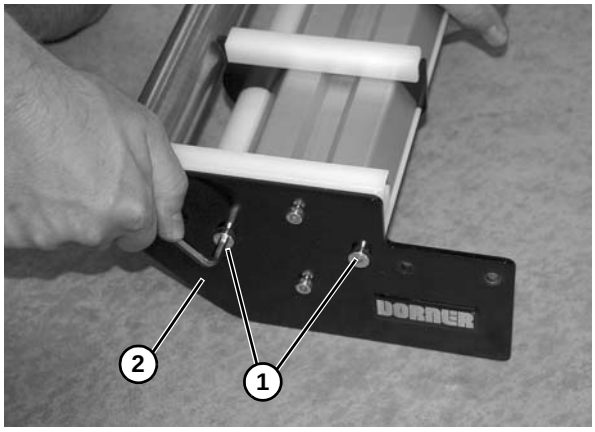


Figure 73

5. Remove plate **(Figure 74, item 1)** from shaft bearing **(Figure 74, item 2)** and crossmember **(Figure 74, item 3)**. Repeat procedure on opposite side.

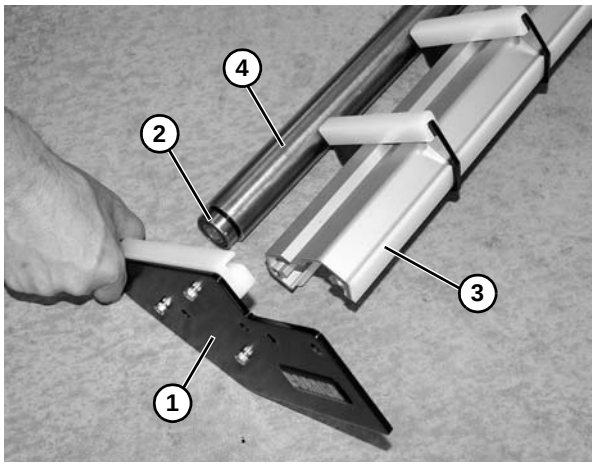


Figure 74

6. Remove shaft **(Figure 74, item 4)** from opposite end plate.

7. Remove each extrusion **(Figure 75, item 1)** and support plate **(Figure 75, item 2)** from crossmember **(Figure 75, item 3)**.

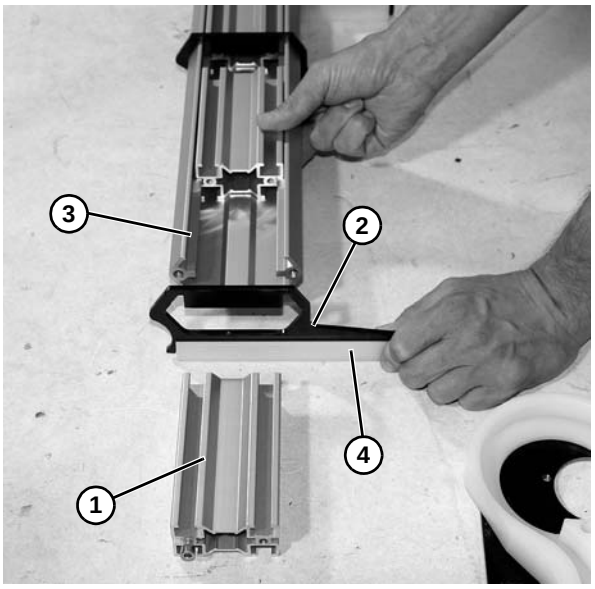


Figure 75

8. Inspect and replace wear strip **(Figure 75, item 4)** if necessary.
9. Check idler terminal assembly **(Figure 76, item 1)** for wear. If worn, remove three low head cap screws **(Figure 76, item 2)** and replace.

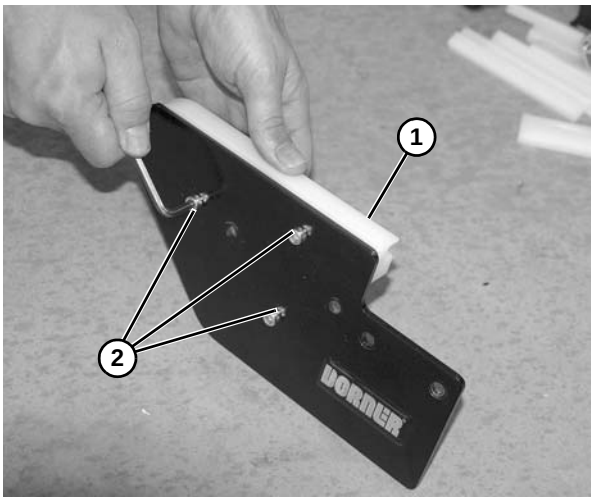


Figure 76

NOTE

*After installing components and belt, secure assembly by backing out socket head screw **(Figure 65, item 1)**. This prevents any rattling of components that may occur during use of conveyor.*

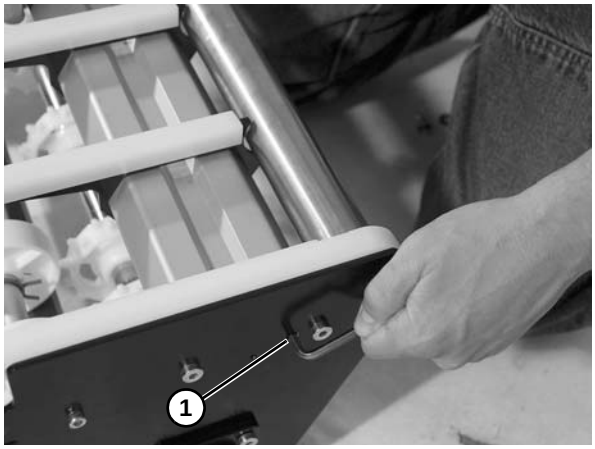


Figure 77

Spindle Replacement

Drive Spindle

To replace the drive spindle, reverse the procedure “A - Drive Spindle Removal” on page 19.

Nose Bar Drive Spindle

To replace the nose bar drive spindle, reverse the procedure “B - Nose Bar Drive Spindle Removal” on page 20.

Idler Spindle

To replace the idler spindle, reverse the procedure “C - Idler Spindle Removal” on page 23.

Nose Bar Idler Spindle

To replace the idler spindle, reverse the procedure “D - Nose Bar Idler Spindle Removal” on page 24.

Bearing Replacement

⚠ WARNING

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

Drive Bearing Removal and Replacement

⚠ WARNING

Drive shaft keyway may be sharp. HANDLE WITH CARE.

Removal

1. Turn bearing **(Figure 78, item 1)** to align with slots **(Figure 78, item 2)** in bearing housing. Then remove bearing.

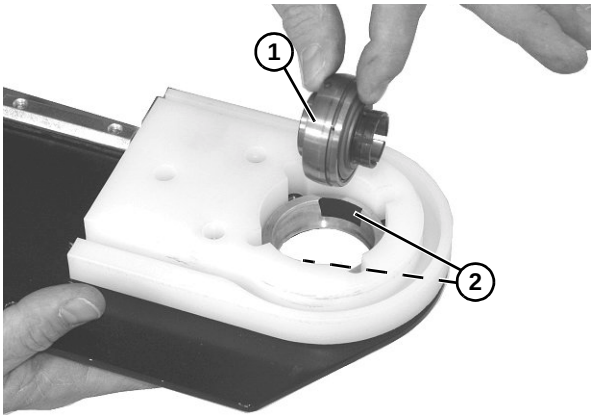


Figure 78

Replacement

1. Inspect bearing housing bearing surface. If worn or damaged, replace. See “Service Parts” on page 31.
2. Insert bearing **(Figure 79, item 1)** into housing slot: Locate anti–rotation nub **(Figure 79, item 2)** to align with slot **(Figure 79, item 3)**, and twist bearing into housing.

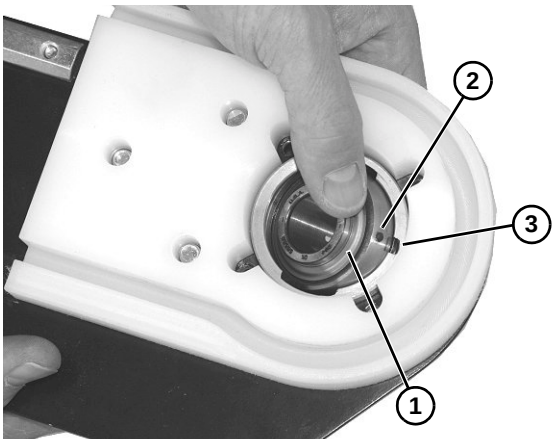


Figure 79

Maintenance of Knuckles

NOTE
Be sure all frame sections are properly supported.

Guides

1. Loosen socket head screw **(Figure 80, item 1)** on guide bracket **(Figure 80, item 2)** and remove guide **(Figure 80, item 3)**. Repeat on opposite side.

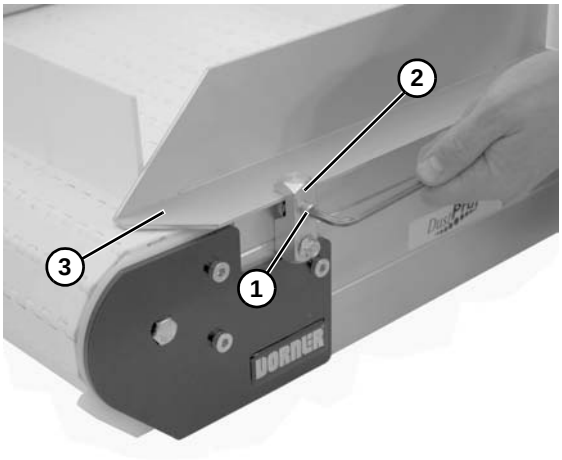


Figure 80

Lower Knuckle

1. Remove belt. See "Conveyor Belt Replacement" on page 15.
2. Remove two cap screws **(Figure 81, item 1)** on each side of the knuckle and remove the hold down roller guards **(Figure 81, item 2)**. Repeat on opposite side.

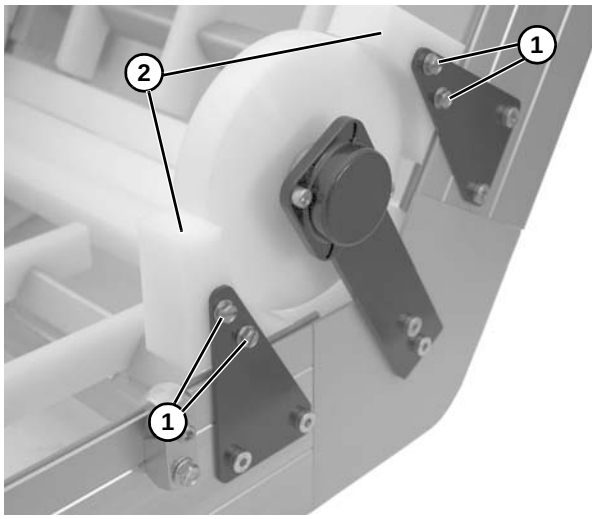


Figure 81

3. Remove two socket head screws **(Figure 82, item 1)** and remove shaft cover **(Figure 82, item 2)**. Repeat on opposite side.

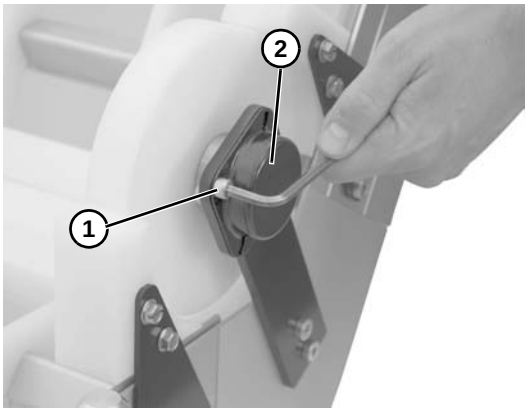


Figure 82

4. Remove the hex jam nut **(Figure 83, item 1)** and the hold down roller **(Figure 83, item 2)**. Repeat on opposite side.

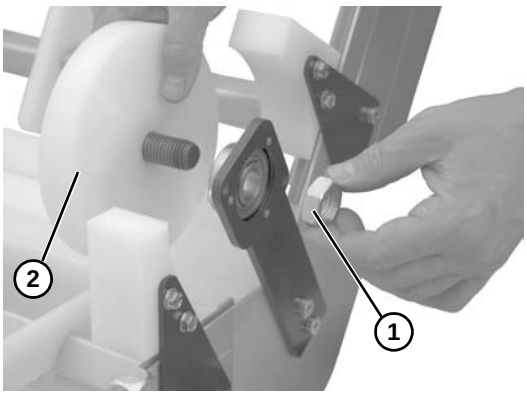


Figure 83

5. Remove three socket head screws and washers **(Figure 84, item 1)** that retain bearing **(Figure 84, item 2)** to support bar **(Figure 84, item 3)**. Repeat on opposite side.

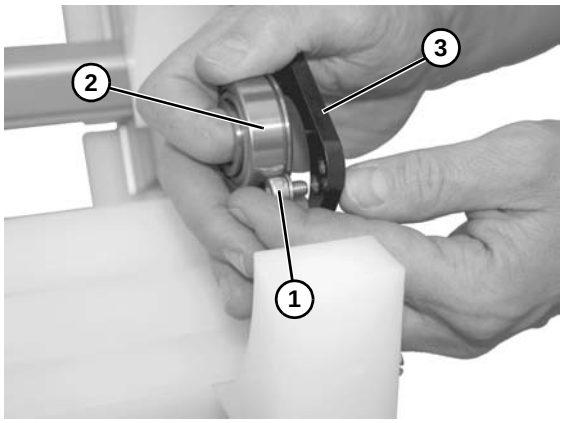


Figure 84

6. Remove knuckle belt supports **(Figure 85, item 1)**.

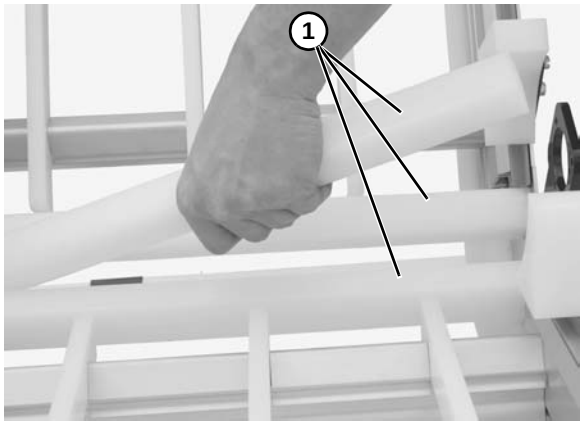


Figure 85

7. Remove belt return wearstrip **(Figure 86, item 1)**. Repeat on opposite side.

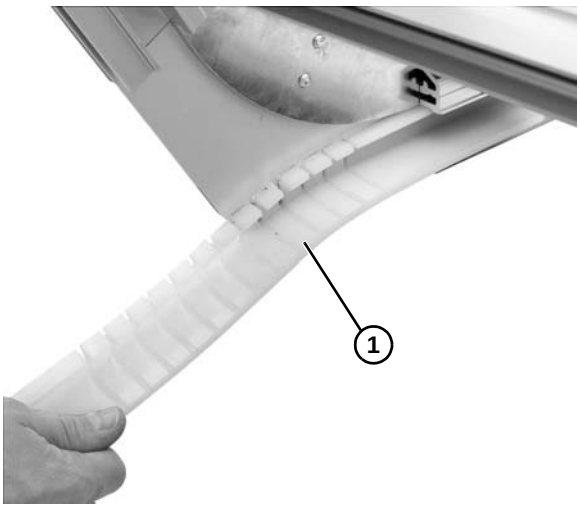


Figure 86

8. Replace parts as necessary.
9. Install parts reverse of removal.

Upper Knuckle

1. Remove belt. See “Conveyor Belt Replacement” on page 15.
2. Remove two socket head screws **(Figure 87, item 1)**. Repeat on other side.

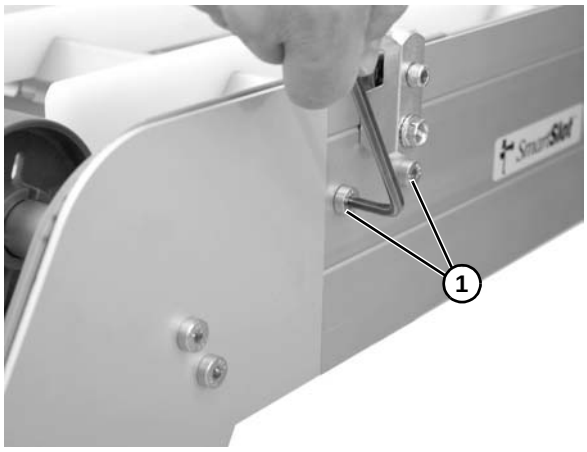


Figure 87

3. Separate conveyor frame **(Figure 88, item 1)** from knuckle assembly **(Figure 88, item 2)**.

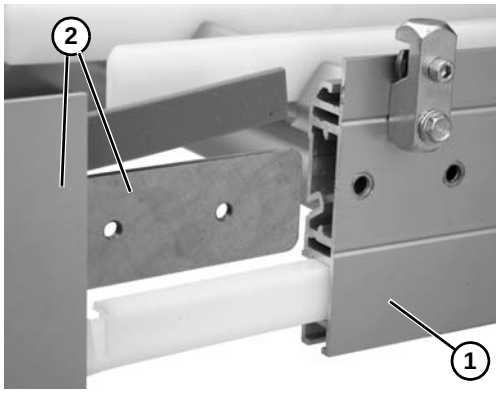


Figure 88

4. Remove upper edge wearstrip **(Figure 89, item 1)**. Repeat on other side.

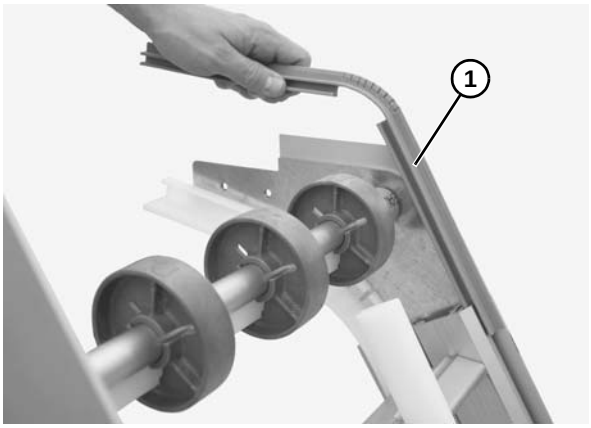


Figure 89

5. Remove belt return wearstrip **(Figure 90, item 1)**. Repeat on other side.

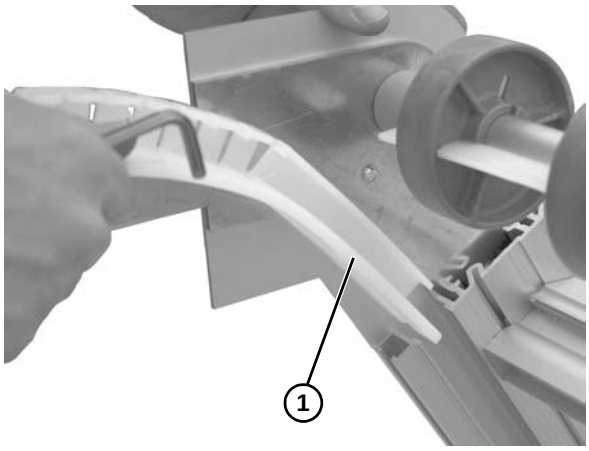


Figure 90

6. Slide knuckle joint plate from slot in conveyor frame **(Figure 91, item** 1) and remove shaft assembly **(Figure 91, item 1)**.

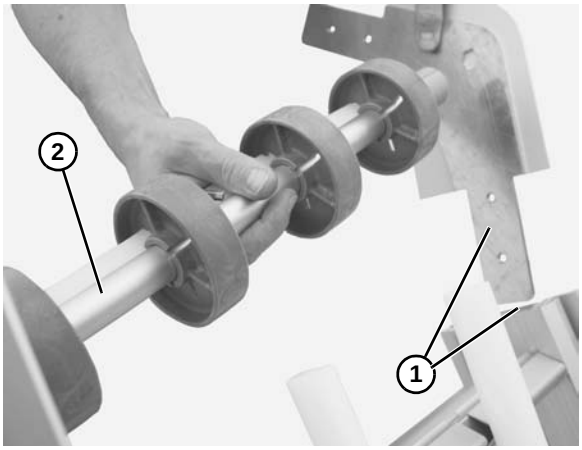


Figure 91

7. Remove tube spacer from shaft **(Figure 92, item** 1).

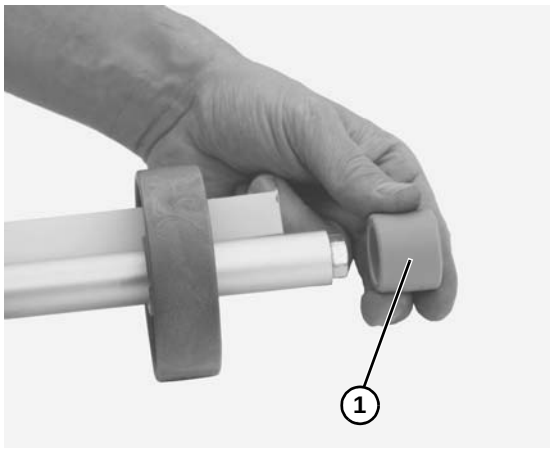


Figure 92

8. Remove rollers **(Figure 93, item 1)** and alignment bar from shaft **(Figure 93, item 2)**.

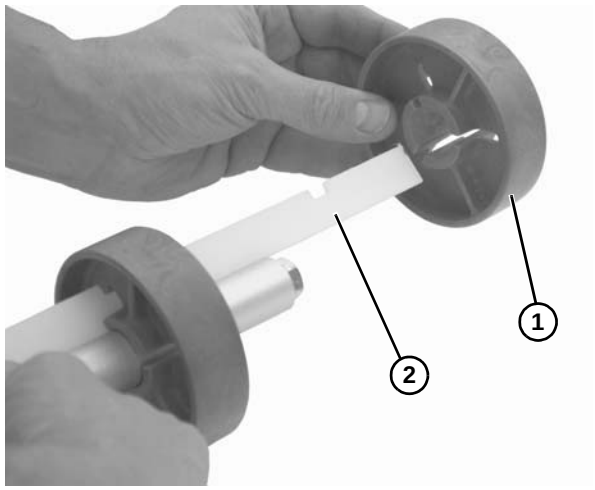


Figure 93

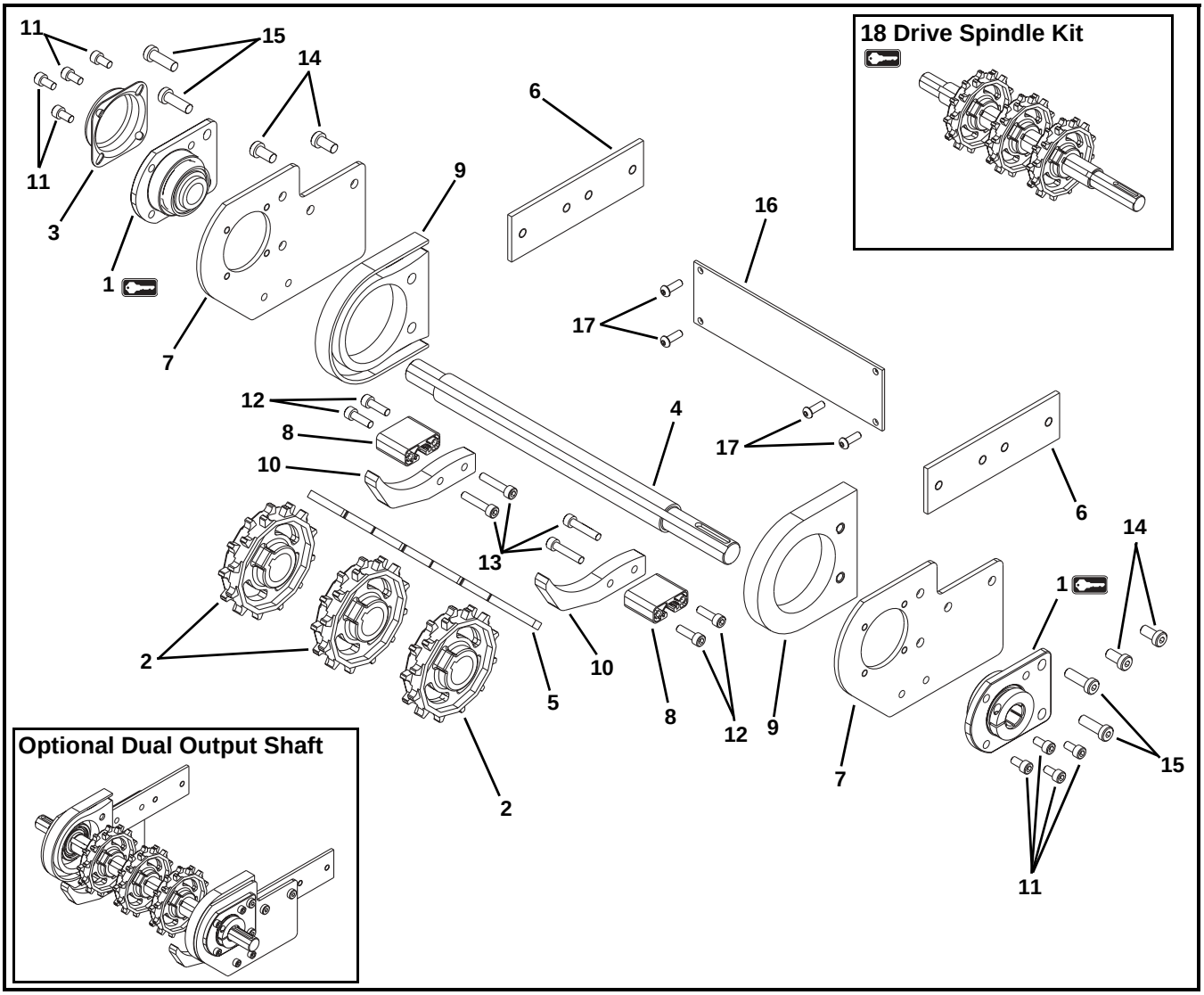
9. Replace parts as necessary.
10. Install parts reverse of removal.

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

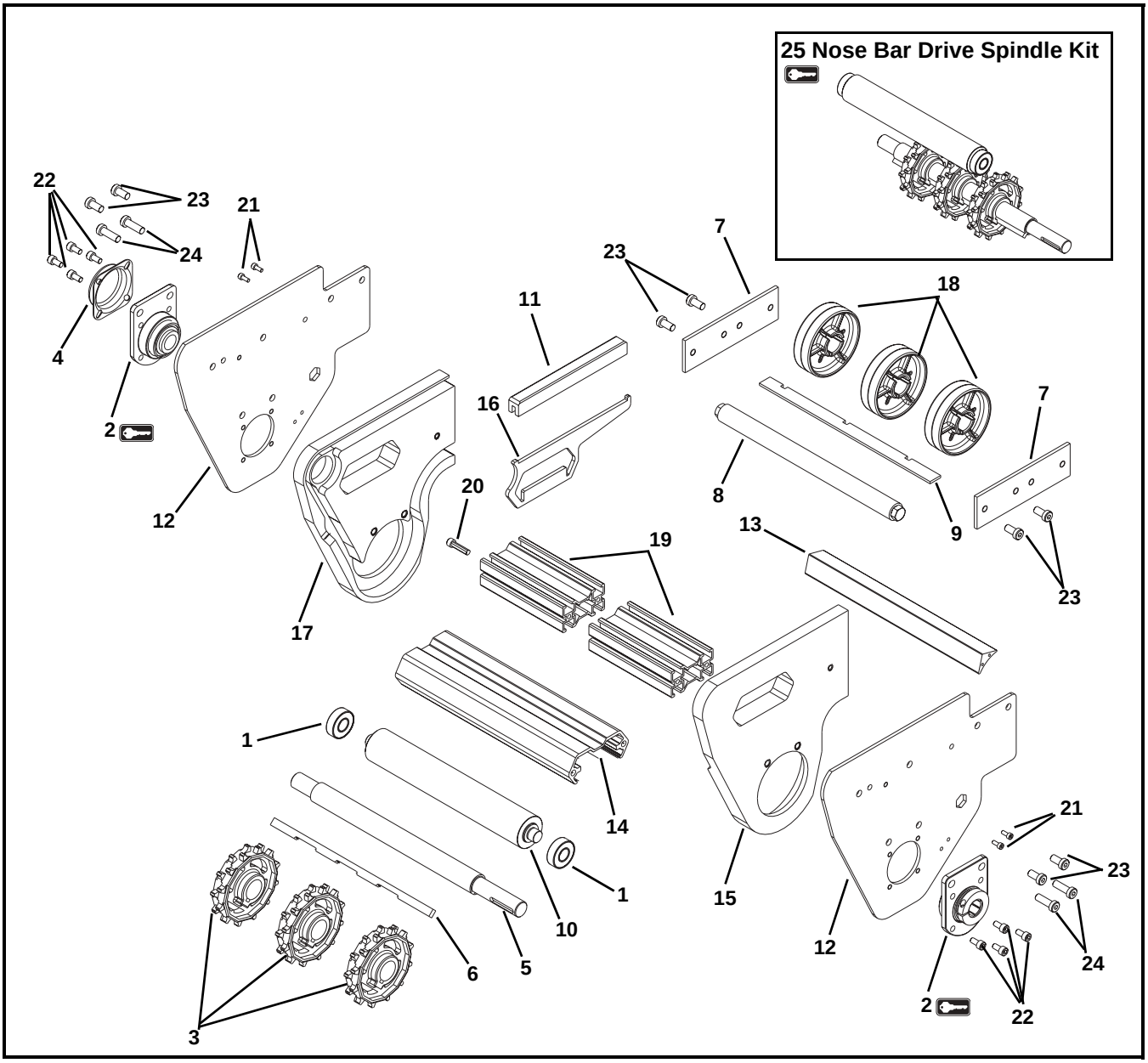


Item	Part Number	Description
1	52BKD	Bearing Kit (Qty. 2)
2	807-1754	Sprocket
3	300139	Shaft Cover
4	352179-WW	Drive Spindle
	352361-WW	Double Output Shaft Drive Spindle
5	352181-WW	Sprocket Alignment Key
6	352184	Clamp Plate
7	352192	Cover Plate
8	352301-00131	Limiter Spacer for 8" - 24" wide conveyors
	352301-00800	Limiter Spacer for 26" - 36" wide conveyors

Item	Part Number	Description
9	352351	Terminal Assembly
10	352352	Drive Shoe
11	920612M	Socket Head Screw, M6 x 12 mm
12	920620M	Socket Head Screw, M6 x 20 mm
13	920630M	Socket Head Screw, M6 x 30 mm
14	950816M	Low Head Cap Screw, M8 x 16 mm
15	950825M	Low Head Cap Screw, M8 x 25 mm
16	352497-WW	Stiffener Plate
17	901-133	Button Head Cap Screw,1/4-20 x 0.75"
18	53CDT-WW	Drive Spindle Kit (Includes items 2, 4 and 5)
WW = Conveyor width reference: 08 – 36 in 02 increments		

Service Parts

Nose Bar Drive End Components



Item	Part Number	Description
1	802-124	Bearing
2	52BKD	Bearing Kit (Qty. 2)
3	807-1754	Sprocket
4	300139	Shaft Cover
5	352179-WW	Drive Spindle
6	352181-WW	Sprocket Key
7	352184	Clamp Plate
8	352190-WW	Shaft Assembly
9	352196-WW	Alignment Bar
10	352252-WW	Spindle
11	352282	Wear Strip
12	352283	Tail Plate
13	352286-WW	Pinch Guard
14	352291-WW	Crossmember
15	352292	Terminal Assembly Right Hand

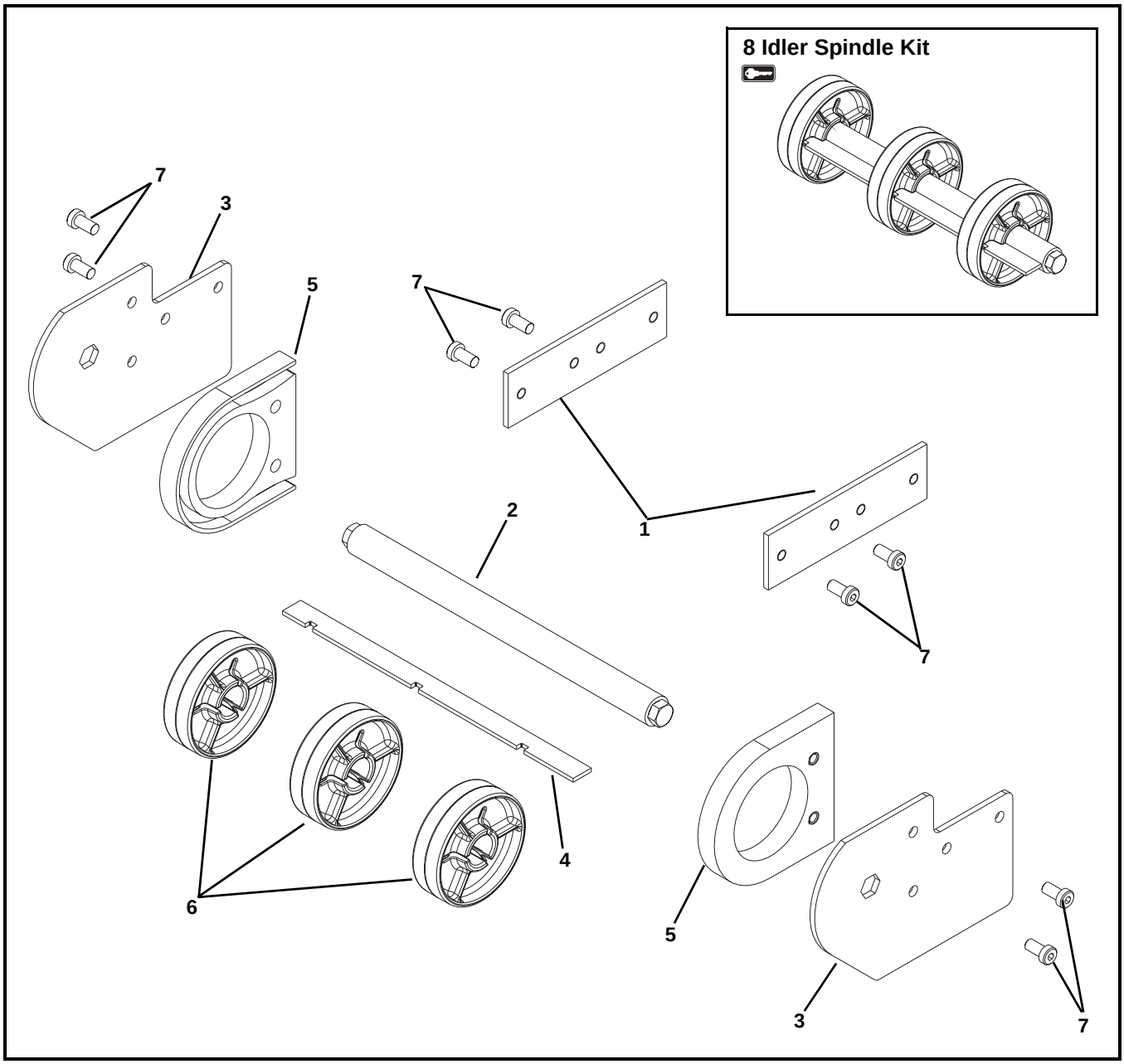
Item	Part Number	Description
16	352296	Support Plate
17	352299	Terminal Assembly Left Hand
18	506296	Idler Puck
19	710211-LLLLL	Extrusion
20	708180P	Socket Head Screw M6-1.00 x 25 mm
21	920410M	Socket Head Screw M4-.70 x 10 mm
22	920612M	Socket Head Screw M6-1.00 x 12 mm
23	950816M	Low Head Cap Screw, M8-1.25 x 16 mm
24	950825M	Low Head Cap Screw, M8-1.25 x 25 mm
25	53CNBDT-WW	Nose Bar Drive Spindle Kit (Includes items 1, 3, 5, 6 and 10)

WW = Conveyor width reference: 08 – 36 in 02 increments

LLLLL = Length in inches with 2 decimal places.

Length Example: Length = 95.25" LLLLL = 09525

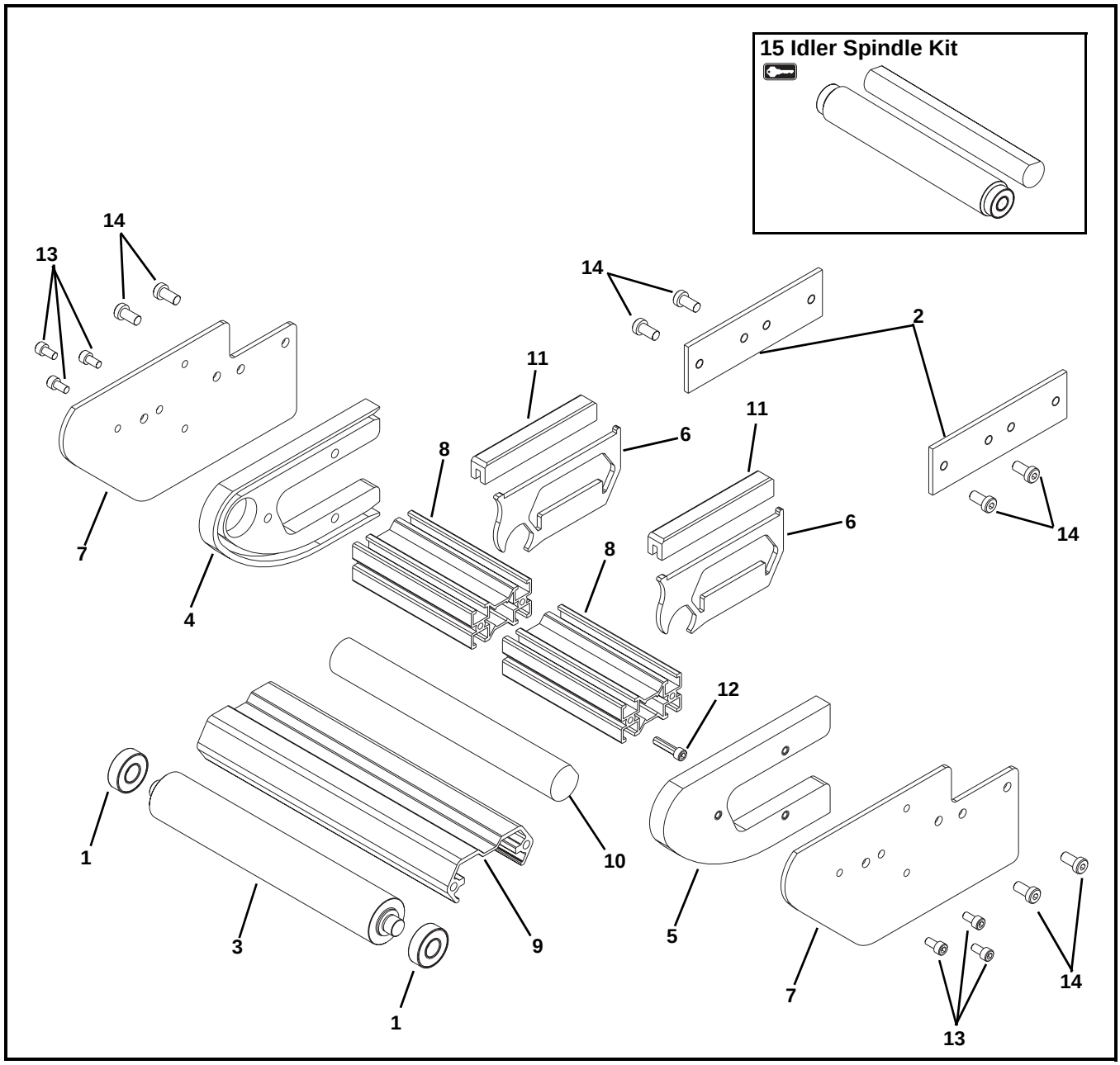
Idler End Components



Item	Part Number	Description
1	352184	Clamp Plate
2	352190-WW	Shaft Assembly
3	352193	Cover Plate
4	352196-WW	Alignment Bar
5	352351	Terminal Assembly
6	506296	Idler Puck
7	950816M	Low Head Cap Screw, M8-1.25 x 16 mm
8	53CET-WW	Idler Spindle Kit (Includes items 2, 4, and 6)
WW = Conveyor width reference: 08 – 36 in 02 increments		

Service Parts

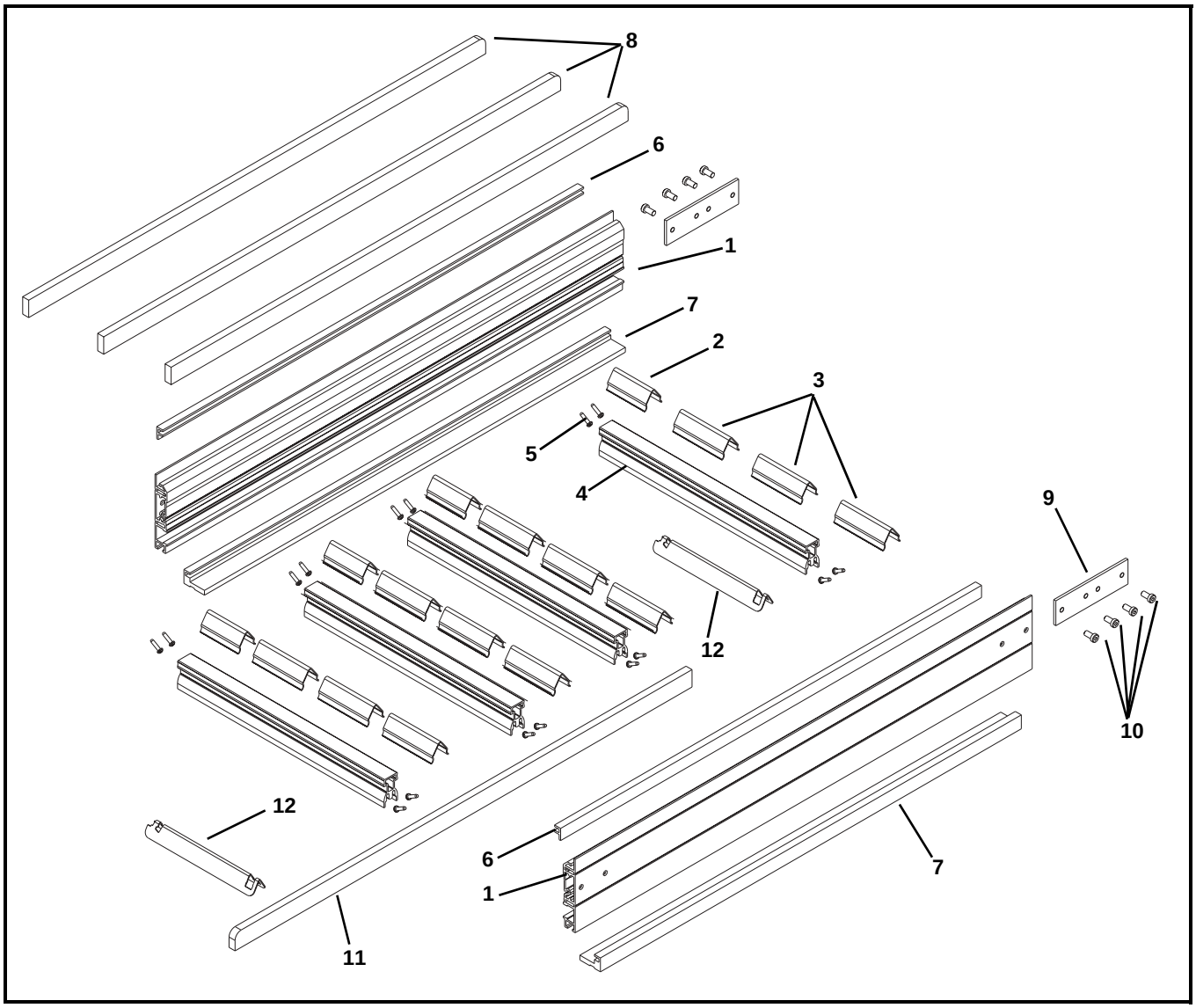
Nose Bar Idler End Components



Item	Part Number	Description
1	802-124	Bearing
2	352184	Clamp Plate
3	352252-WW	Spindle
4	352259	Terminal Assembly Left Hand
5	352260	Terminal Assembly Right Hand
6	352287	Support Plate
7	352288	Tail Plate
8	352290-WW	Extrusion
9	352291-WW	Crossmember
10	352353-WW	Belt Support Rod
11	532289	Wear Strip

Item	Part Number	Description
12	708180P	Socket Head Screw, M6-1.00 x 25 mm
13	920612M	Socket Head Screw, M6-1.00 x 12 mm
14	950816M	Low Head Cap Screw, M8-1.25 x 16 mm
15	53CNBT-WW	Nose Bar Idler Spindle Kit (Includes items 1, 3, and 10)
WW = Conveyor width reference: 08 – 36 in 02 increments		

Frame Assembly

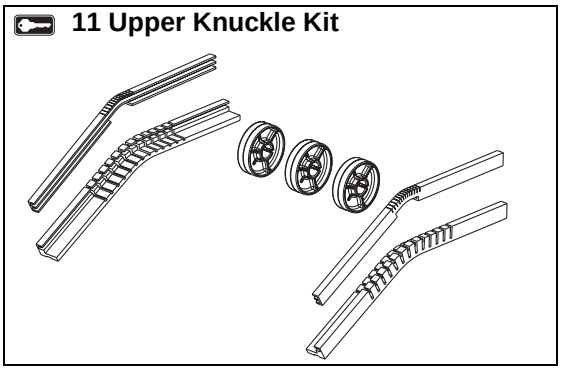


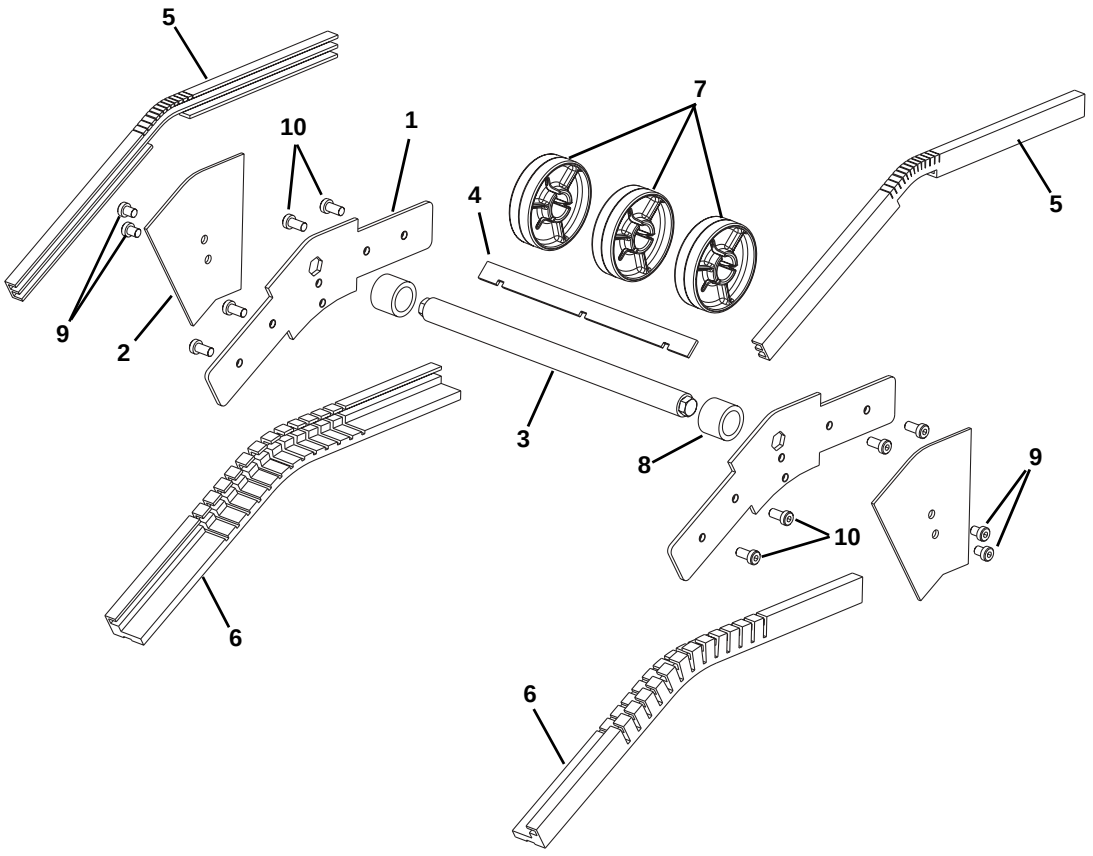
Item	Part Number	Description
1	352171-LLLLL	Side Rail
2	352172-WW	First Spacer
3	352172-01	Spacer for 10”, 14, 24”, and 28” Wide Conveyors Only
	352172-00	Spacer for All Other Width Conveyors
4	352170-WWC	Center Rail
5	352108	Pan Screw, M5-.80 x 20 mm
6	352163-LLLLL	Edge Strip
7	352177-LLLLL	Edge Return Wear Strip
8	352167-LLLLL	Wear Strip

Item	Part Number	Description
9	352184	Clamp Plate
10	950816M	Low Head Cap Screw, M8-1.25 x 16 mm
11	532162-LLLLL	Return Strip
12	352168	Return Support Bracket
WW = Conveyor width reference: 08 – 36 in 02 increments		
LLLLL = Length in inches with 2 decimal places.		
Length Example: Length = 95.25" LLLLL = 09525		

Service Parts

Upper Knuckle

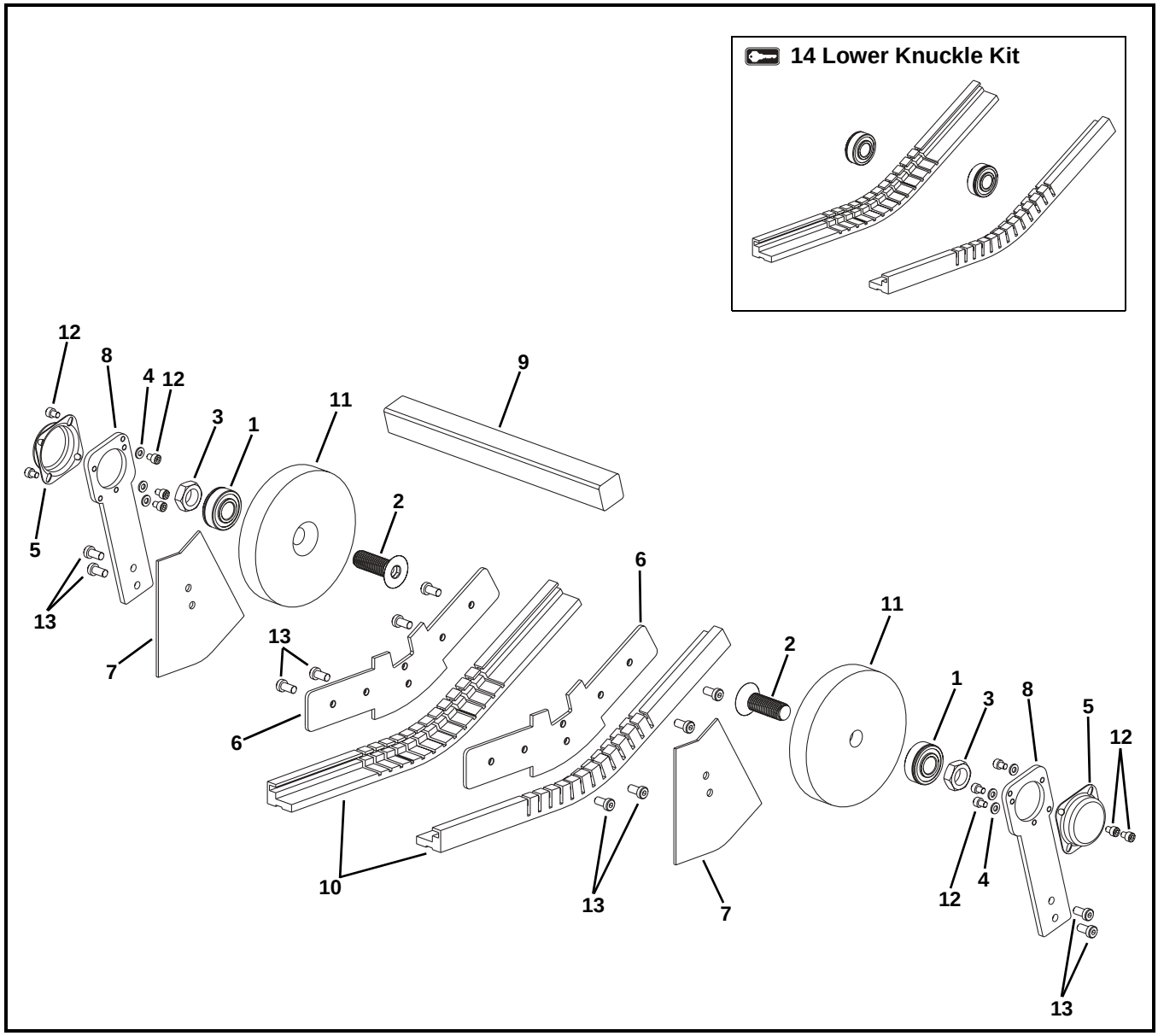




Item	Part Number	Description
1	352452-AA	Upper Joint Plate
2	352453-AA	Knuckle Cover Plate
3	352456-WW	Shaft Assembly for Straight Conveyors
	352461-WW	Shaft Assembly for Curve Conveyors
4	352457-WW	Alignment Bar for Straight Conveyors
	352462-WW	Alignment Bar for Curve Conveyors
5	352458	Upper Edge Wearstrip for Straight Conveyors
	352463	Upper Edge Wearstrip for Curve Conveyors
6	352459	Return Strip for Straight Conveyors
	352464	Return Strip for Curve Conveyors
7	506296	Idler Puck
8	532127-00100	Tube Spacer
9	950810M	Low Head Cap Screw, M8 - 1.25 x 10 mm
10	950816M	Low Head Cap Screw, M8 - 1.25 x 16 mm
11	53CNV-WW	Upper Knuckle Kit (Includes Items 5, 6 and 7)
AA = Angle 05, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, and 60		
WW = Conveyor width reference: 08 – 24 in 02 increments		

Service Parts

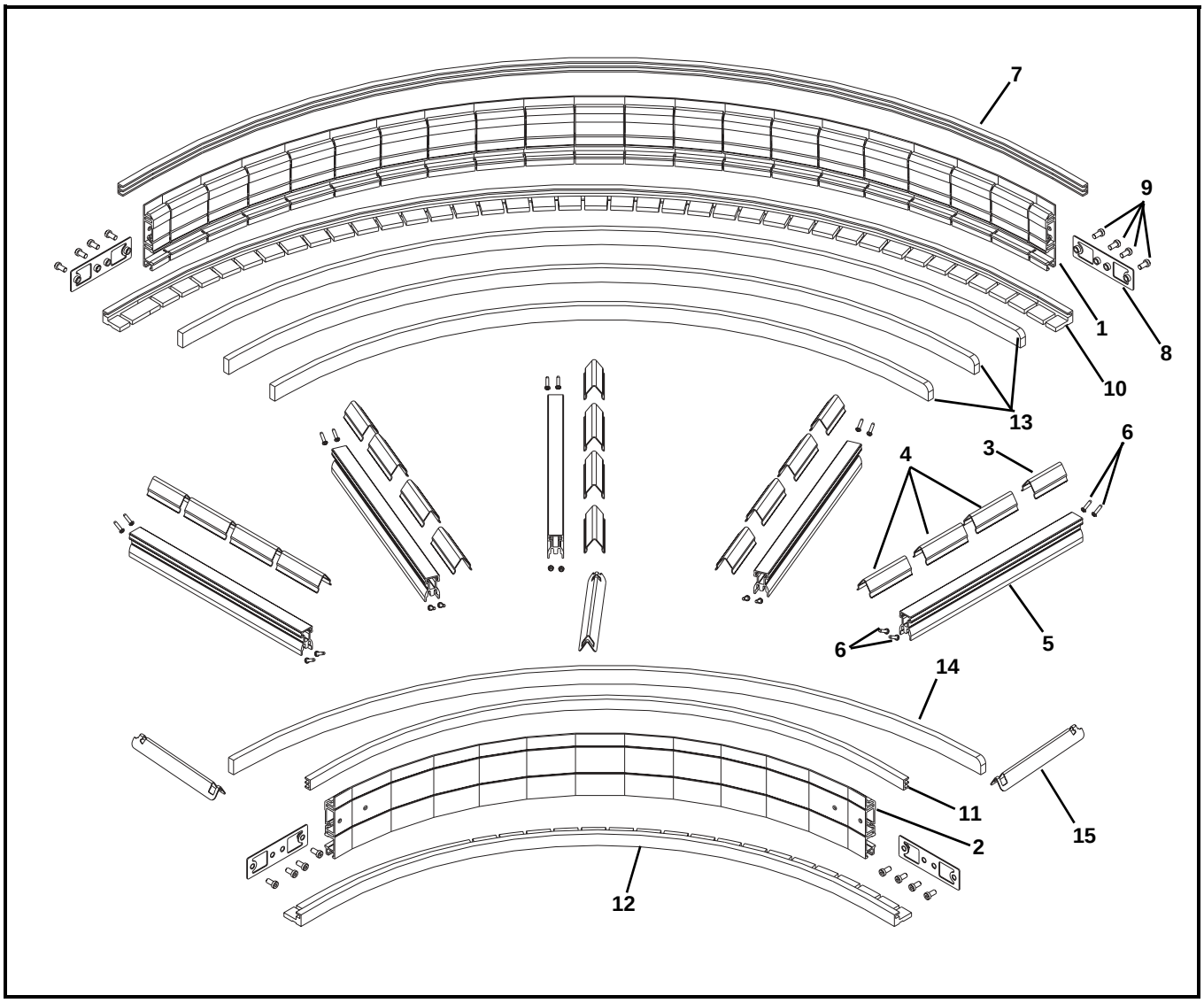
Lower Knuckle



Item	Part Number	Description
1	802-050	Bearing
2	903-349	Flat Head Cap Screw, 3/4 - 10 x 2.25"
3	910-034	Hex Jam Nut
4	911-222	Washer
5	300139	Shaft Cover
6	352451-AA	Lower Joint Plate
7	352453-AA	Knuckle Cover Plate
8	352454	Roller Support Bar
9	352455-WW	Knuckle Belt Support for Straight Conveyors
	352460-WW	Knuckle Belt Support for Curve Conveyors

Item	Part Number	Description
10	352459	Return Wearstrip for Straight Conveyors
	352464	Return Wearstrip for Curve Conveyors
11	352465	Hold-Down Wheel
12	920608M	Socket Head Screw, M6 - 1.00 x 8 mm
13	950816M	Low Head Cap Screw, M8 - 1.25 x 16 mm
14	53CHI	Lower Knuckle Kit (Includes Items 1 and 10)
AA = Angle 05, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55 and 60		
WW = Conveyor width reference: 08 – 24 in 02 increments		

Curve Conveyor Frame and Wear Strips

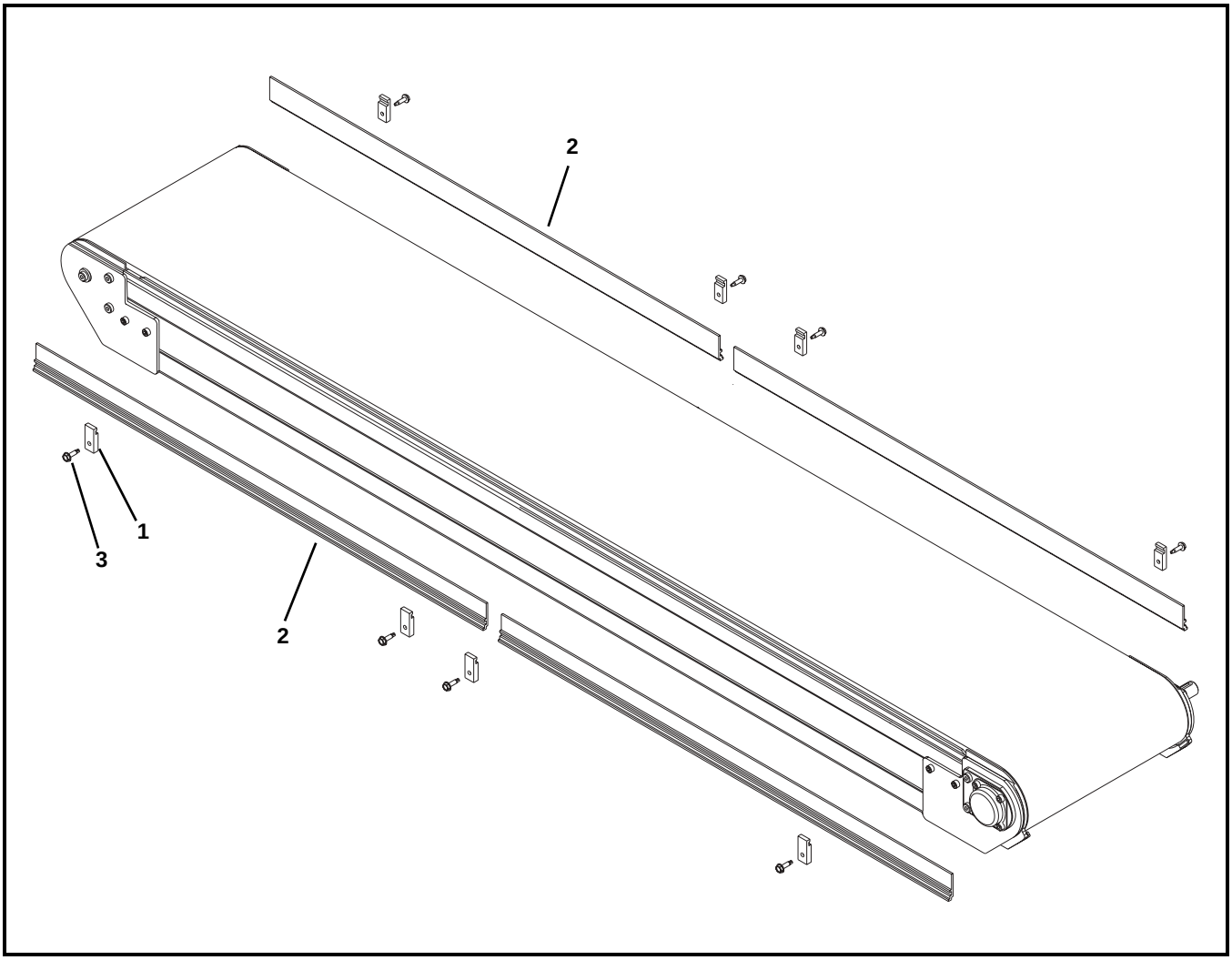


Item	Part Number	Description
1	352198-WW-AAA	Side Rail Outer Curve
2	352197-WW-AAA	Side Rail Inner Curve
3	352172-WWC	First Spacer
4	352172-01	Spacer for 10”, 14, 24”, and 28” Wide Conveyors Only
	352172-00	Spacer for All Other Width Conveyors
5	352170-WW	Center Rail
6	352108	Pan Screw, M5-.80 x 20 mm
7	352355-WW-AAA	Top Outer Wear Strip
8	352185	Nut Plate

Item	Part Number	Description
9	950816M	Low Head Cap Screw, M8-1.25 x 16 mm
10	352357-WW-AAA	Bottom Outer Wear Strip
11	352354-WW-AAA	Top Inner Wear Strip
12	352356-WW-AAA	Bottom Inner Wear Strip
13	352358-WW-AAA	Wear Strip
14	352359-WW-AAA	Return Wear Strip
15	352168	Return Bracket
WW = Conveyor width reference: 08 – 36 in 02 increments		
AAA = Degree of Curve		

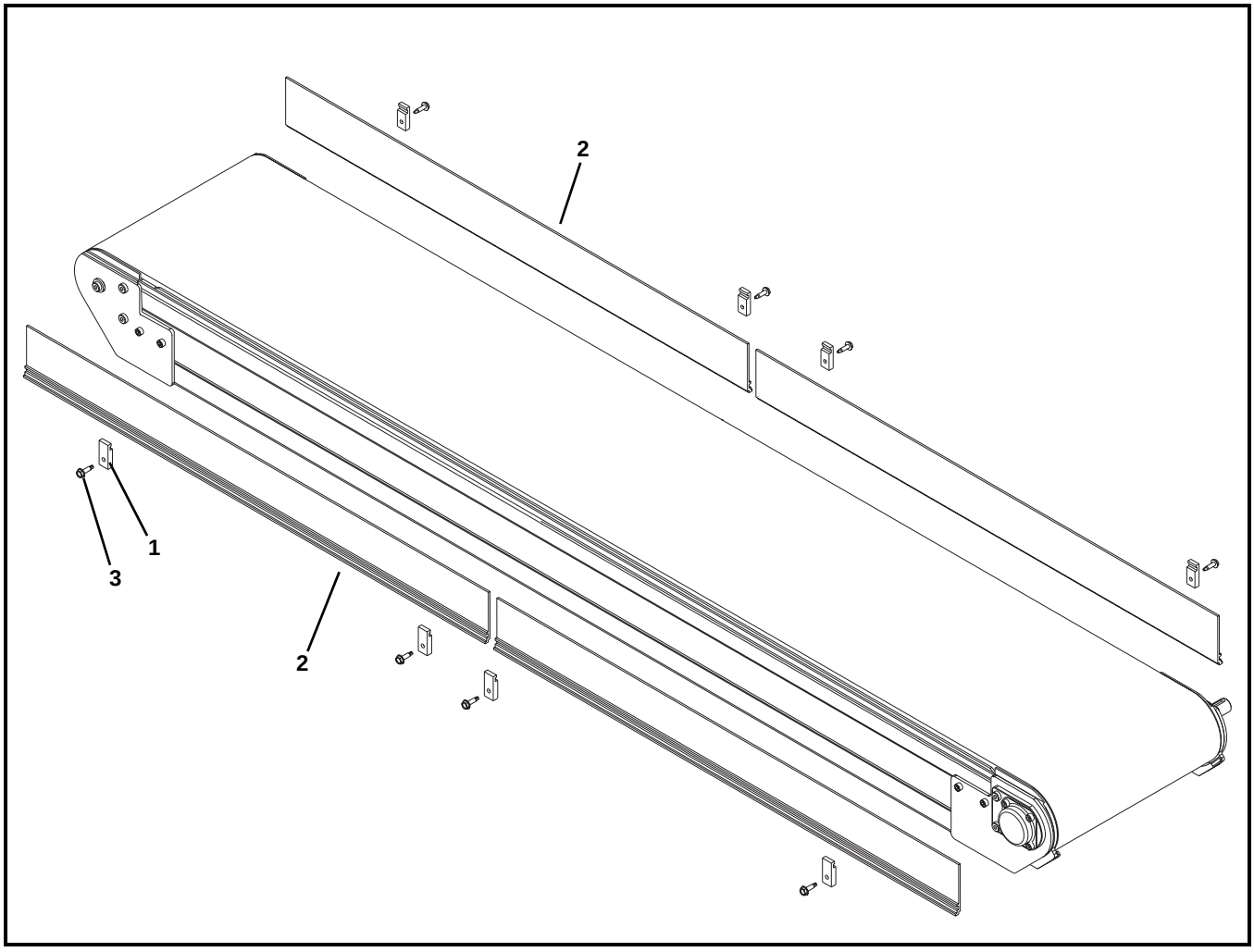
Service Parts

1.5” (38 mm) High Sides



Item	Part Number	Description
1	352182	Guide Retaining Clip
2	380500-LLLLL	1" Guides
3	807-1937	Self-Drilling Hex Head Screw, 1/4-20 x 1”
LLLLL = Length in inches with 2 decimal places.		
Length Example: Length = 95.25" LLLLL = 09525		

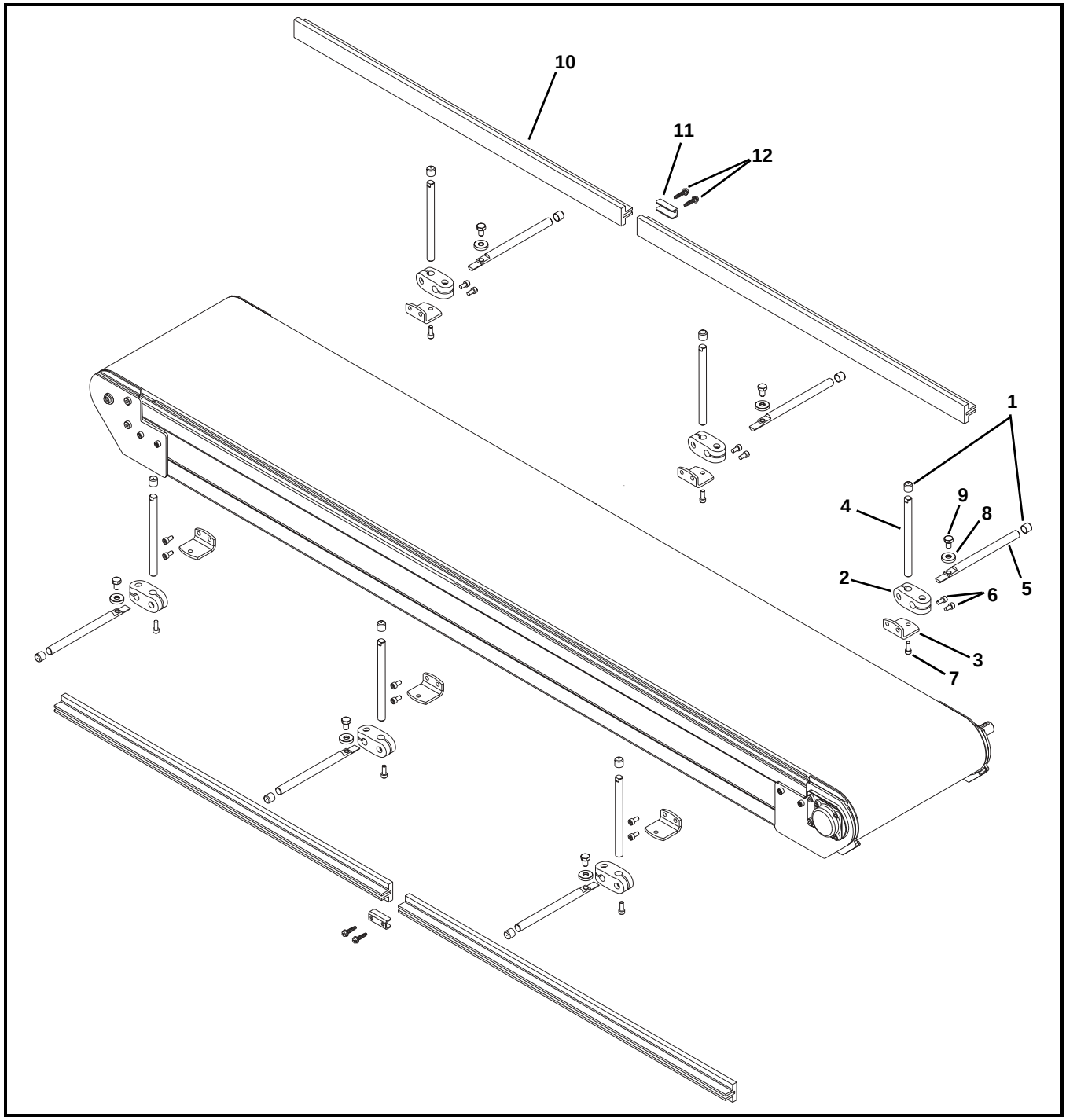
3” (76 mm) High Sides



Item	Part Number	Description
1	352182	Guide Retaining Clip
2	380400-LLLLL	3" Guides
3	807-1937	Self-Drilling Hex Head Screw, 1/4-20 x 1”
LLLLL = Length in inches with 2 decimal places.		
Length Example: Length = 95.25" LLLLL = 09525		

Service Parts

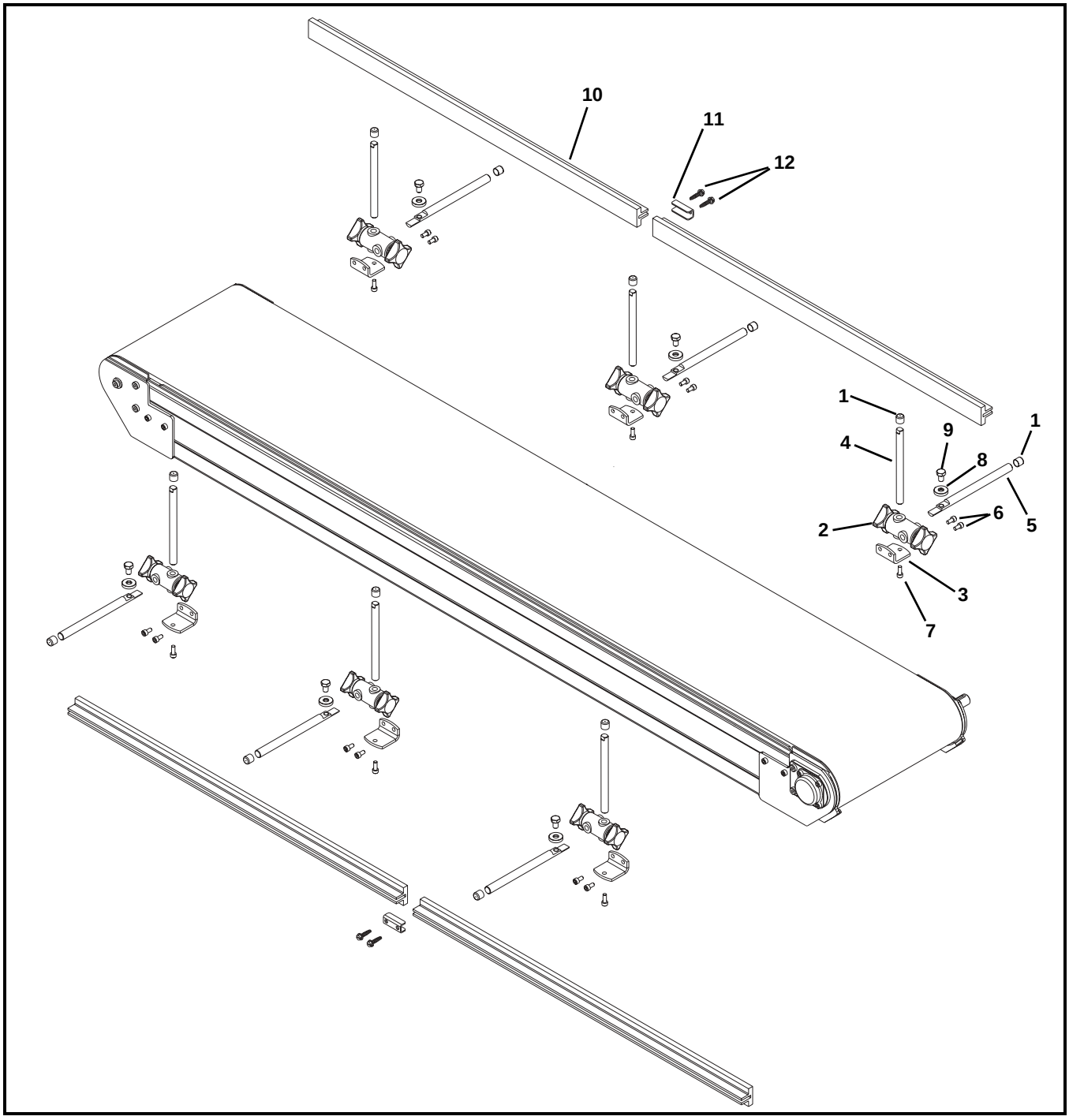
Fully Adjustable Guiding



Item	Part Number	Description
1	807-948	Shaft Cap
2	807-652	Cross Block
3	202004	Mounting Bracket
4	202027M	Vertical Mounting Guide Shaft
5	532178	Horizontal Mounting Guide Shaft
6	807-1937	Self-Drilling Hex Head Screw, 1/4-20 x 1”
7	920616M	Socket Head Screw, M6-1.00 x 16 mm

Item	Part Number	Description
8	532179	Washer
9	950816M	Low Head Cap Screw M8-1.25 x 16mm
10	352363-LLLLL	Guide Rail
11	532195	Guide Connecting Clip
12	807-1840	Hex Head Washer Screw
LLLLL = Length in inches with 2 decimal places.		
Length Example: Length = 95.25" LLLLL = 09525		

Tool-Less Fully Adjustable Guiding

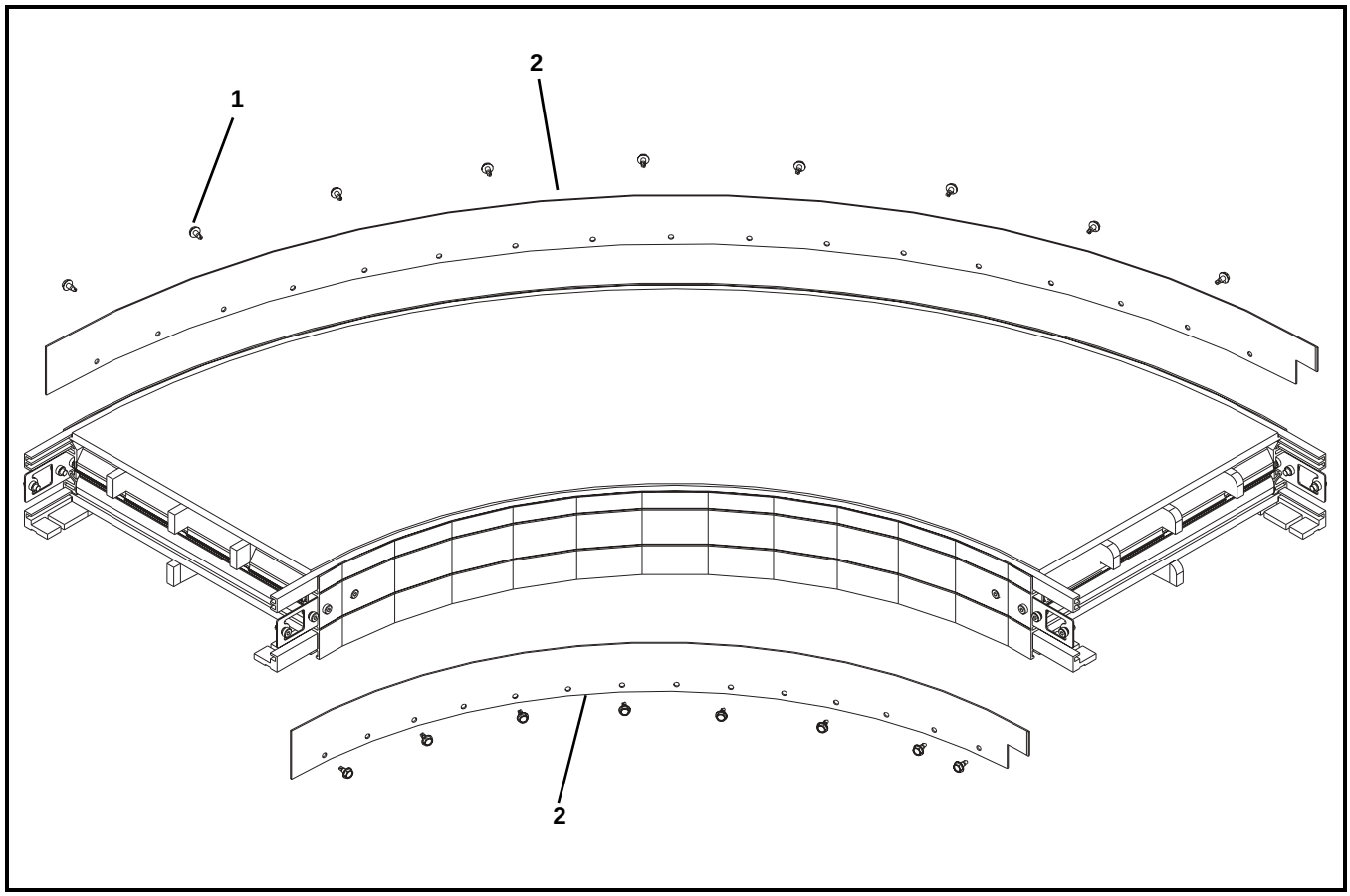


Item	Part Number	Description
1	807-948	Shaft Cap
2	807-1470	Cross Block
3	202004	Mounting Bracket
4	202027M	Vertical Mounting Guide Shaft
5	532178	Horizontal Mounting Guide Shaft
6	807-1937	Self-Drilling Hex Head Screw, 1/4-20 x 1”
7	920616M	Socket Head Screw, M6-1.00 x 16 mm

Item	Part Number	Description
8	532179	Washer
9	950816M	Low Head Cap Screw M8-1.25 x 16mm
10	352363-LLLLL	Guide Rail
11	532195	Guide Connecting Clip
12	807-1840	Hex Head Washer Screw
LLLLL = Length in inches with 2 decimal places.		
Length Example: Length = 95.25" LLLLL = 09525		

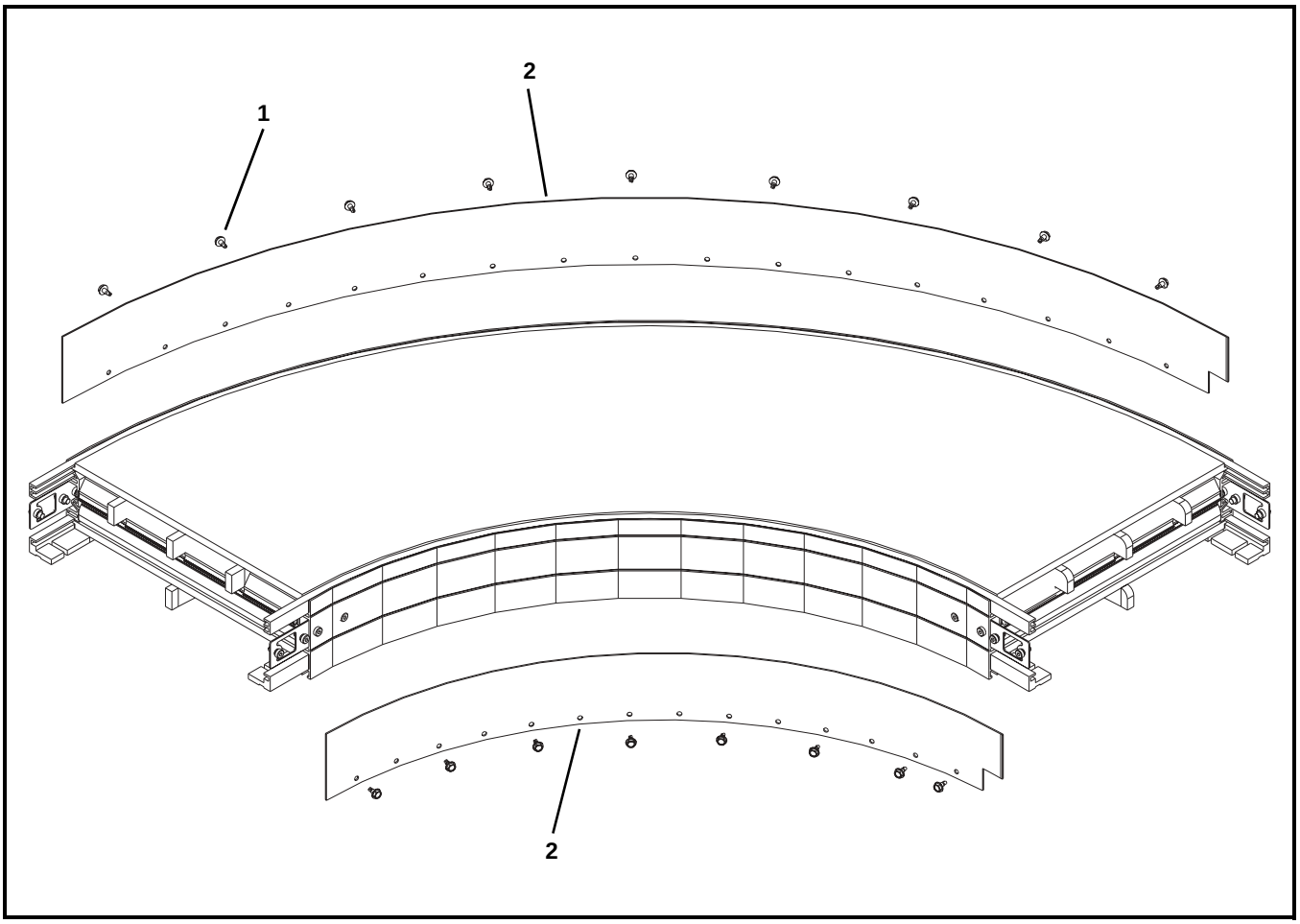
Service Parts

1.5” (38 mm) High Sides for Curve Module



Item	Part Number	Description
1	807-1943	Self-Drilling Hex Head Screw, 1/4-20 x 5/8”
2	352294-LLLLL	1.5” High Side Curve Guiding
LLLLL = Length in inches with 2 decimal places.		
Length Example: Guiding Length = 95.25" LLLLL = 09525		

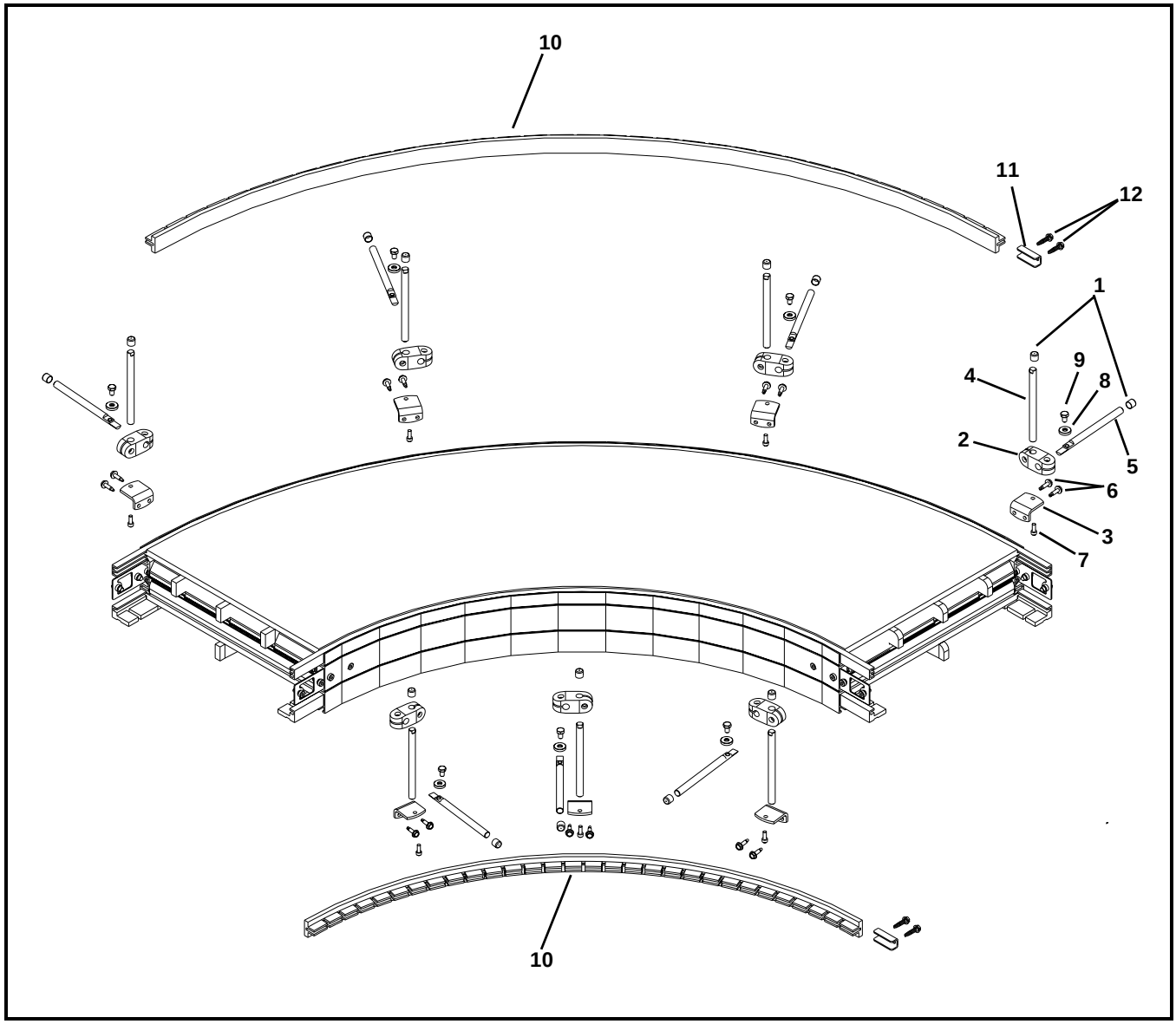
3” (76 mm) High Sides for Curve Module



Item	Part Number	Description
1	807-1943	Self-Drilling Hex Head Screw, 1/4-20 x 5/8”
2	352293-LLLLL	3” High Side Curve Guiding
LLLLL = Length in inches with 2 decimal places.		
Length Example: Guiding Length = 95.25" LLLLL = 09525		

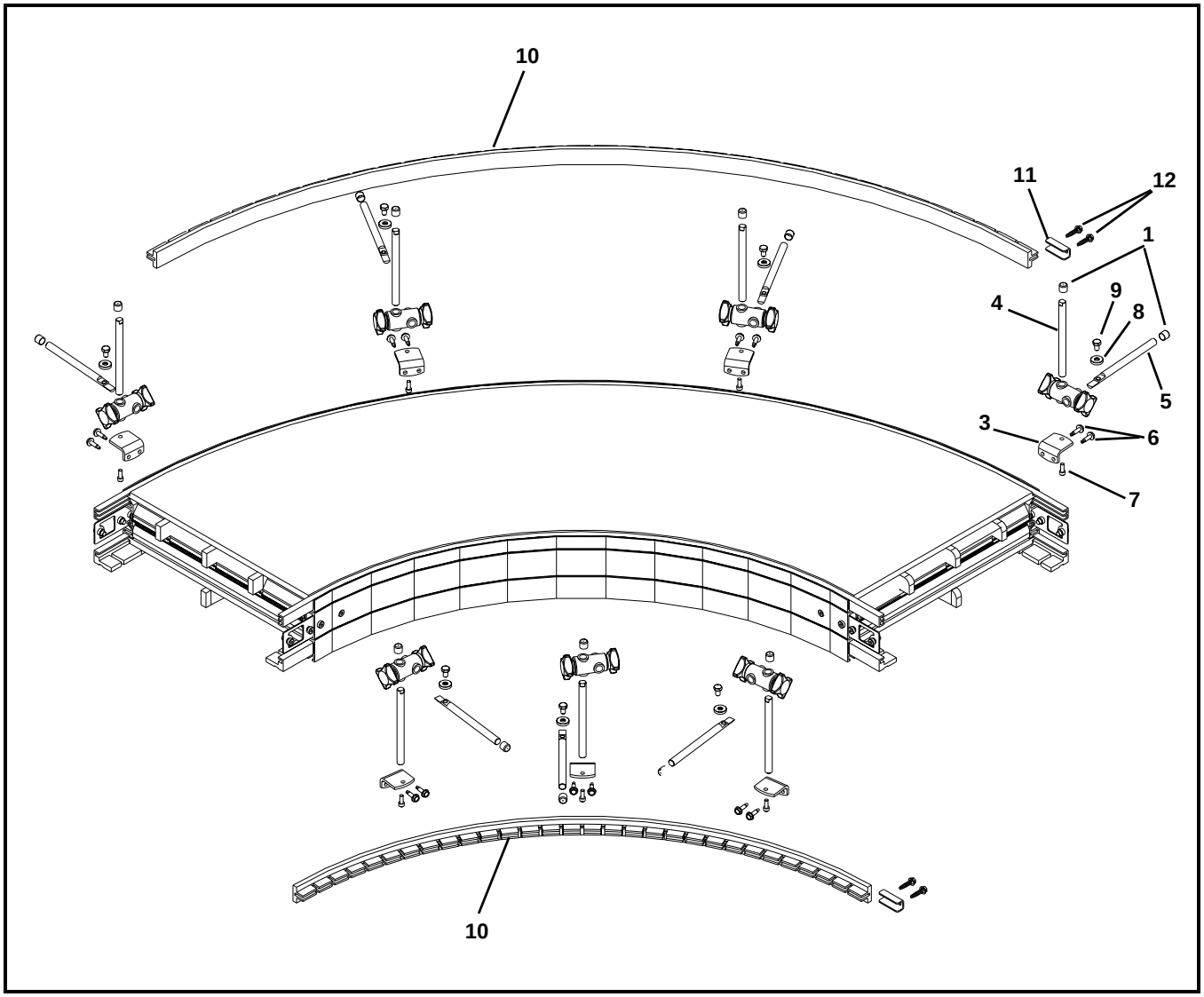
Service Parts

Fully Adjustable Guiding for Curve Module



Item	Part Number	Description
1	807-948	Shaft Cap
2	807-652	Cross Block
3	202004	Mounting Bracket
4	202027M	Vertical Mounting Guide Shaft
5	532178	Horizontal Mounting Guide Shaft
6	807-1937	Self-Drilling Hex Head Screw, 1/4-20 x 1”
7	920612M	Socket Head Screw, M6-1.00 x 12 mm
8	532179	Washer
9	960812MSS	Hex Head Cap Screw M8-1.25 x 12mm
10	352364-LLLLL	Guide Rail
11	532195	Guide Connecting Clip
12	807-1840	Hex Head Washer Screw
LLLLL = Length in inches with 2 decimal places.		
Length Example: Length = 95.25" LLLLL = 09525		

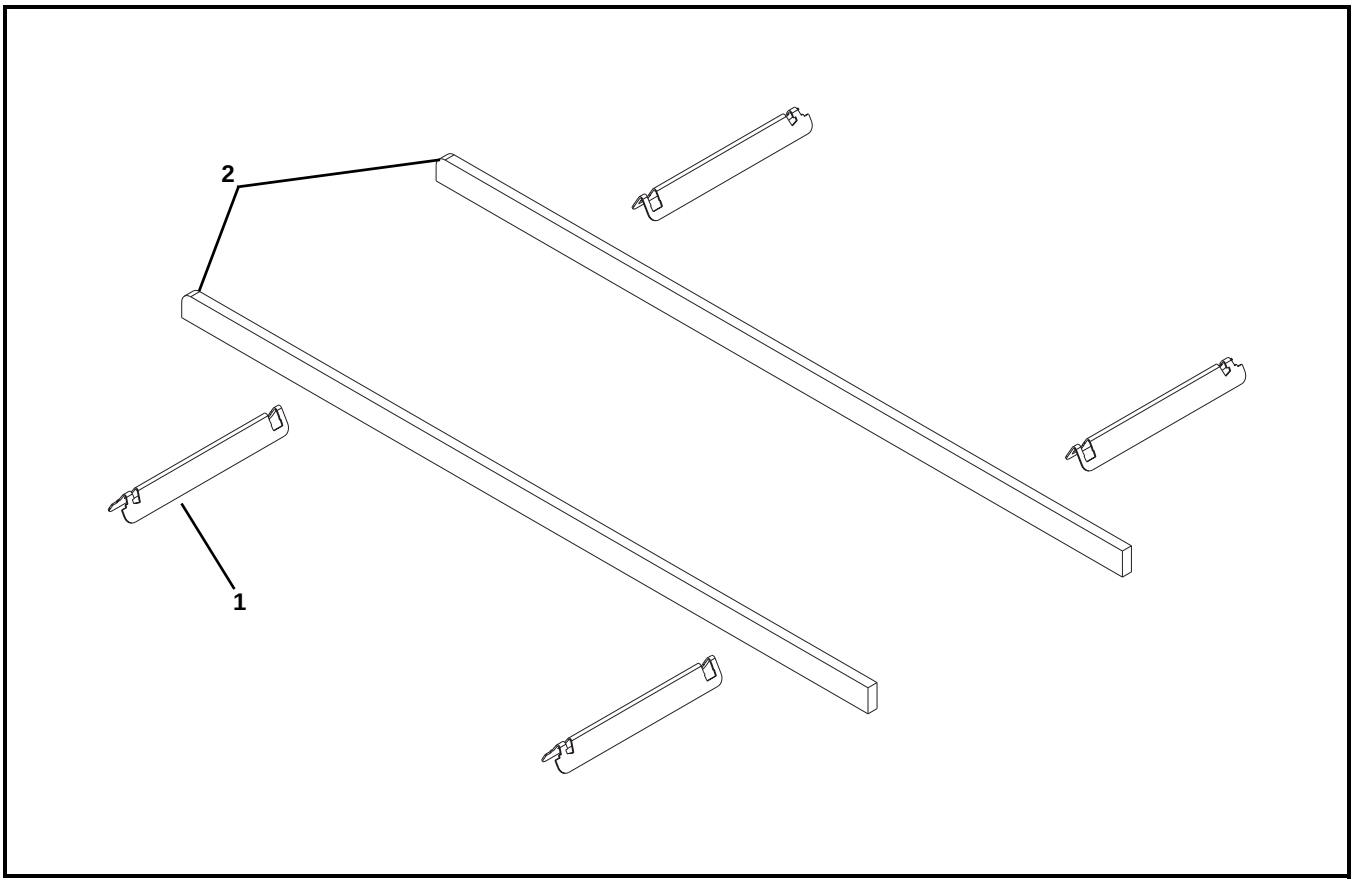
Tool-Less Fully Adjustable Guiding for Curve Module



Item	Part Number	Description
1	807-948	Shaft Cap
2	807-1470	Cross Block
3	202004	Mounting Bracket
4	202027M	Vertical Mounting Guide Shaft
5	532178	Horizontal Mounting Guide Shaft
6	807-1937	Self-Drilling Hex Head Screw, 1/4-20 x 1”
7	920612M	Socket Head Screw, M6-1.00 x 12 mm
8	532179	Washer
9	960812MSS	Hex Head Cap Screw M8-1.25 x 12mm
10	352364-LLLLL	Guide Rail
11	532195	Guide Connecting Clip
12	807-1840	Hex Head Washer Screw
LLLLL = Length in inches with 2 decimal places.		
Length Example: Length = 95.25" LLLLL = 09525		

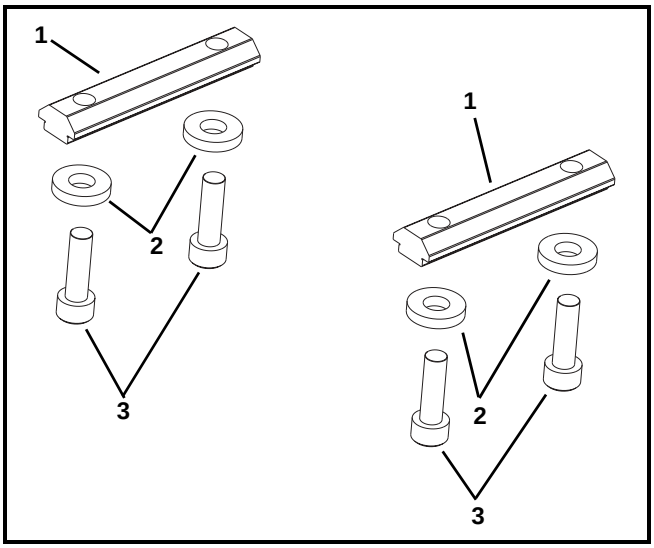
Service Parts

Flat Belt Returns



Item	Part Number	Description
1	352168	Return Support Bracket
2	532162-LLLLL	Return Strip
LLLLL = Length in inches with 2 decimal places.		
Length Example: Guiding Length = 95.25" LLLLL = 09525		

Stand Mount Kit



Item	Part Number	Description
1	300150M	Drop-In Tee Bar
2	605279P	Washer
3	920620M	Socket Head Screw, M6-1.00 x 20 mm

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:

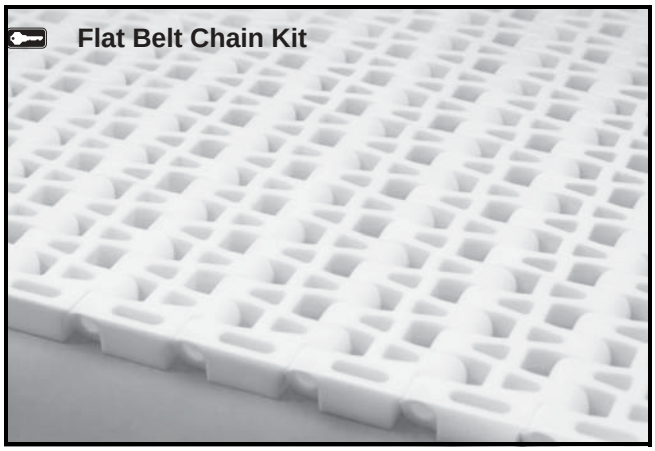
Overall chain length = 42' 5" (rounded up = 43')

Order: Qty (43) of 52BB-WW

BB = Chain reference number

WW = Conveyor width ref: 08-36 in 02 increments

Flat Belt Chain Repair Kit



Item	Part Number	Description
1	52BB-WW	Flat Belt Chain Repair Kit (Includes 1 ft (305 mm) of flat belt chain and assembly pins)
BB = Chain Reference number		
WW = Conveyor width ref: 08 - 36 in 02 increments		

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.

<table>
<tr><th></th><th colspan="8">Product Type</th></tr>
<tr><th></th><th colspan="7">Standard Products</th><th>Engineered to order parts</th></tr>
<tr><th>Product Line</th><th>Conveyors</th><th>Gearmotors & Mounting Packages</th><th>Support Stands</th><th>Accessories</th><th>Spare Parts (non-belt)</th><th>Spare Belts - Standard Flat Fabric</th><th>Spare Belts - Cleated & Specialty Fabric</th><th>Spare Belts - Plastic Chain</th><th>All equipment and parts</th></tr>
<tr><td>1100</td><td colspan="6" rowspan="14">30% return fee for all products except:
50% return fee for conveyors with modular belt, cleated belt or specialty belts</td><td colspan="2" rowspan="15">non-returnable</td><td rowspan="15">case-by-case</td></tr>
<tr><td>2200</td></tr>
<tr><td>2200 Modular Belt</td></tr>
<tr><td>2200 Precision Move</td></tr>
<tr><td>2300</td></tr>
<tr><td>2300 Modular Belt</td></tr>
<tr><td>3200</td></tr>
<tr><td>3200 LPZ</td></tr>
<tr><td>3200 Precision Move</td></tr>
<tr><td>4100</td></tr>
<tr><td>5200</td></tr>
<tr><td>5300</td></tr>
<tr><td>6200</td></tr>
<tr><td>Controls</td></tr>
<tr><td>7200 / 7300</td><td colspan="6">50% return fee for all products</td></tr>
<tr><td>7350</td><td colspan="9" rowspan="4">non-returnable</td></tr>
<tr><td>7360</td></tr>
<tr><td>7400</td></tr>
<tr><td>7600</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 factory, distributor, service center or visit our website at www.dorner.com.

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

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