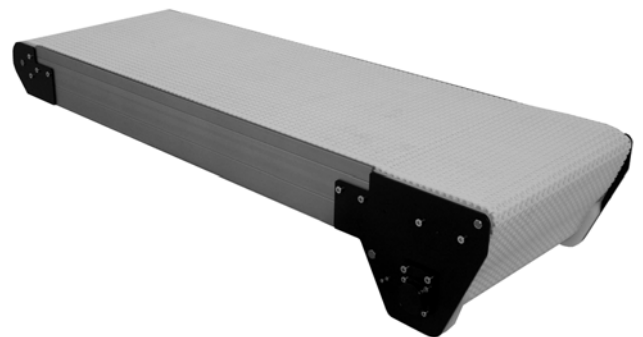
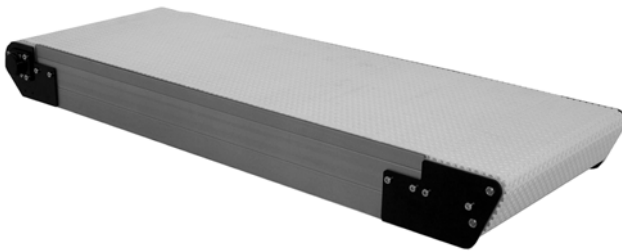




# 5300 Series DustPruf Straight Conveyors

Installation, Maintenance and Parts Manual



Featuring: *SmartSlot*<sup>™</sup>

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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 have patents pending.

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

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


# Warnings – General Safety

**⚠ DANGER**



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


**⚠ DANGER**



**EXPLOSION HAZARD!**

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

**⚠ WARNING**



**CRUSH HAZARD!**

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

**⚠ WARNING**



**CRUSH HAZARD!**


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

**⚠ WARNING**




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

**⚠ WARNING**




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

**⚠ WARNING**



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

**⚠ WARNING**



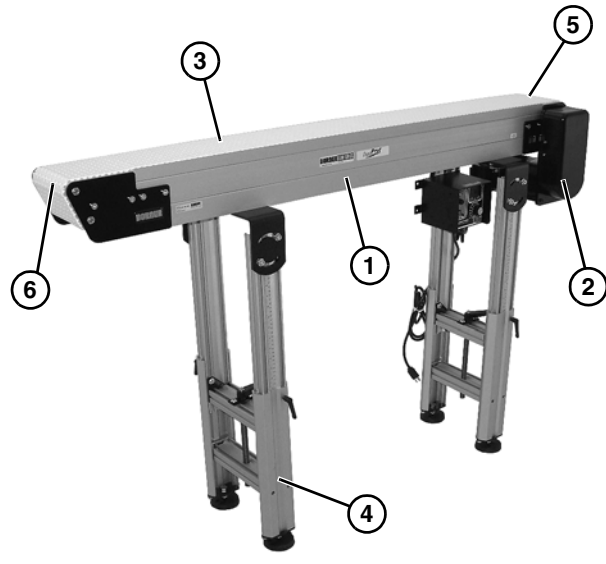
**SEVERE HAZARD!**

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

# Product Description

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

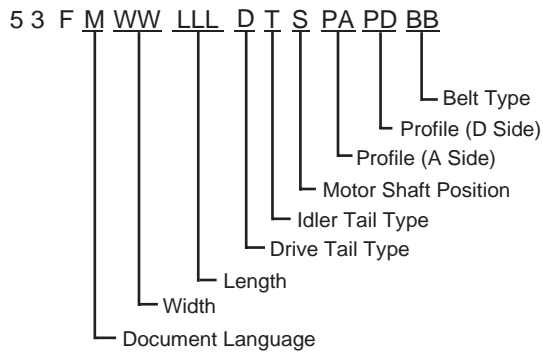
Typical Components	
1	Conveyor
2	Gearmotor
3	Belt (Flat Belt Shown)
4	Support Stands
5	Drive End
6	Idler End



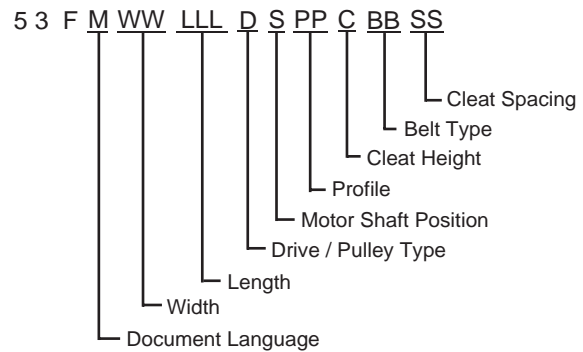
**Figure 1**

# Specifications

## Flat Belt 5300 Series Dustpruf Conveyor



## Cleated Belt 5300 Series Dustpruf Conveyor



## Conveyor Supports

### Maximum Distances:

- 1 = Support Stand on Idler End = 3 ft (914 mm)
  - 2 = Between Support Stands = 12 ft (3658 mm)\*\*
  - 3 = Support Stand on Drive End = 3 ft (914 mm)
- \*\* For conveyors longer than 12 ft (3658 mm),  
install stand mount kit at frame joint.

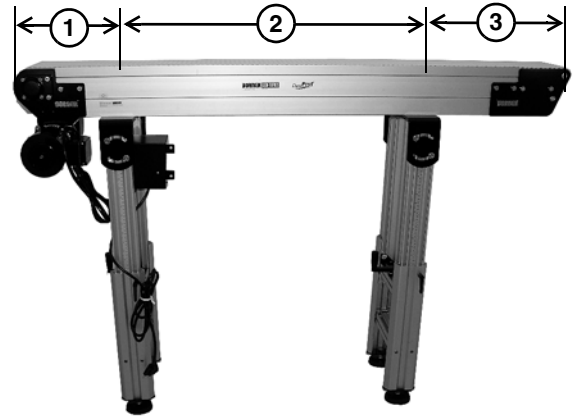


Figure 2

## Specifications

Flat Belt Conveyor Width Reference ( <u>WW</u> )	08 - 36 in 02 increments
Flat Belt Conveyor Belt Width	8" (203 mm) - 36" (914 mm) in 2" (51 mm) increments
Cleated Belt Conveyor Width Reference ( <u>WW</u> )	08 - 24 in 02 increments
Cleated Belt Conveyor Belt Width	8" (103 mm) - 24" (610 mm) in 2" (51 mm) increments
Maximum Conveyor Load	20 lbs. / ft <sup>2</sup> (97 kg/ m <sup>2</sup> ) with a maximum of 1000 lbs. (454 kg)
Belt Travel	12" (305 mm) per revolution of pulley
Maximum Belt Speed	250 ft/minute (76 m/minute)
Conveyor Length Reference ( <u>LLL</u> )	036 - 999 in 001 increments
Conveyor Length	36" (914 mm) - 999" (25.4 m) 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*

# Installation

## CAUTION

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

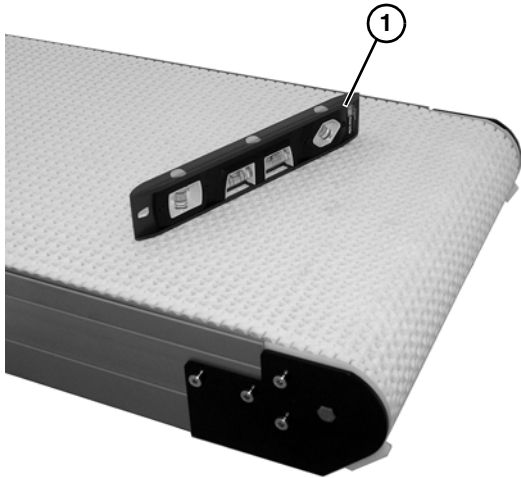


Figure 3

## 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 6 and “All Conveyors” on page 7.
2. Attach the stands. Refer to “Stand Installation” on page 7.
3. Install the belt. Refer to “Belt Installation” on page 7.
4. Install the guiding. Refer to “Guiding” on page 10.
5. Install the gearmotor. Refer to “Drive Package Installation” on page 10.

## Conveyor Sections Longer than 12 ft (3658 mm)

### Connecting Components

Typical Connecting Components (Figure 4)

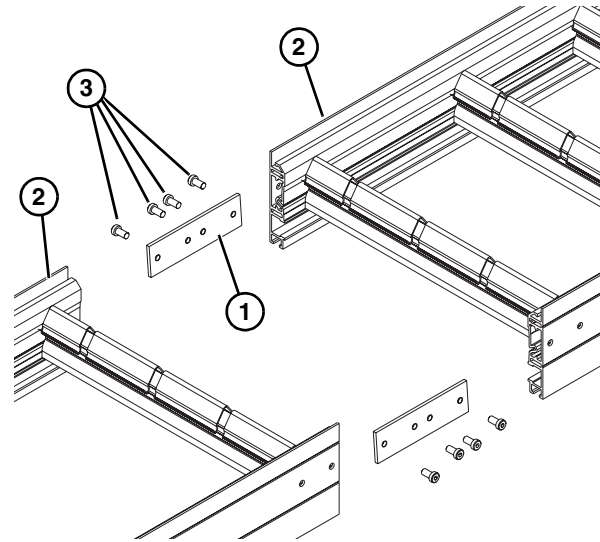


Figure 4

- |   |                                       |
|---|---------------------------------------|
| 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).

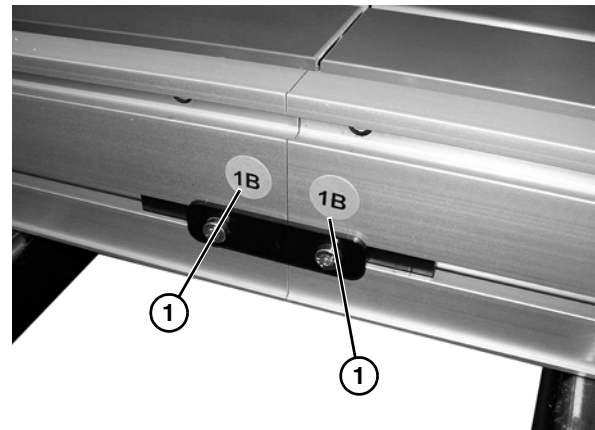


Figure 5

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).

## All Conveyors

### Stand Installation

#### NOTE

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

Typical stand components (Figure 6)

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

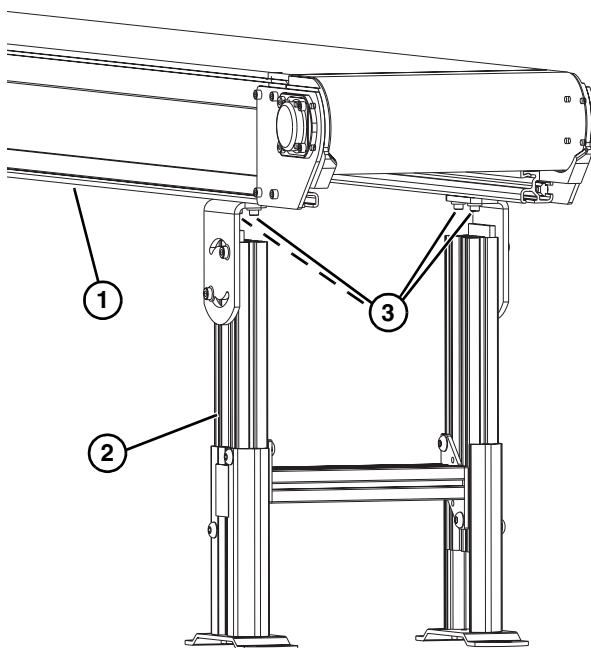


Figure 6

1. Properly support the conveyor.
2. Attach stands (Figure 7, item 1) to the bottom of the conveyor frame (Figure 7, item 2). Tighten socket head screws (Figure 7, item 3), on each side, to secure in place.

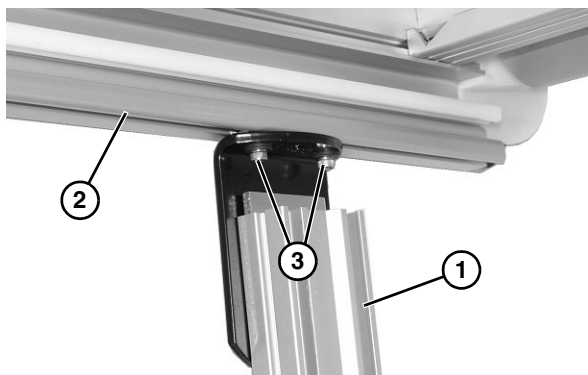


Figure 7

## Belt Installation

Typical Belt Components (Figure 8).

- |   |            |
|---|------------|
| 1 | Chain Belt |
| 2 | Belt Rod   |

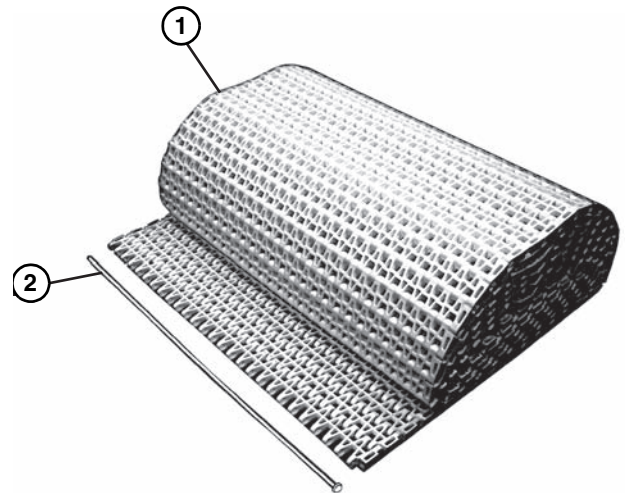


Figure 8

1. Position the belt on the conveyor frame.
2. Wrap belt around idler tail (Figure 9, item 1).

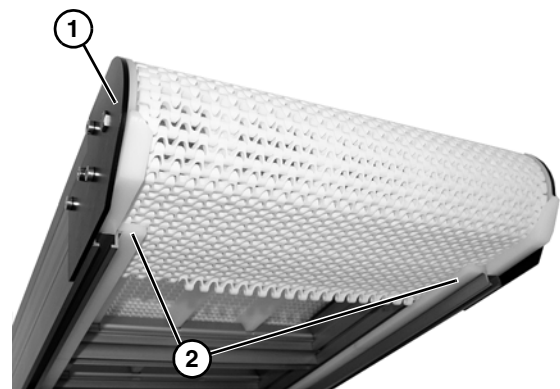


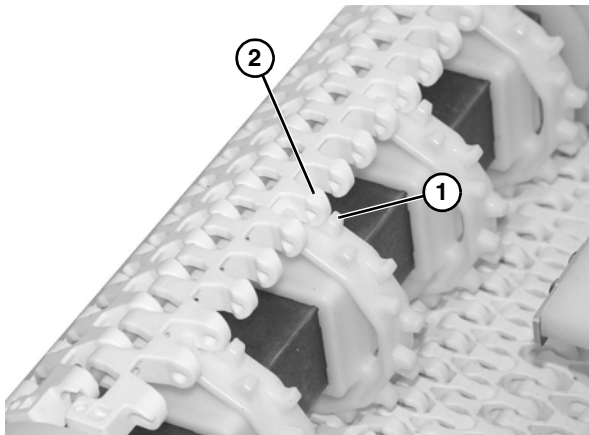
Figure 9

3. Install belt around lower frame section and above lower wear strips (Figure 9, item 2).



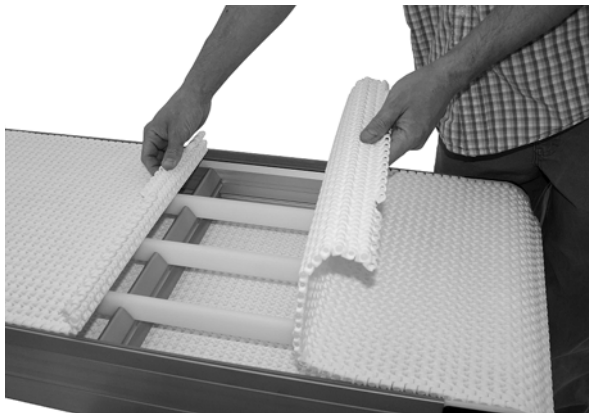
# Installation

4. Wrap the belt around the drive end of the conveyor, making sure the sprocket teeth have engaged the belt, with concave teeth (**Figure 10, item 1**) mating with rounded section (**Figure 10, item 2**) of belt.



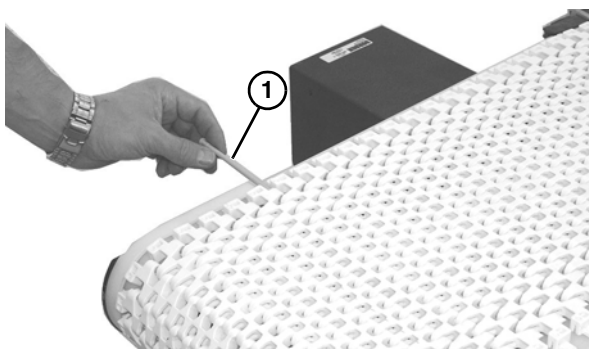
**Figure 10**

5. Bring the ends of the belt together (**Figure 11**).



**Figure 11**

6. Insert the belt rod (**Figure 12, item 1**).



**Figure 12**

7. Push the belt rod in as far as possible.
8. Lightly tap the head of the rod with a hammer until it snaps into position.

## Proper Methods of Attachment to Side Rails

### **⚠ WARNING**

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.

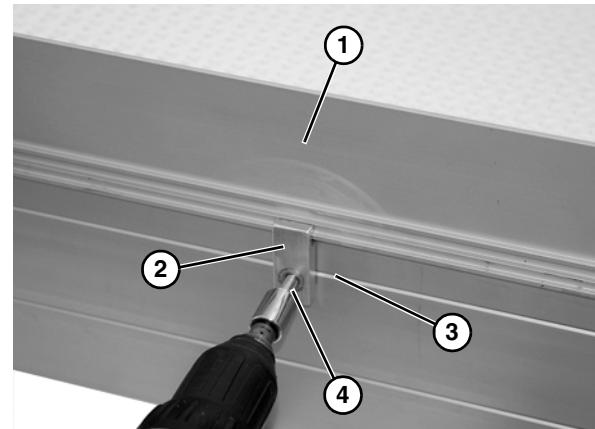
**SUPPORT CONVEYOR FRAMES WHILE INSTALLING SELF-DRILLING SCREWS.**

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 13, item 1**) and retaining clip (**Figure 13, item 2**) and hold to side rail. Hole should line up with notch (**Figure 13, item 3**) in side rail.



**Figure 13**

2. With a cordless drill or equivalent install self-drilling screw (**Figure 13, 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 14**). Recommended torque is 150 in-lb (17 Nm).

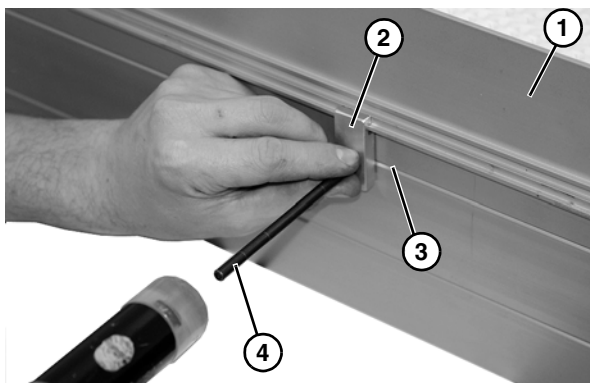


**Figure 14**

### Pre-Drill for Standard Screws

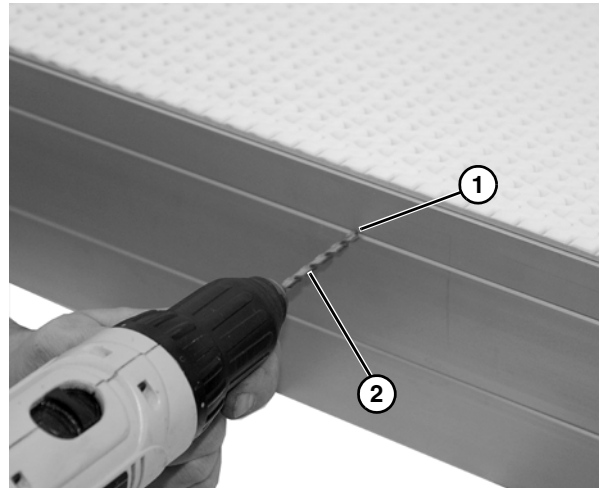
The DustPruf side rail will also accept standard screws. M6-1.0 and 1/4-20 are acceptable. Strength grade 8 is recommended.

1. Locate guide (**Figure 15, item 1**) and retaining clip (**Figure 15, item 2**) and hold to side rail. Hole should line up with notch (**Figure 15, item 3**) in side rail. Mark the hole locations with a center punch (**Figure 15, item 4**) and remove the bracket.



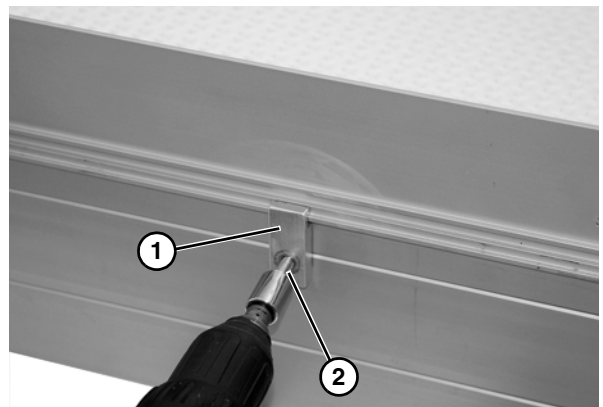
**Figure 15**

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



**Figure 16**

3. Position and hold bracket (**Figure 17, item 1**) to side rail. With a standard M6-1.0 or 1/4-20 screw, install screws (**Figure 17, item 2**) with cordless drill or equivalent. Do not fully tighten with drill.



**Figure 17**

4. Hand tighten the screws to secure (**Figure 18**). Recommended torque is 150 in-lb (17 Nm).



**Figure 18**

# Installation

## Guiding

### **WARNING**

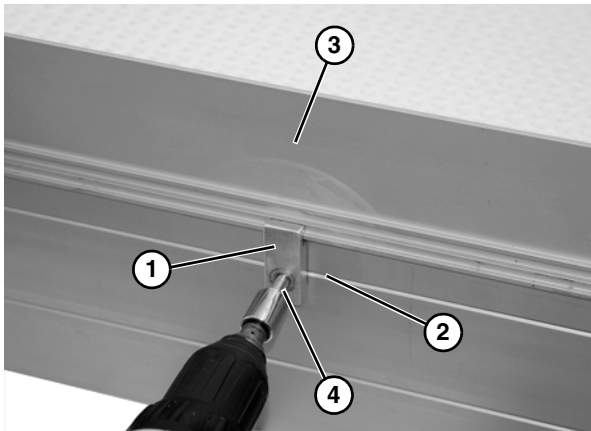
Installing self-drilling screws into the dustpruf side rail requires substantial force.

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 19, item 1**) locations. The end clips should be no greater than 12" from end of the conveyor. Hole should line up with notch (**Figure 19, item 2**) in side rail.



**Figure 19**

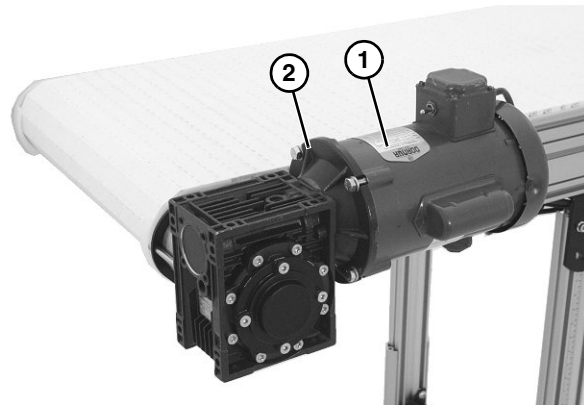
2. Hold guide (**Figure 19, item 3**) and retaining clip (**Figure 19, item 1**) to conveyor side rail. Install self-drilling screws (**Figure 19, item 4**) following the "Proper Methods of Attachment to Side Rails" on page 8 procedure.

## Drive Package Installation

### **NOTE**

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

1. Attach the motor (**Figure 20, item 1**) to the gear reducer (**Figure 20, item 2**). (End Drive shown below.)



**Figure 20**

# Preventive Maintenance and Adjustment

## 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 22 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](http://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. Use a punch and hammer to push the belt rod (Figure 21, item 1) out by striking the rod end opposite the retaining head.

### WARNING



**SEVERE HAZARD!**  
If conveyor belt is damaged or worn, replace belt section.

2. Remove the belt rods on both sides of the section of belt being replaced.

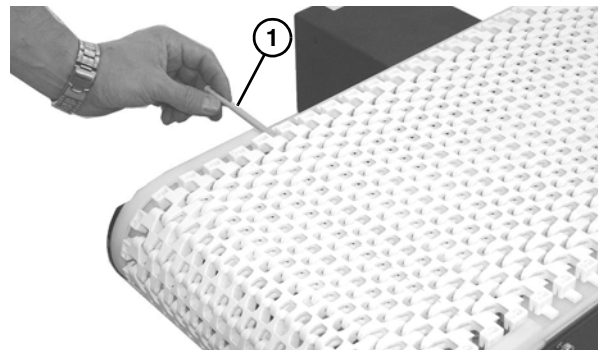


Figure 21

3. Replace old section of belt.

### CAUTION

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

# Preventive Maintenance and Adjustment

## Replacing the Entire Belt

1. Use a punch and hammer to push the belt rod (Figure 22, item 1) out by striking the rod end opposite the retaining head.

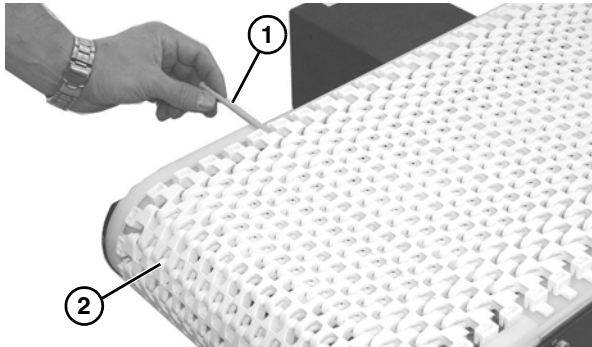


Figure 22

2. Slide the old belt (Figure 22, item 2) off the conveyor frame.
3. Replace the old belt with a new one. Refer to “Belt Installation” on page 7.

### 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 11.

## Wear Strips

Replace the wear strips if they become worn.

Typical Standard Wear Strips (Figure 23)

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

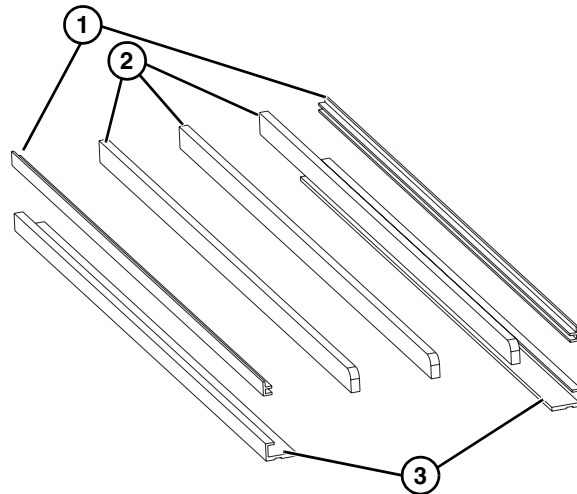


Figure 23

## Removal of Upper Wear Strips

1. Remove belt. See “Conveyor Belt Replacement” on page 11.
2. Remove inner spacer (Figure 24, item 1) from top of frame assembly.

### NOTE

The upper wearstrips (Figure 24, item 2) have a screw (Figure 24, item 3) on end of wearstrip that is retained by the inner spacers (Figure 24, item 1).

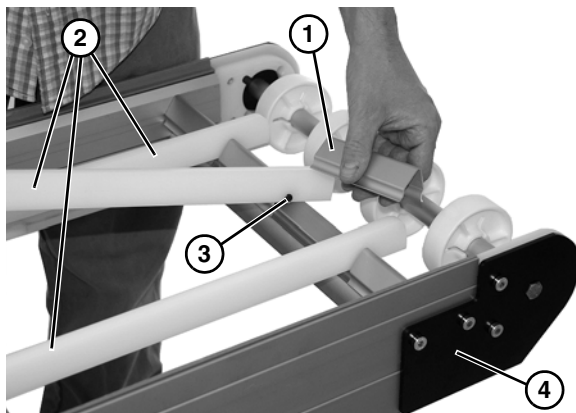


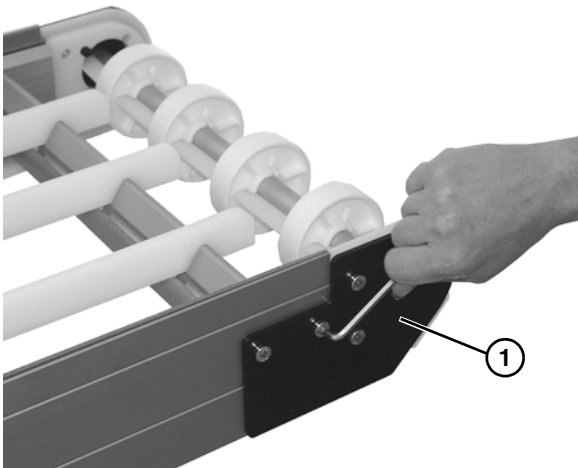
Figure 24

3. Remove upper wear strips (Figure 24, item 2).

# Preventive Maintenance and Adjustment

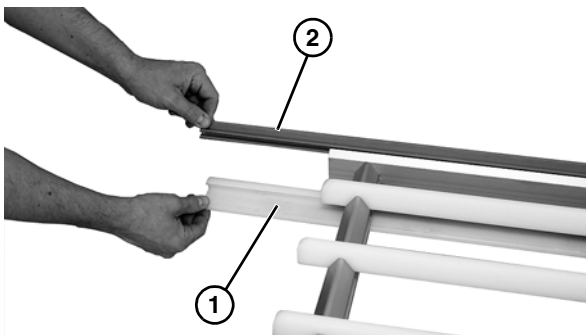
## Removal of Lower and Side Wear Strips

1. Remove conveyor idler end (**Figure 25, item 1**). See “C - Idler Spindle Removal” on page 19.



**Figure 25**

2. Slide lower wear strips (**Figure 26, item 1**), and side wear strips (**Figure 26, item 2**) from frame assembly.



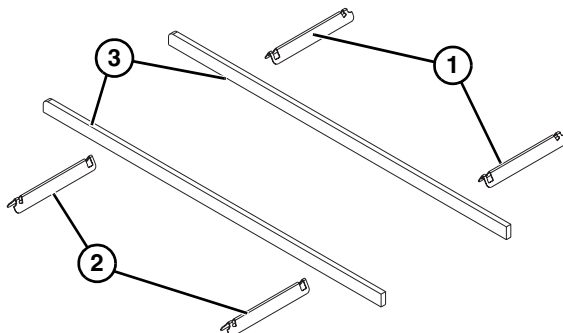
**Figure 26**

## Removal of Belt Returns

Replace the wear strips if they become worn.

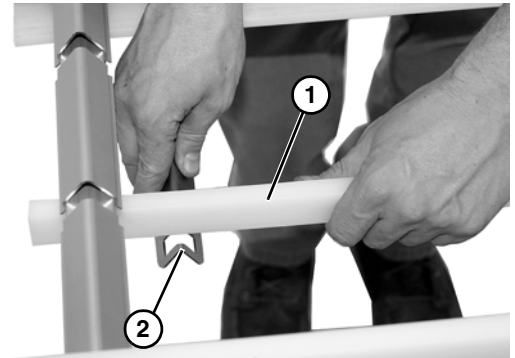
Typical Standard Wear Strips (**Figure 27**)

1	Return Support Bracket
2	Return Strip



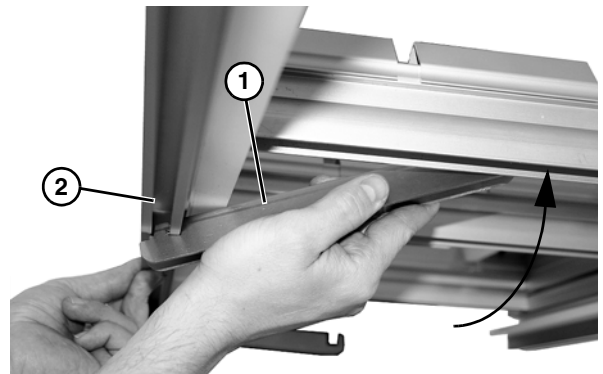
**Figure 27**

1. Remove return strips (**Figure 28, item 1**), from brackets (**Figure 28, item 2**).



**Figure 28**

2. If necessary, rotate upward and remove bracket (**Figure 29, item 1**), from frame channel (**Figure 29, item 2**).

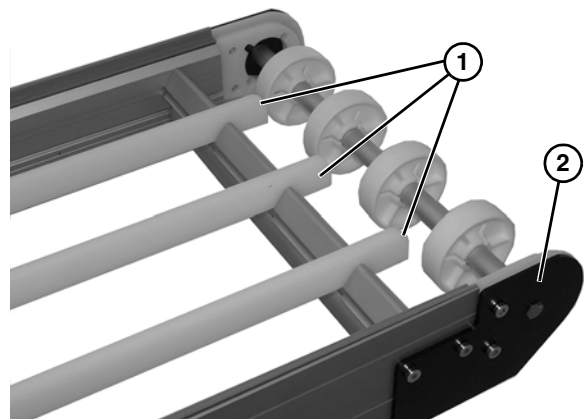


**Figure 29**

## Installation

### NOTE

The rounded ends of top wear strips (**Figure 30, item 1**) faces the idler end (**Figure 30, item 2**) of the conveyor.





**Figure 30**

Install components reverse of removal.



# Preventive Maintenance and Adjustment

## Spindle Removal

 <b>WARNING</b>

<b>SEVERE HAZARD!</b> Exposed moving parts can cause severe injury. <b>LOCK OUT POWER</b> before removing guards or performing maintenance.

Remove conveyor belt to access spindle(s). See “Replacing the Entire Belt” on page 12. 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

 <b>WARNING</b>

<b>Drive shaft keyway may be sharp. HANDLE WITH CARE.</b>

1. Remove the gearmotor. For detailed instructions, refer to the appropriate drive package manual.
2. Remove the two socket head screws (Figure 31, item 1). Repeat on opposite side.



Figure 31

3. Remove the drive tail assembly (Figure 32, item 1) from the frame (Figure 32, item 2).

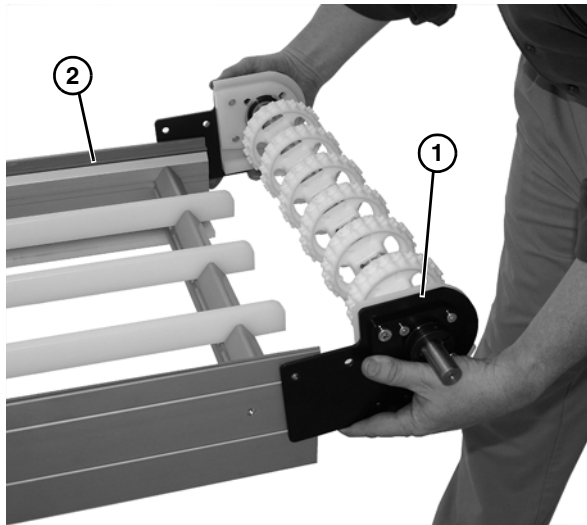


Figure 32

4. Remove the four socket head screws (Figure 33, item 1) and cover (Figure 33, item 2).

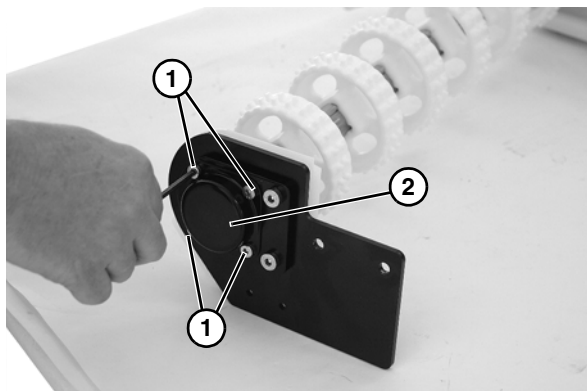


Figure 33

5. Loosen set screw (Figure 34, item 1) and remove clamp collar (Figure 34, item 2).

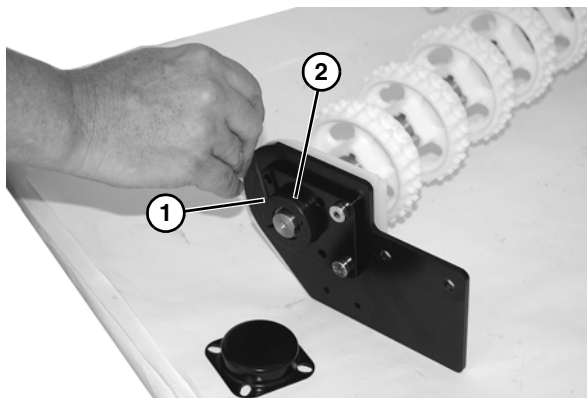
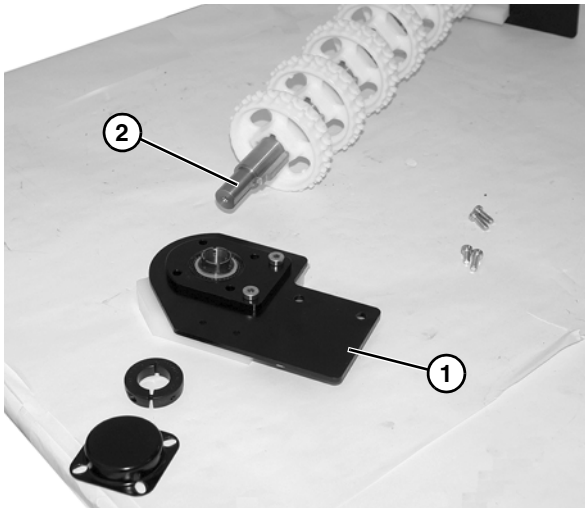


Figure 34



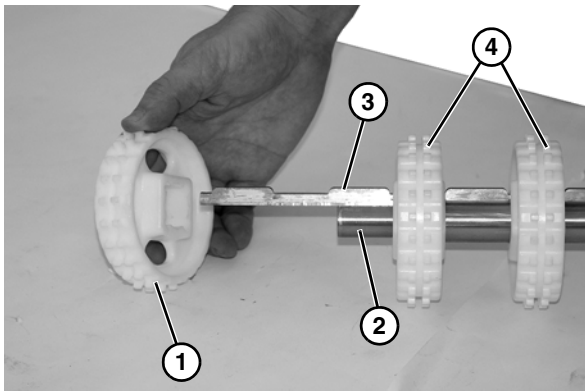
# Preventive Maintenance and Adjustment

6. Remove end plate (**Figure 35, item 1**) from shaft (**Figure 35, item 2**).



**Figure 35**

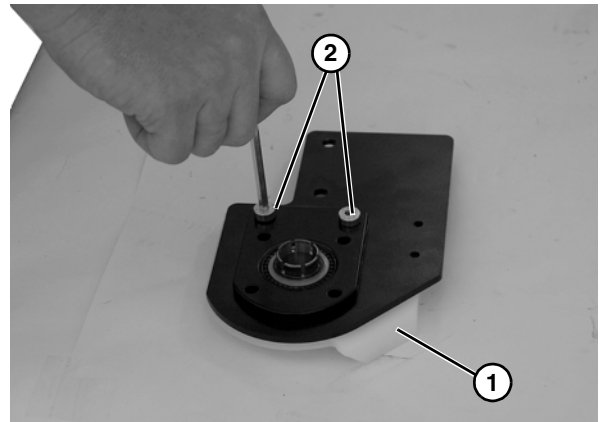
7. Slide entire sprocket assembly slightly outward, and remove the first sprocket (**Figure 36, item 1**) off the drive spindle (**Figure 36, item 2**) and alignment bar (**Figure 36, item 3**).



**Figure 36**

8. Remove remaining sprockets (**Figure 36, 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 36, item 4**) one by one, while sliding entire assembly onto alignment bar (**Figure 36, item 3**) and spindle (**Figure 36, item 2**).

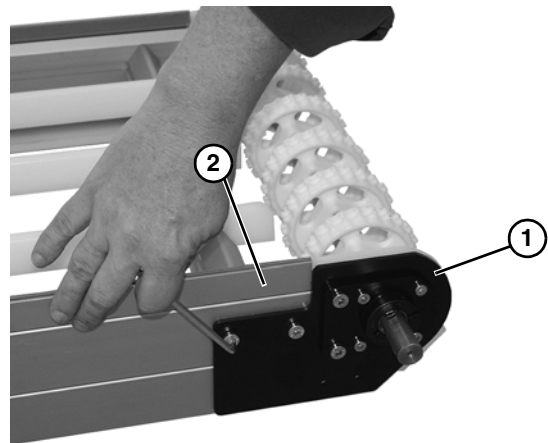
11. Check drive terminal assembly (**Figure 37, item 1**) for wear. If worn, remove two low head cap screws (**Figure 37, item 2**) and replace.



**Figure 37**

## NOTE

*When reinstalling the drive spindle tail assembly, the drive tail assembly (**Figure 38, item 1**) should mate flush with the conveyor frame (**Figure 38, item 2**).*



**Figure 38**

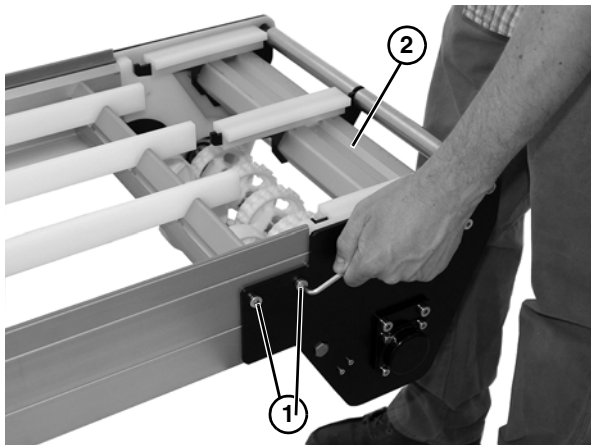
# Preventive Maintenance and Adjustment

## B – Nose Bar Drive Spindle Removal

 <b>WARNING</b>

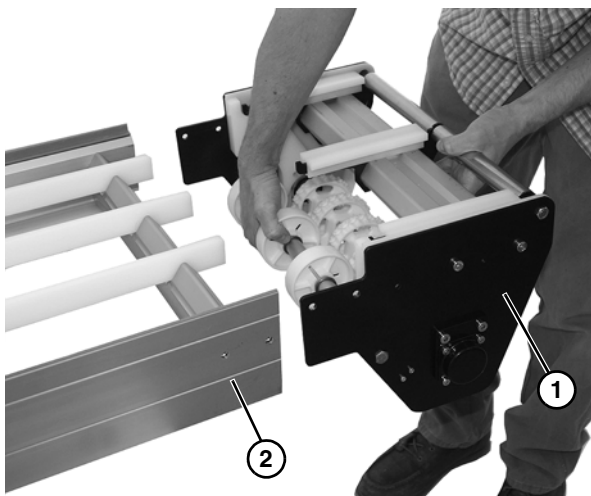
<b>Drive shaft keyway may be sharp. HANDLE WITH CARE.</b>

1. Remove the gearmotor. For detailed instructions, refer to the appropriate drive package manual.
2. Remove two socket head bolts (**Figure 39, item 1**) on each side of drive tail assembly (**Figure 39, item 2**).



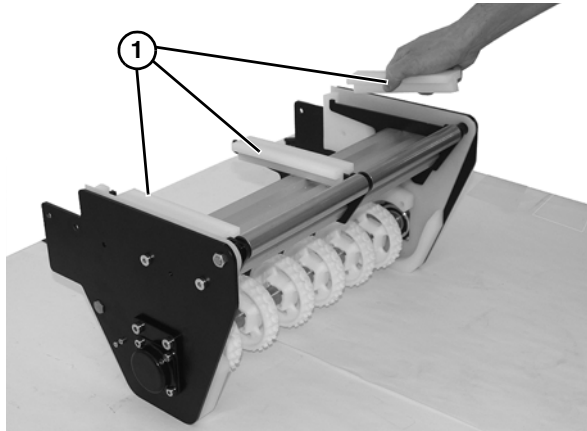
**Figure 39**

3. Remove the drive tail assembly (**Figure 40, item 1**) from the frame (**Figure 40, item 2**).



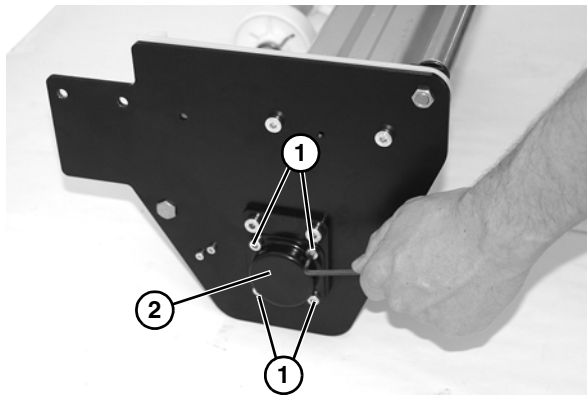
**Figure 40**

4. Remove wear strip, (**Figure 41, item 1**), as necessary.



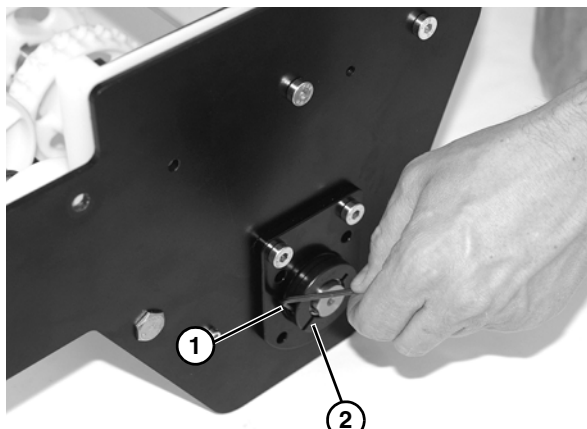
**Figure 41**

5. On the non-drive side, remove four socket head screws (**Figure 42, item 1**) and cover (**Figure 42, item 2**).



**Figure 42**

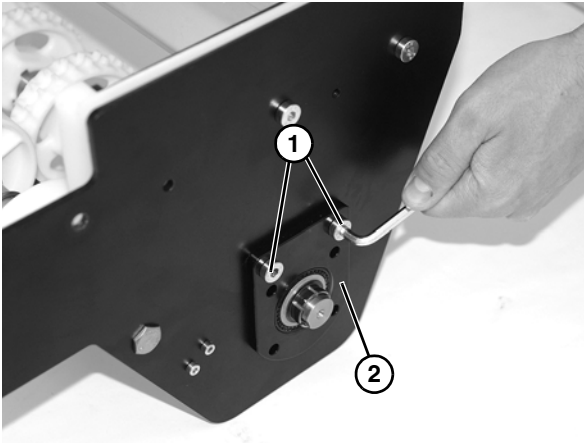
6. Loosen the bearing collar set screw (**Figure 43, item 1**) and remove bearing collar (**Figure 43, item 2**).



**Figure 43**

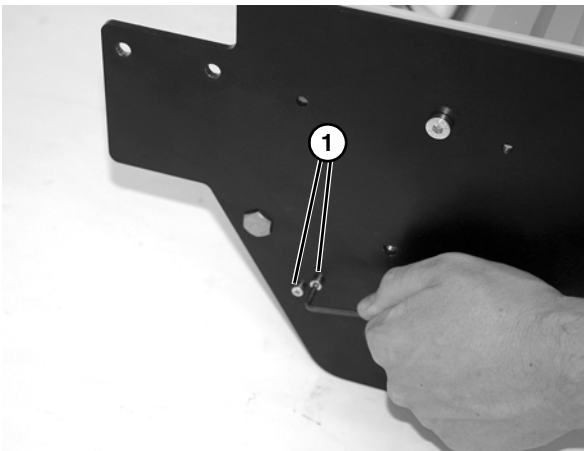
# Preventive Maintenance and Adjustment

7. Remove two socket head screws (**Figure 44, item 1**) and remove plate (**Figure 44, item 2**).



**Figure 44**

8. Remove two socket head screws (**Figure 45, item 1**) on both sides of the conveyor.

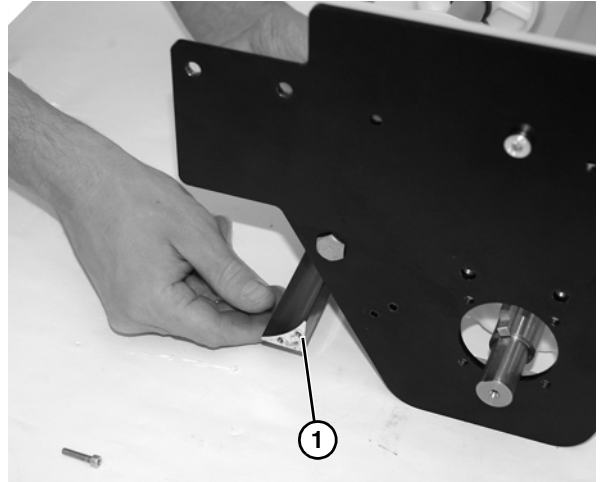


**Figure 45**

9. Remove guard (**Figure 46, item 1**).

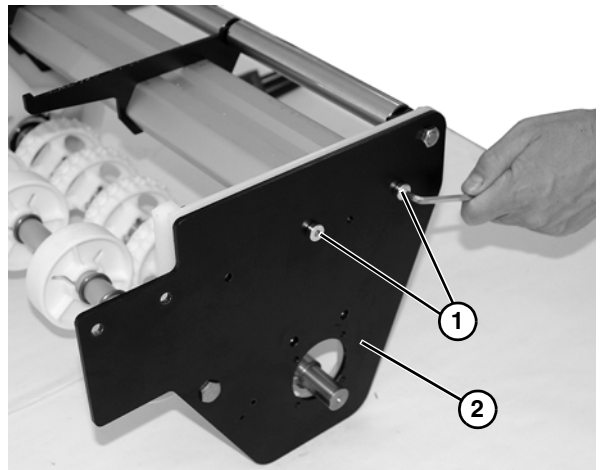
## NOTE

*Note orientation of guard (**Figure 46, item 1**) before removing from end plates.*



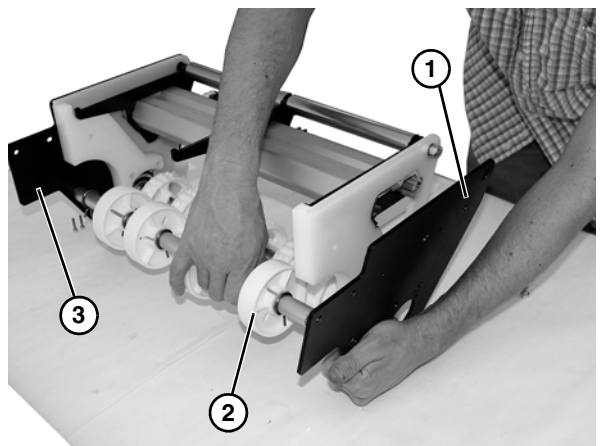
**Figure 46**

10. Remove two socket head screws (**Figure 47, item 1**) from end plate (**Figure 47, item 2**).



**Figure 47**

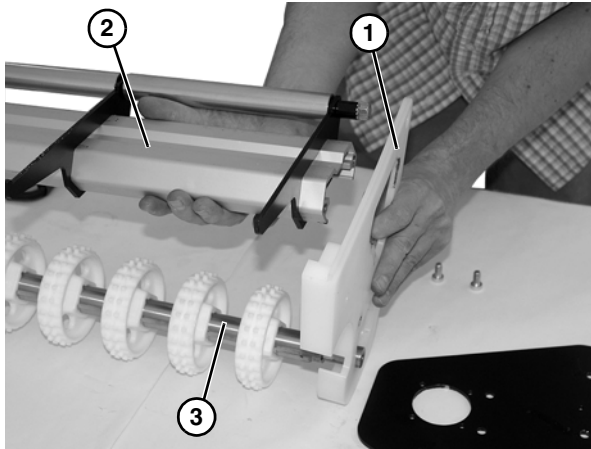
11. Remove end plate (**Figure 48, item 1**), and remove lower roller assembly (**Figure 48, item 2**) from end plate and opposite end plate (**Figure 48, item 3**).



**Figure 48**

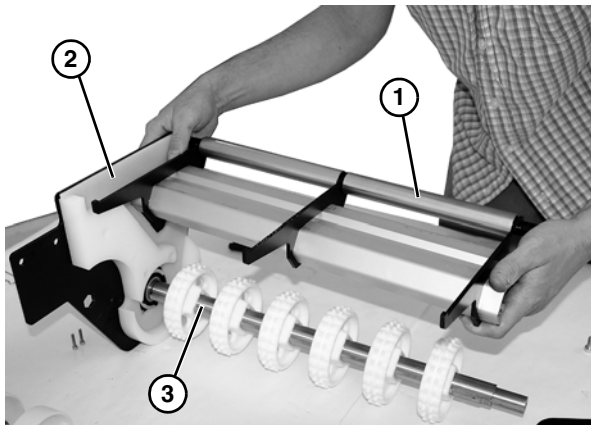
# Preventive Maintenance and Adjustment

12. Remove terminal assembly (**Figure 49, item 1**) from crossmember (**Figure 49, item 2**) and drive spindle (**Figure 49, item 3**). Inspect and replace if worn.



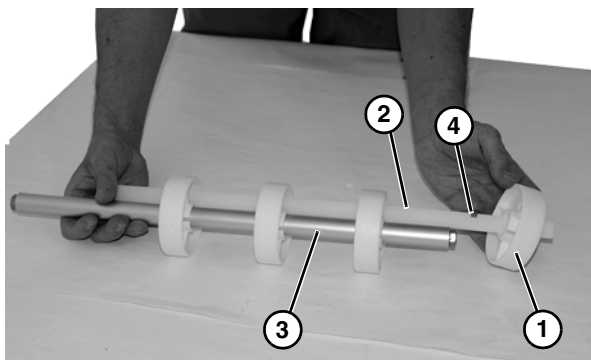
**Figure 49**

13. Remove crossmember (**Figure 50, item 1**) from opposite terminal assembly (**Figure 50, item 2**).



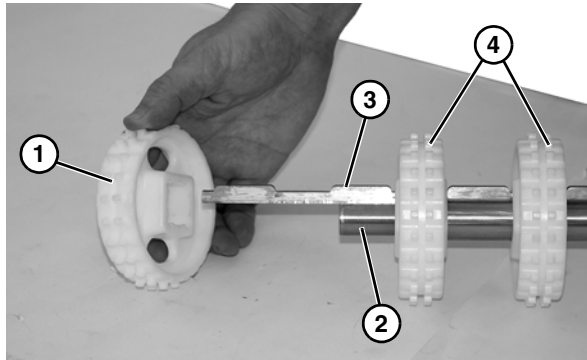
**Figure 50**

14. Remove drive spindle (**Figure 50, item 3**) from terminal assembly (**Figure 50, item 2**).
15. Remove rollers (**Figure 51, item 1**) and alignment bar (**Figure 51, item 2**) from shaft (**Figure 51, item 3**). Inspect and replace if worn.



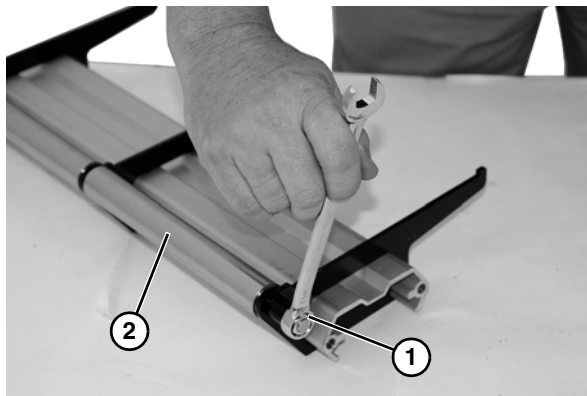
**Figure 51**

16. Reinstall rollers and alignment bar, with each roller lining up with cutout area (**Figure 51, item 4**) on alignment bar.
17. Slide entire sprocket assembly slightly outward, and remove the first sprocket (**Figure 52, item 1**) off the drive spindle (**Figure 52, item 2**) and alignment bar (**Figure 52, item 3**).



**Figure 52**

18. Remove remaining sprockets (**Figure 52, item 4**) off the alignment bar as you slide entire assembly off the drive spindle.
19. To assemble sprockets onto drive spindle, slide one sprocket onto alignment bar and slide assembly onto drive spindle.
20. Install second sprocket and subsequent sprockets (**Figure 52, item 4**) one by one, while sliding entire assembly onto alignment bar (**Figure 52, item 3**) and spindle (**Figure 52, item 2**).
21. Remove nut (**Figure 53, item 1**) from roller axle shaft (**Figure 53, item 2**).



**Figure 53**

# Preventive Maintenance and Adjustment

22. Remove spacer (Figure 54, item 1), plate (Figure 54, item 2), washer (Figure 54, item 3), roller (Figure 54, item 4), second washer (Figure 54, item 5) from axle shaft (Figure 54, item 6).

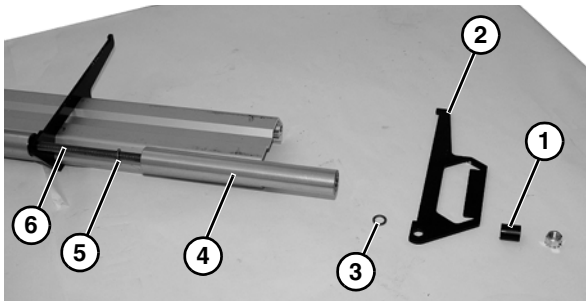


Figure 54

## C – Idler Spindle Removal

1. Be sure the conveyor is supported.
2. On one side of conveyor, remove the two socket head screws (Figure 55, item 1).

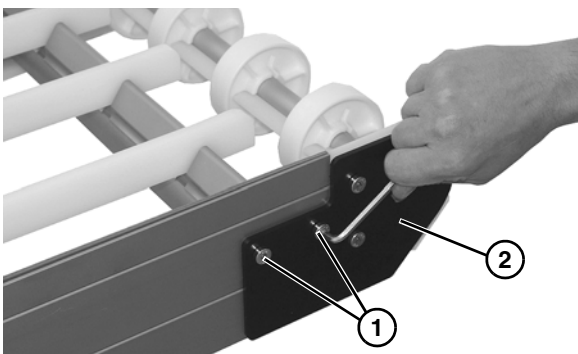


Figure 55

3. Remove end plate (Figure 56, item 1) and roller assembly (Figure 56, item 2) from conveyor frame (Figure 56, item 3) and opposite end plate (Figure 56, item 4).

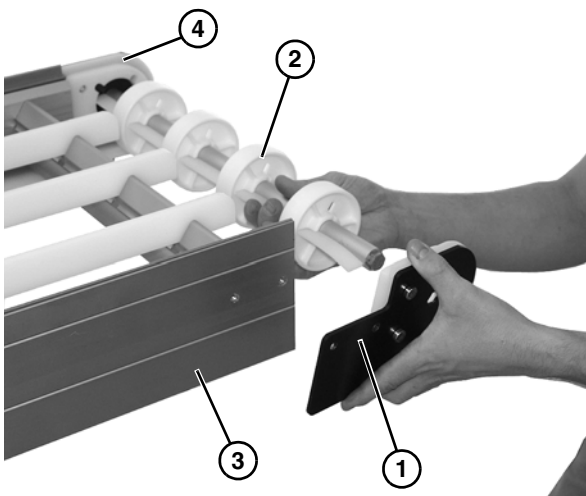


Figure 56

4. Remove rollers (Figure 57, item 1) and alignment bar (Figure 57, item 2) from shaft (Figure 57, item 3). Inspect and replace if worn.

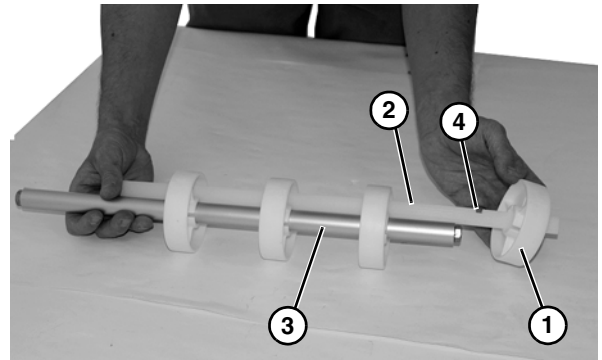


Figure 57

5. Reinstall rollers and alignment bar, with each roller lining up with cutout area (Figure 57, item 4) on alignment bar.
6. Check idler terminal assembly (Figure 58, item 1) for wear. If worn, remove two low head cap screws (Figure 58, item 2) and replace.

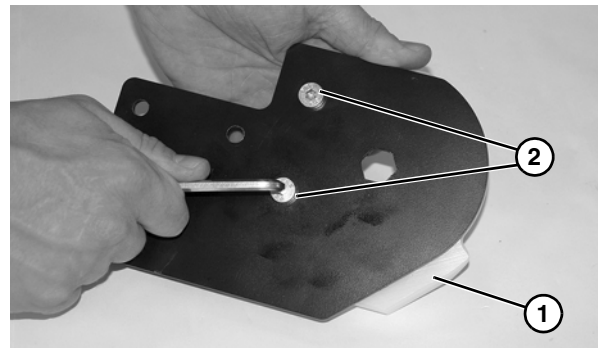


Figure 58

## 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 59, item 1). Repeat on opposite side.

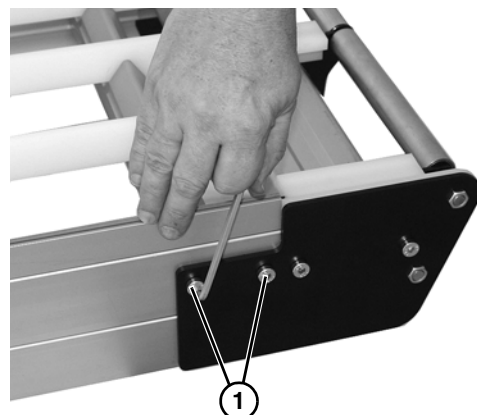
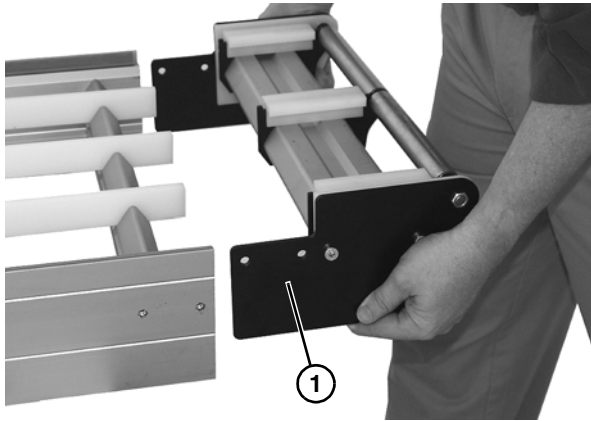


Figure 59

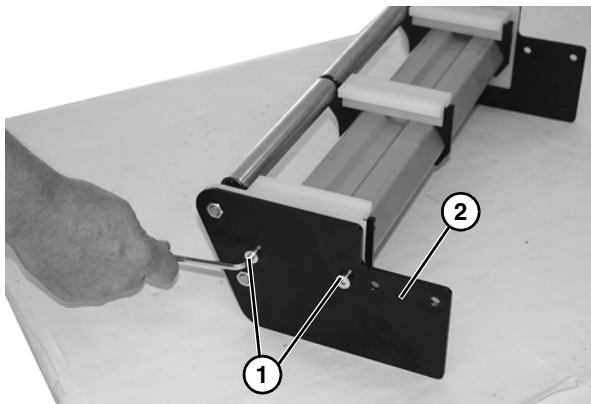
# Preventive Maintenance and Adjustment

3. Remove idler tail assembly (**Figure 60, item 1**).



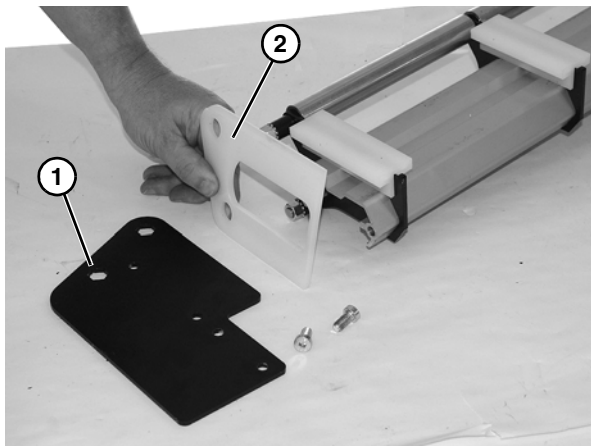
**Figure 60**

4. Remove two low head cap screws (**Figure 61, item 1**) from plate (**Figure 61, item 2**). Repeat procedure on opposite side.



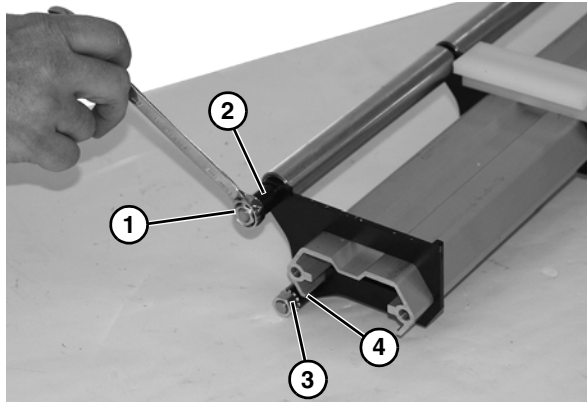
**Figure 61**

5. Remove plate (**Figure 62, item 1**) and transfer plate (**Figure 62, item 2**). Repeat procedure on opposite side. Check transfer plate on each side for wear. If worn, replace.



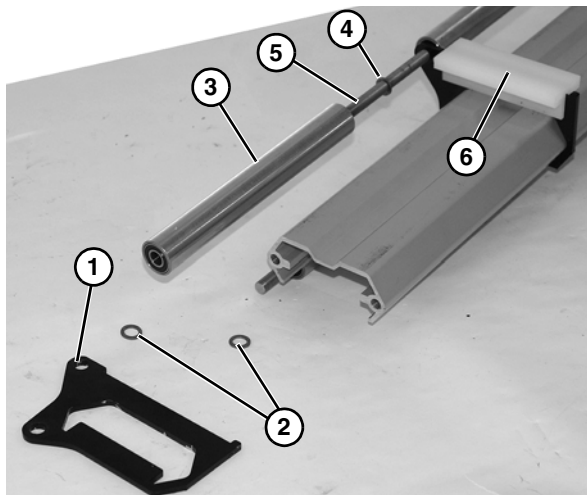
**Figure 62**

6. Remove upper nut (**Figure 63, item 1**) and spacer (**Figure 63, item 2**) from end of axle shaft assembly.



**Figure 63**

7. Remove lower nut (**Figure 63, item 3**) and spacer (**Figure 63, item 4**) from lower axle shaft assembly.
8. Slide the support plate (**Figure 64, item 1**) off of both axle shafts.



**Figure 64**

9. Remove washers (**Figure 64, item 2**) off of lower and upper axle shafts.
10. Remove roller assembly (**Figure 64, item 3**) and washer (**Figure 64, item 4**) from axle shaft (**Figure 64, item 5**).
11. Remove remaining roller assembly components on opposite side.
12. Remove and replace wear guides (**Figure 64, item 6**) if worn.



# Preventive Maintenance and Adjustment

## Spindle Replacement

### Drive Spindle

To replace the drive spindle, reverse the procedure “A - Drive Spindle Removal” on page 14.

### Nose Bar Drive Spindle

To replace the nose bar drive spindle, reverse the procedure “B - Nose Bar Drive Spindle Removal” on page 16.

### Idler Spindle

To replace the idler spindle, reverse the “C - Idler Spindle Removal” on page 19.

### Nose Bar Idler Spindle

To replace the idler spindle, reverse the “D - Nose Bar Idler Spindle Removal” on page 19.

## Bearing Replacement

 <b>WARNING</b>

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

## Drive Bearing Removal and Replacement

 <b>WARNING</b>

<b>Drive shaft keyway may be sharp. HANDLE WITH CARE.</b>

### Removal

1. Turn bearing (**Figure 65, item 1**) to align with slots (**Figure 65, item 2**) in bearing housing. Then remove bearing.

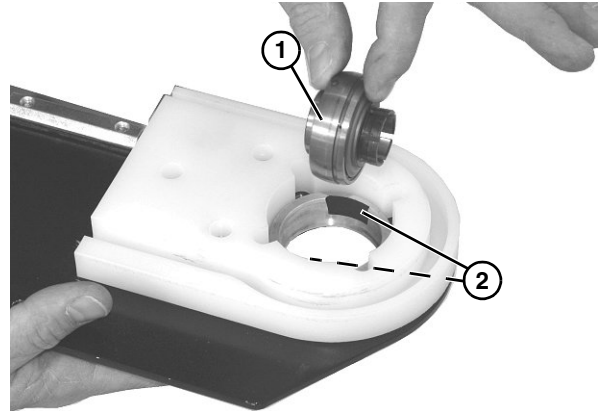


Figure 65

### Replacement

1. Inspect bearing housing bearing surface. If worn or damaged, replace. See “Service Parts” on page 22.
2. Insert bearing (**Figure 66, item 1**) into housing slot: Locate anti-rotation nub (**Figure 66, item 2**) to align with slot (**Figure 66, item 3**), and twist bearing into housing.

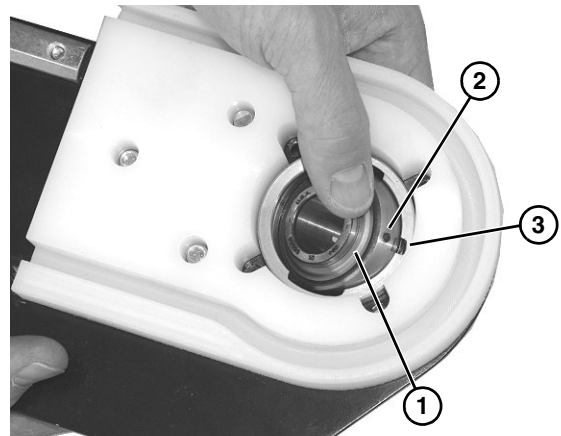



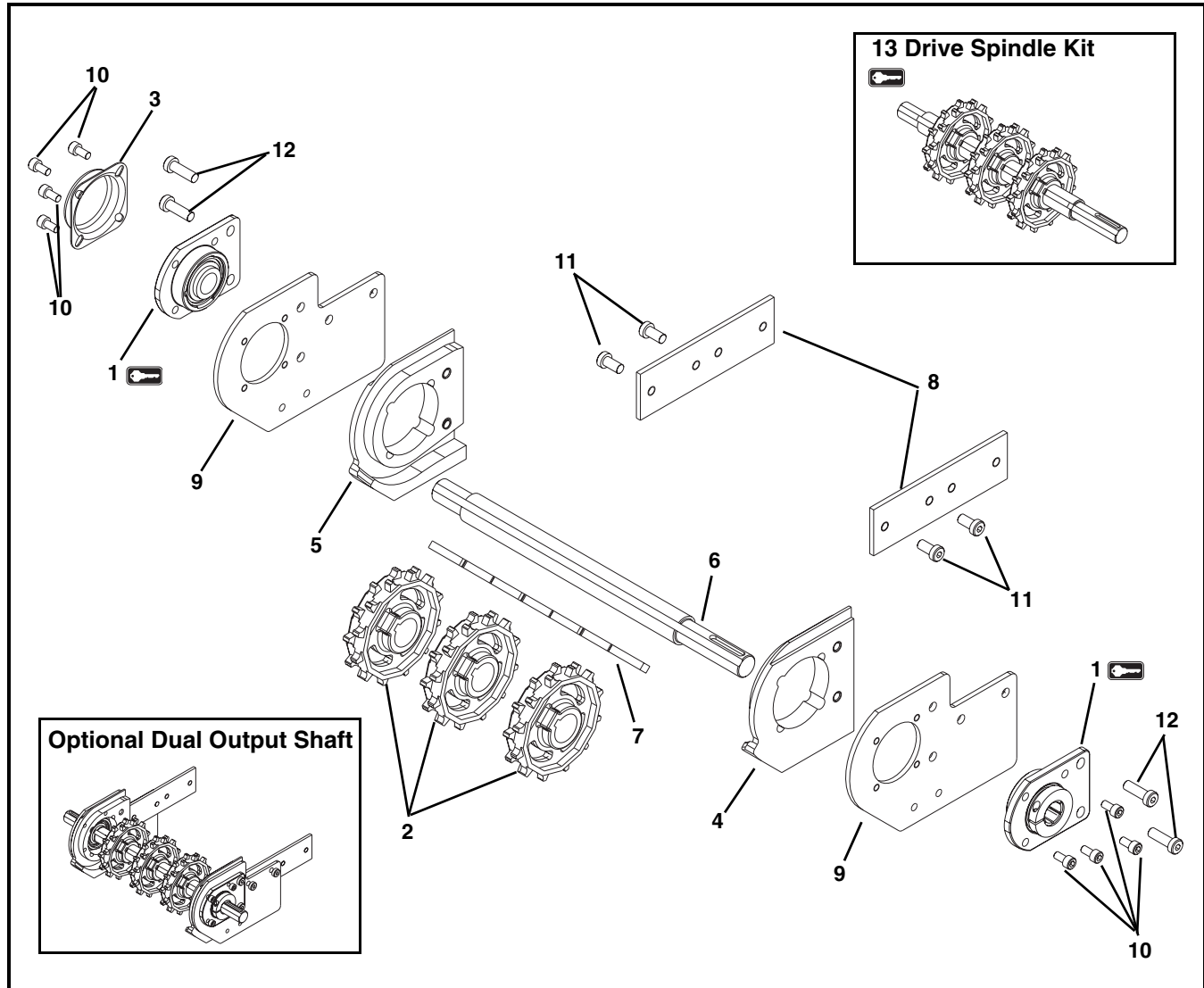
Figure 66


# Service Parts


## NOTE

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

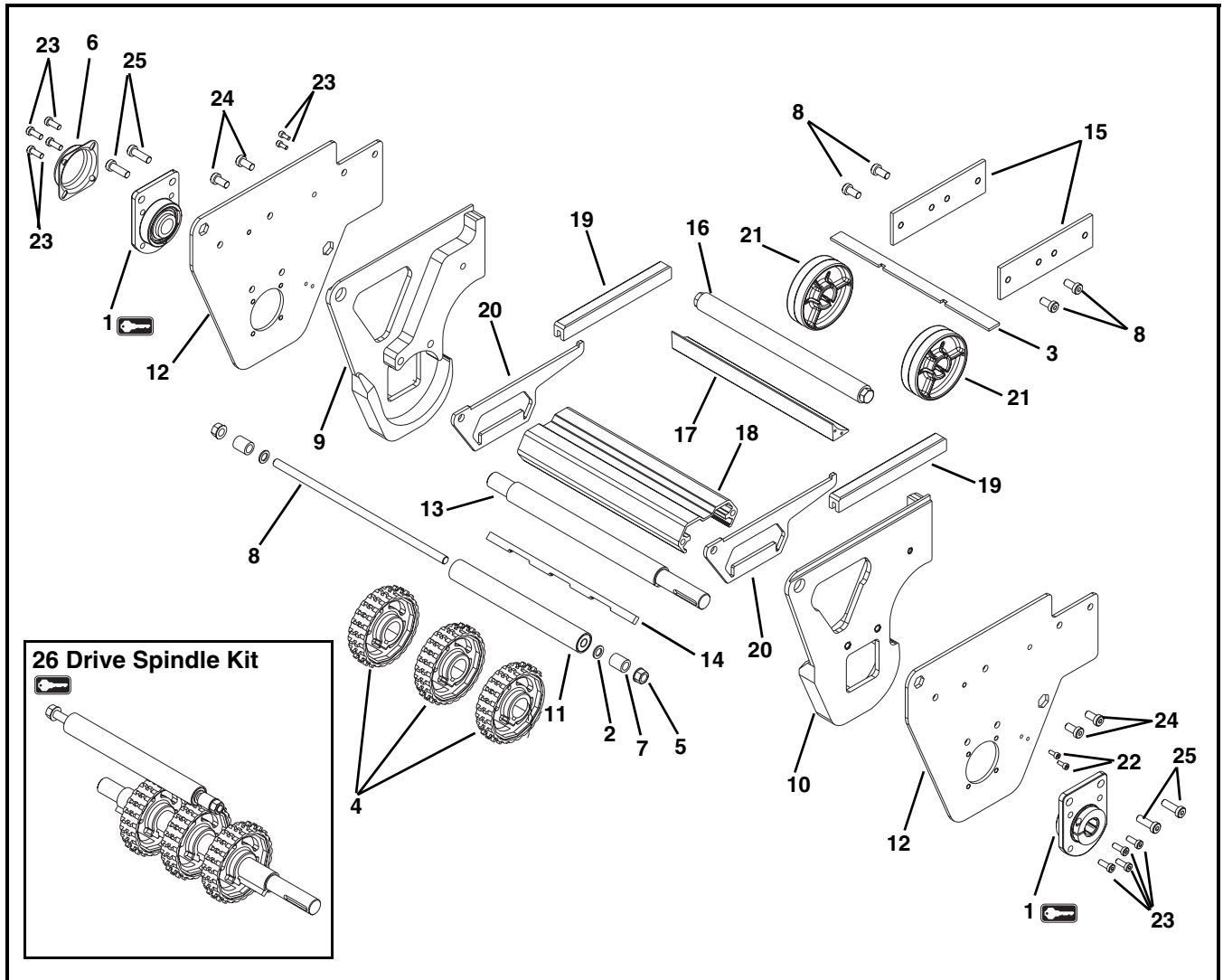
## Drive End Components



Item	Part Number	Description
1 	52BKD	Bearing Kit (Qty. 2)
2	807-1754	Sprocket for 1" Pitch Belt
	807-1761	Sprocket for 0.50" Pitch Belt
3	300139	Shaft Cover
4	352091	Drive Terminal Assembly A Side
5	352092	Drive Terminal Assembly D Side
6	352178- <u>WW</u>	Drive Spindle
	352360- <u>WW</u>	Drive Spindle for Dual Output Shaft
	352180- <u>WW</u>	Sprocket Alignment Key

Item	Part Number	Description
8	352184	Clamp Plate
9	352192	Cover Plate
10	920612M	Socket Head Screw, M6-1.00 x 12 mm
11	920893M	Low Head Cap Screw, M8-1.25 x 16 mm
12	920895M	Low Head Cap Screw, M8-1.25 x 25 mm
13 	53DT- <u>WW</u>	Drive Spindle Kit (Includes items 2, 6 and 7)
<u>WW</u> = Conveyor width reference: 08 – 36 in 02 increments		

## Nose Bar Drive End Components



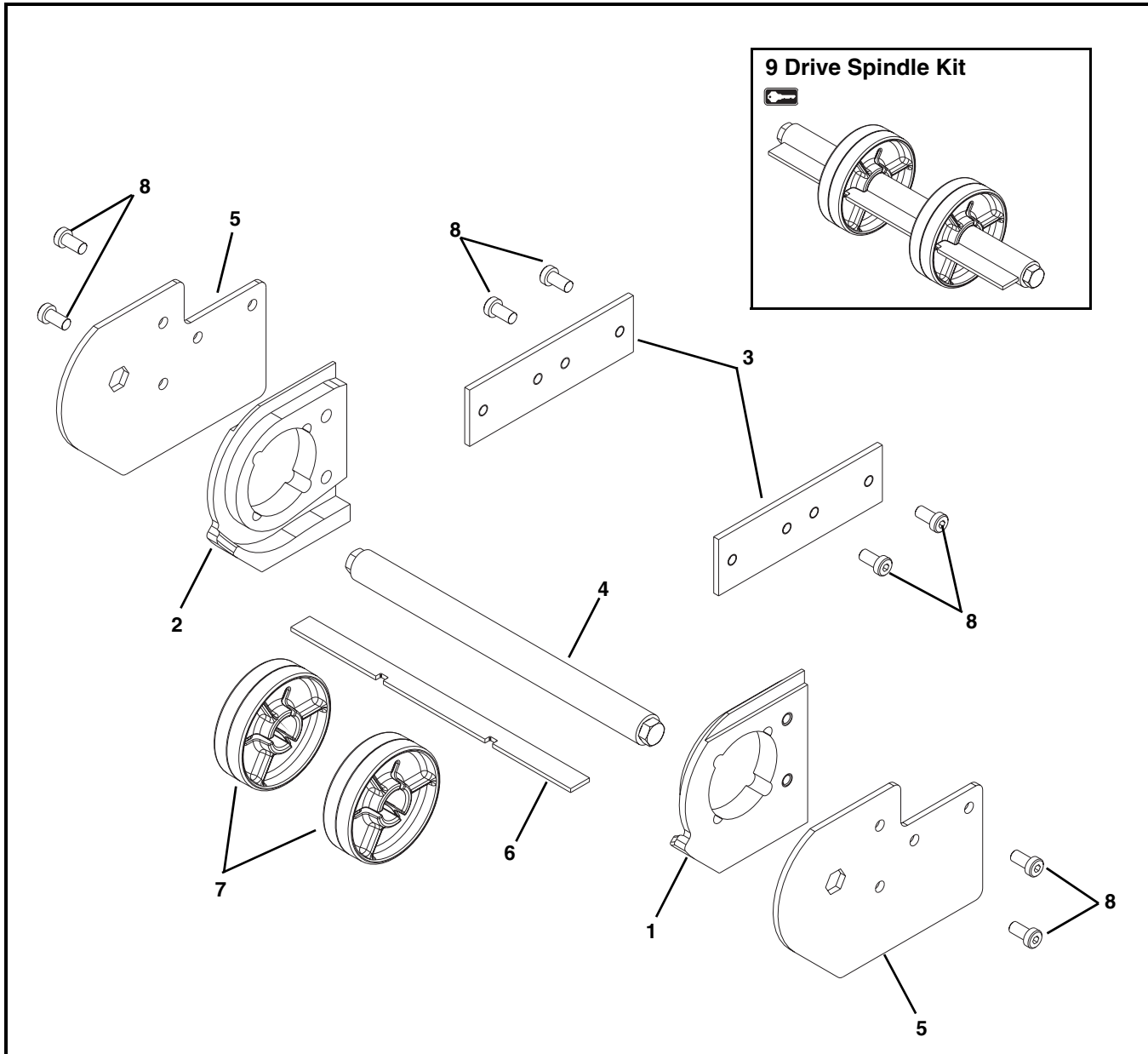
Item	Part Number	Description
1	52BKD	Bearing Kit (Qty. 2)
2	807-1136	Washer
3	352195- <u>WW</u>	Alignment Bar
4	807-1761	Sprocket for 0.50" Pitch Belt
5	910-203	Hex Nut
6	300139	Shaft Cover
7	352125	Spacer
8	352126- <u>WW</u>	Shaft
9	352135	Terminal Assembly Left Hand
10	352136	Terminal Assembly Right Hand
11	352164- <u>WW</u>	Roller Assembly
12	352166	Tail Plate
13	352178- <u>WW</u>	Spindle
14	352180- <u>WW</u>	Sprocket Alignment Key

Item	Part Number	Description
15	352184	Clamp Plate
16	352189- <u>WW</u>	Shaft Assembly
17	352199- <u>WW</u>	Pinch Guard
18	352277- <u>WW</u>	Crossmember
19	352282	Wear Strip
20	352295	Support Plate
21	506296	Idler Puck
22	920410M	Socket Head Screw, M4-0.70 x 10 mm
23	920693M	Low Head Cap Screw, M6-1.00 x 16 mm
24	920893M	Low Head Cap Screw, M8-1.25 x 16 mm
25	920895M	Low Head Cap Screw, M8-1.25 x 25 mm
26	53NBDT- <u>WW</u>	Nose Bar Drive Spindle Kit (Includes items 2, 4, 5, 7, 8, 11, 13 and 14)

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

# Service Parts

## Idler End Components

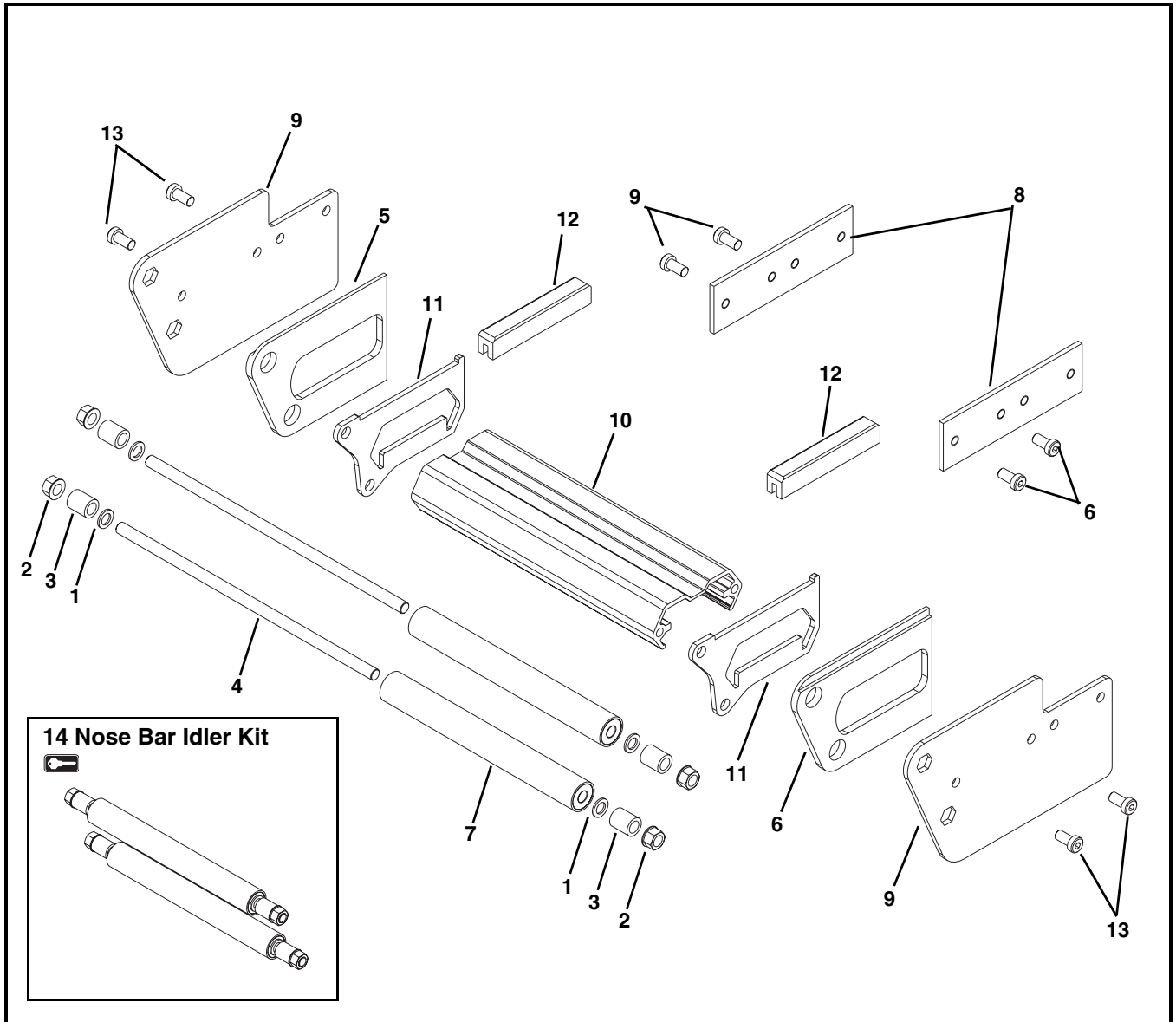


Item	Part Number	Description
1	352091	Terminal Assembly Drive A Side
2	352092	Terminal Assembly Drive D Side
3	352184	Clamp Plate
4	352189- <u>WW</u>	Idler Shaft Assembly
5	352193	Cover Plate
6	352195- <u>WW</u>	Alignment Bar

Item	Part Number	Description
7	506296	Idler Puck
8	920893M	Low Head Cap Screw, M8-1.25 x 16 mm
9	53ET- <u>WW</u>	Idler Spindle Kit (Includes items 4, 6, and 7)

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

## Nose Bar Idler End Components



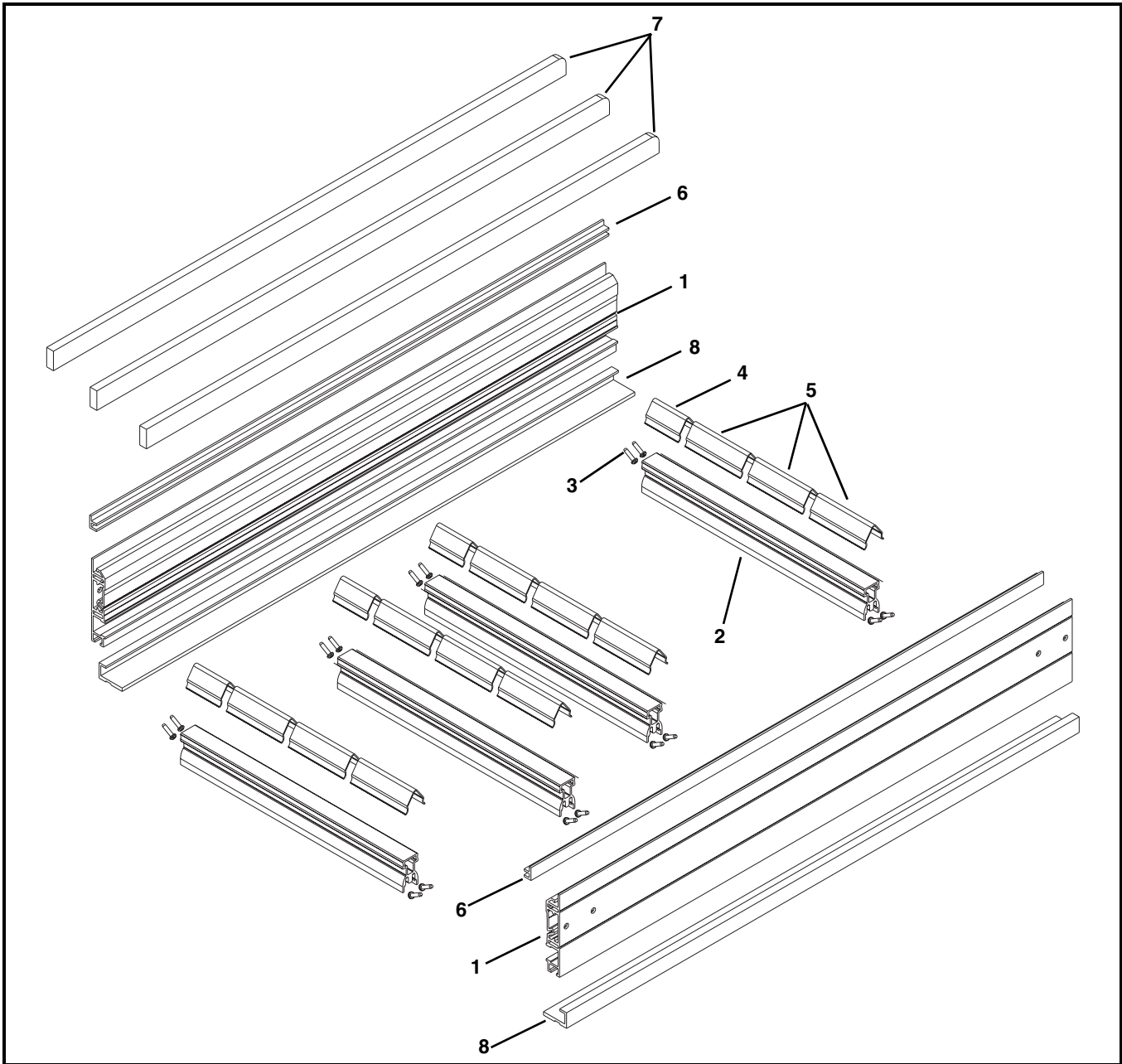
Item	Part Number	Description
1	807-1136	Washer
2	910-203	Hex Nut
3	352125	Spacer
4	352126- <u>WW</u>	Shaft
5	352131	Terminal Transfer Tail Left Hand
6	352132	Terminal Transfer Tail Right Hand
7	352164- <u>WW</u>	Roller Assembly

Item	Part Number	Description
8	352184	Clamp Plate
9	352188	Tail Plate
10	352277- <u>WW</u>	Crossmember
11	352278	Support Plate
12	352279	Wear Strip
13	920893M	Low Head Cap Screw, M8-1.25 x 16 mm
14	53NBT- <u>WW</u>	Nose Bar Idler Kit (Includes items 1 thru 4, and 7)

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

# Service Parts

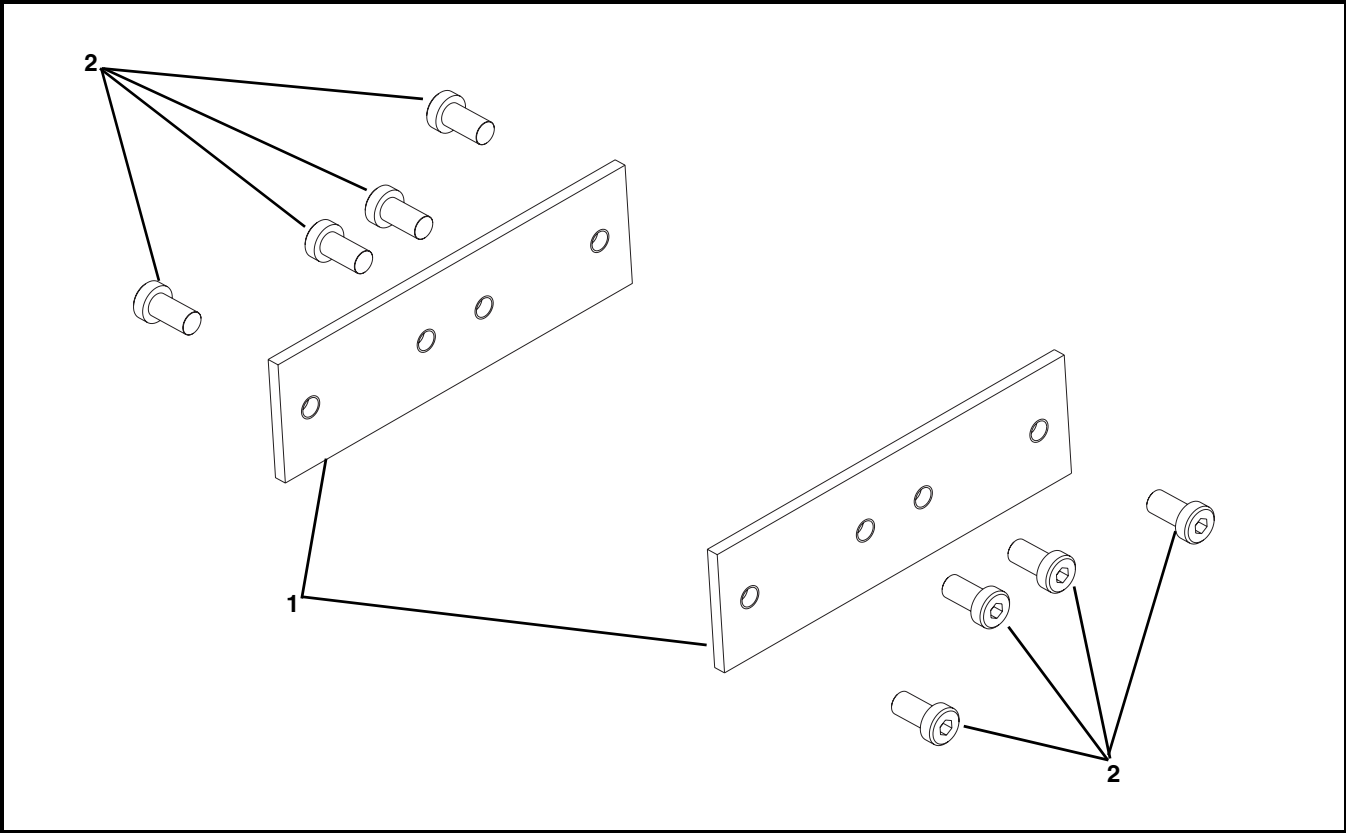
## Frame Assembly



Item	Part Number	Description
1	352171-LLLLL	Side Rail
2	352169-WWW	Center Rail
3	352108	Pan Screw, M5-.80 x 20 mm
4	352172-WWW	First Spacer
5	352172-06A	Spacer for 6" wide Conveyor
	352172-00	Spacer for Conveyors over 6" wide
6	352163-LLLLL	Edge Strip
7	352167-LLLLL	Wear Strip
8	352175-LLLLL	Edge Return Wear Strip
WWW = Conveyor width reference: 08 – 36 in 02 increments		
LLLLL = Length in inches with 2 decimal places.		
Length Example: Length = 95.25" LLLLL = 09525		



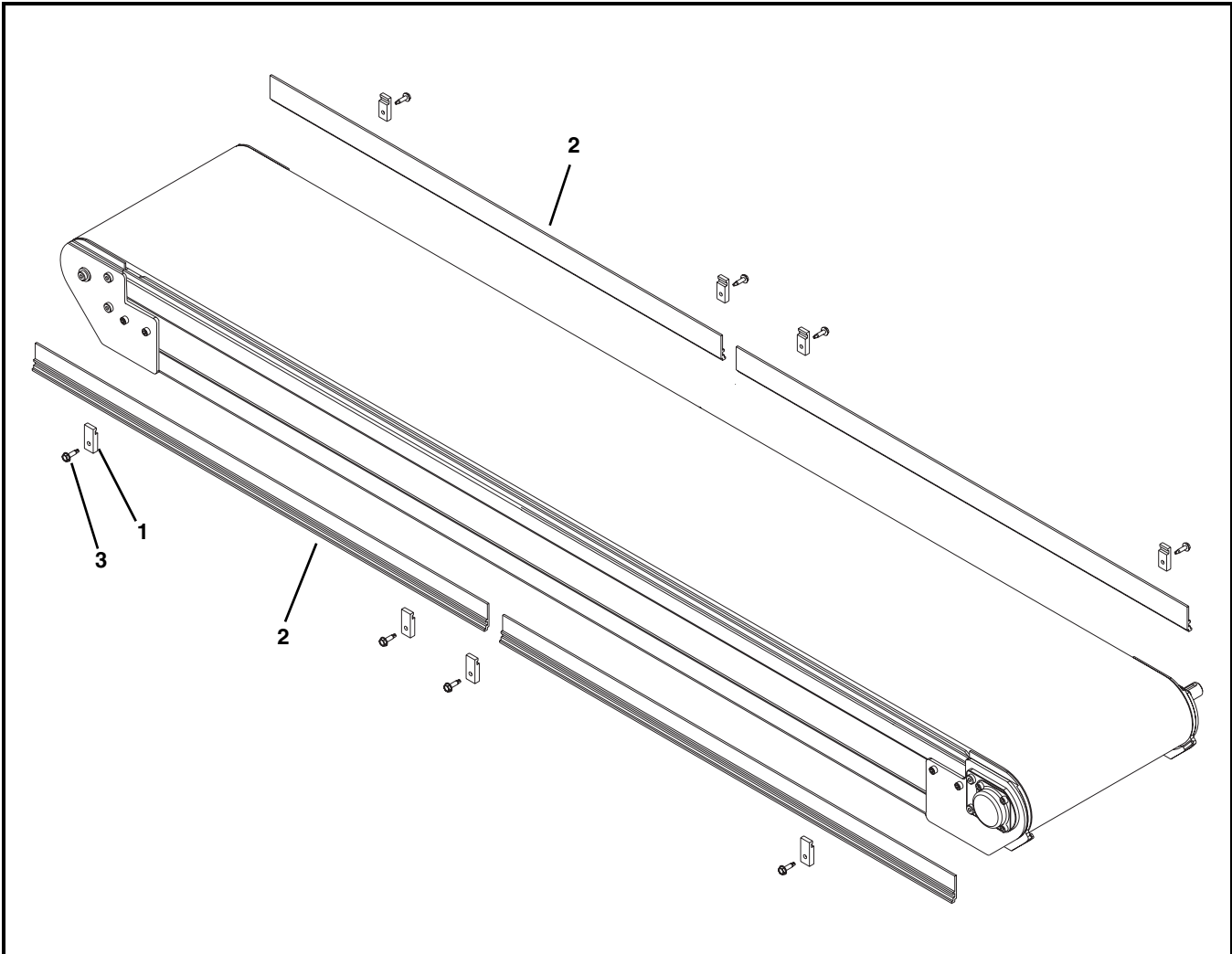
**Connecting Assembly**



Item	Part Number	Description
1	352184	Clamp Plate
2	920893M	Low Head Cap Screw, M8-1.25 x 16 mm

# Service Parts

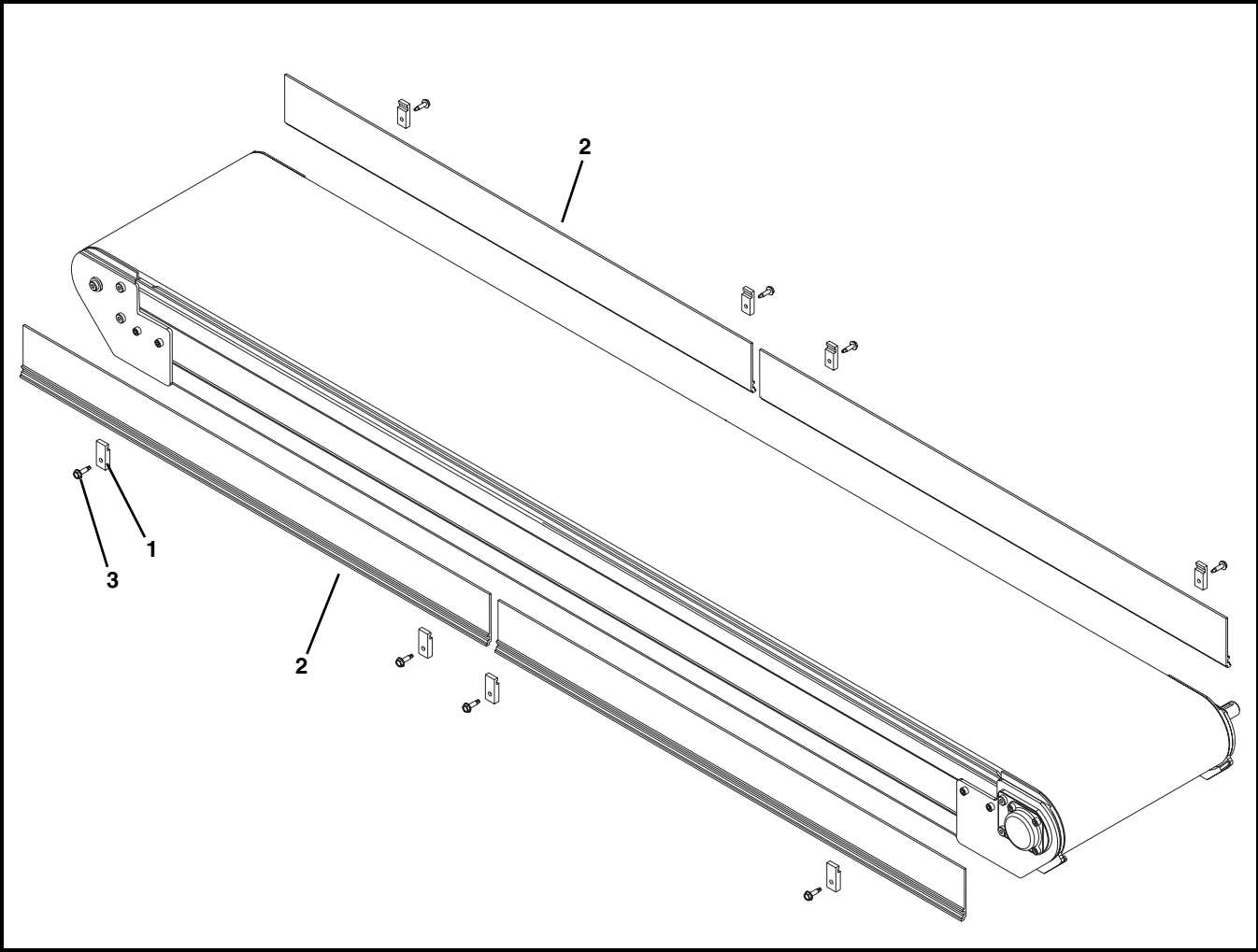
## 1" (25 mm) High Sides



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

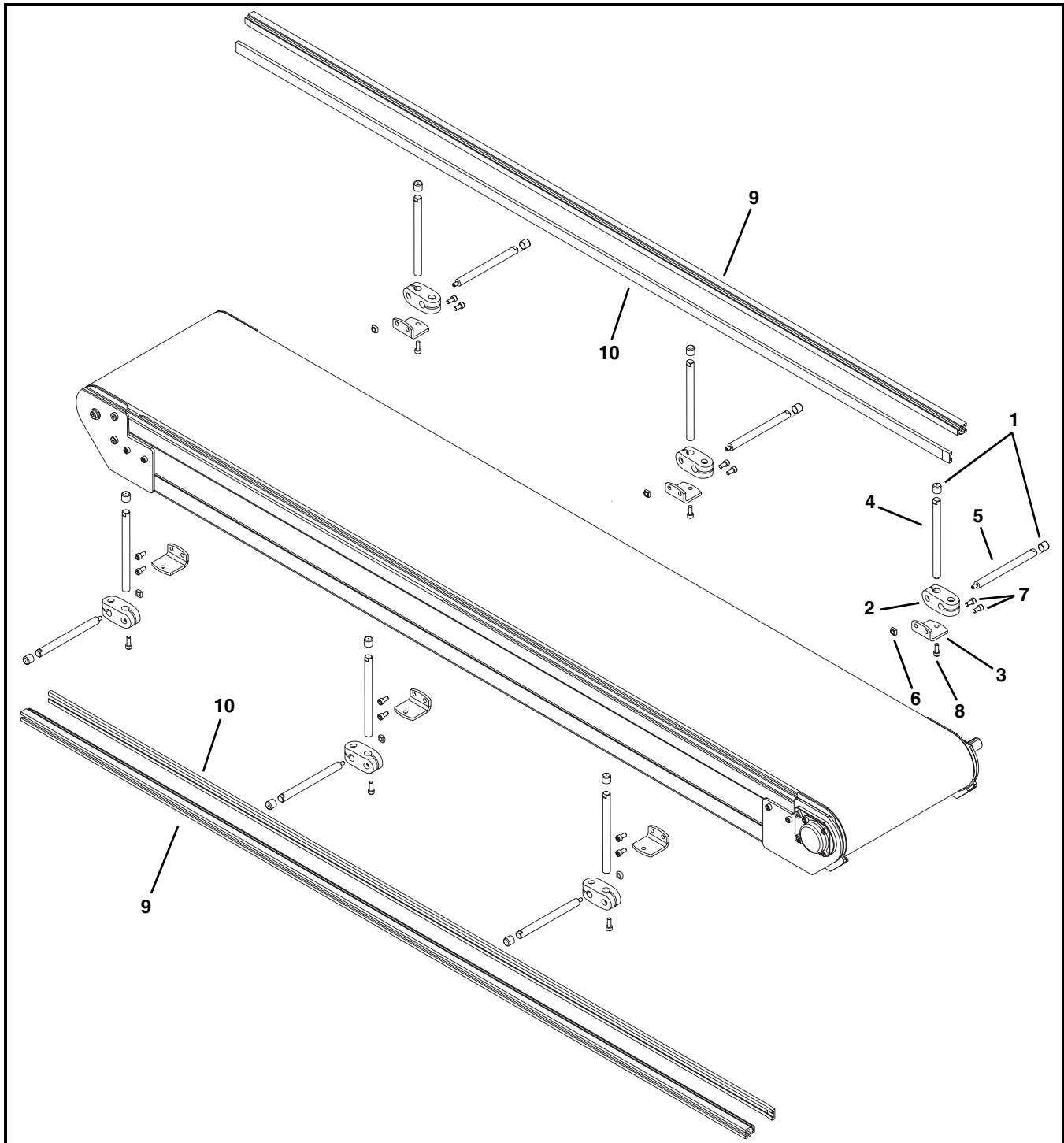
3" (76 mm) High Sides



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

# Service Parts

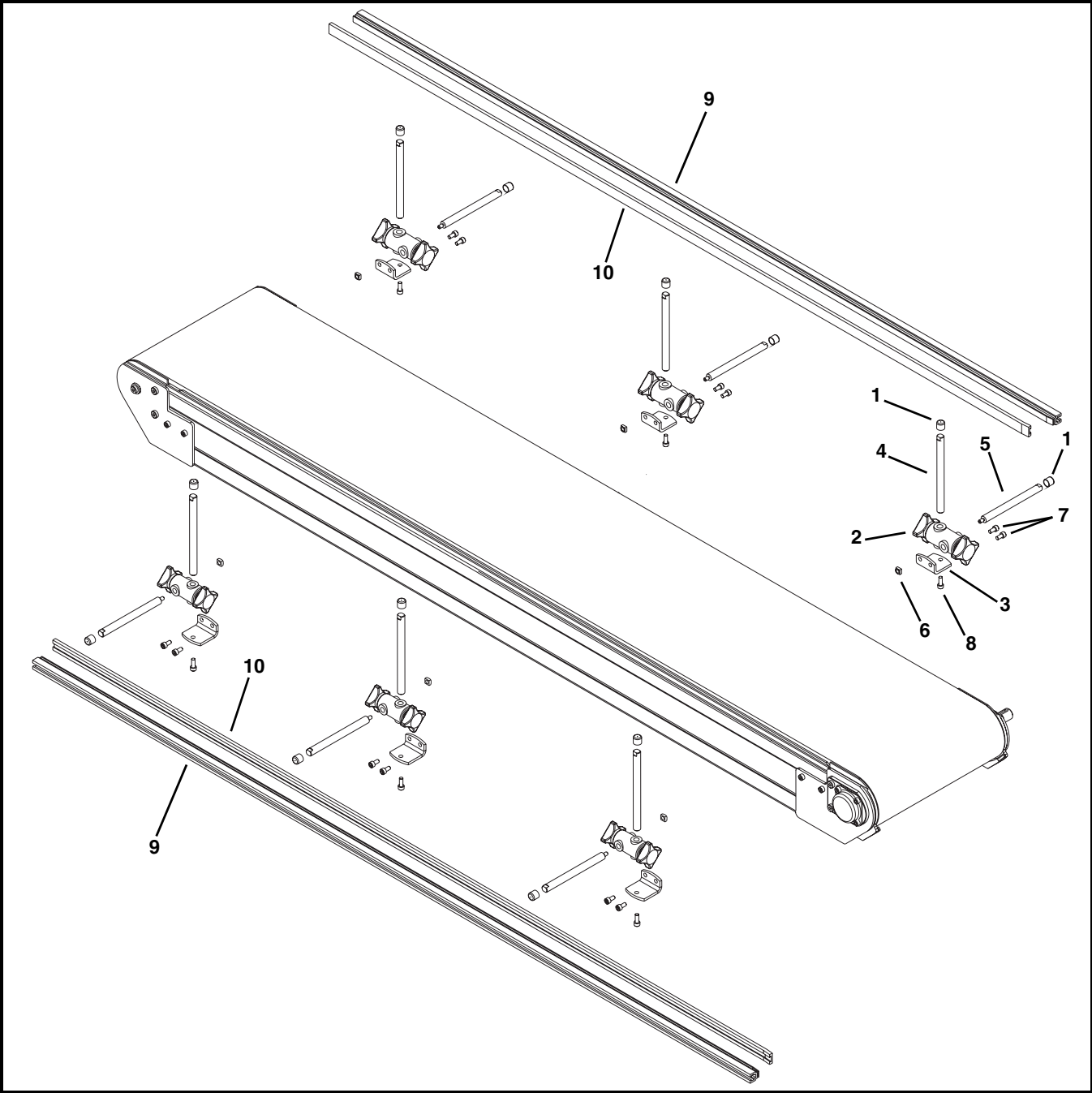
## Fully Adjustable Guiding



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	202028M	Horizontal Mounting Guide Shaft
6	674175MP	Square Nut, M6-1.00

Item	Part Number	Description
7	807-1937	Self-Drilling Hex Head Screw, 1/4-20 x 1"
8	920612M	Socket Head Screw, M6-1.00 x 12 mm
9	460063-LLLLL	Aluminum Profile Guide
10	614068P-LLLLL	Extruded Guide
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	202028M	Horizontal Mounting Guide Shaft

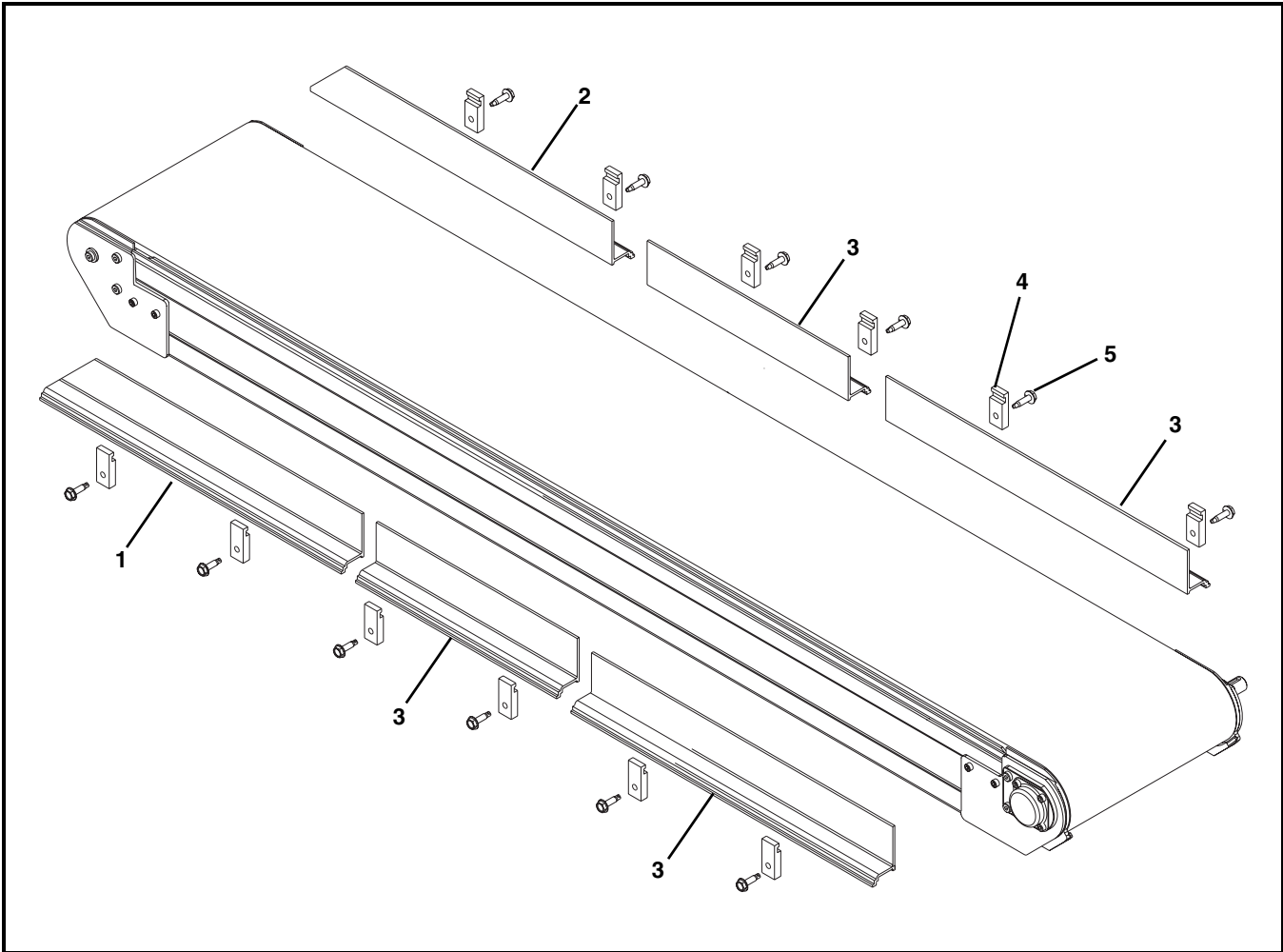
Item	Part Number	Description
6	674175MP	Square Nut, M6-1.00
7	807-1937	Self-Drilling Hex Head Screw, 1/4-20 x 1"
8	920612M	Socket Head Screw, M6-1.00 x 12 mm
9	460063-LLLLL	Aluminum Profile Guide
10	614068P-LLLLL	Extruded Guide

LLLLL = Length in inches with 2 decimal places.

Length Example: Length = 95.25" LLLLL = 09525

# Service Parts

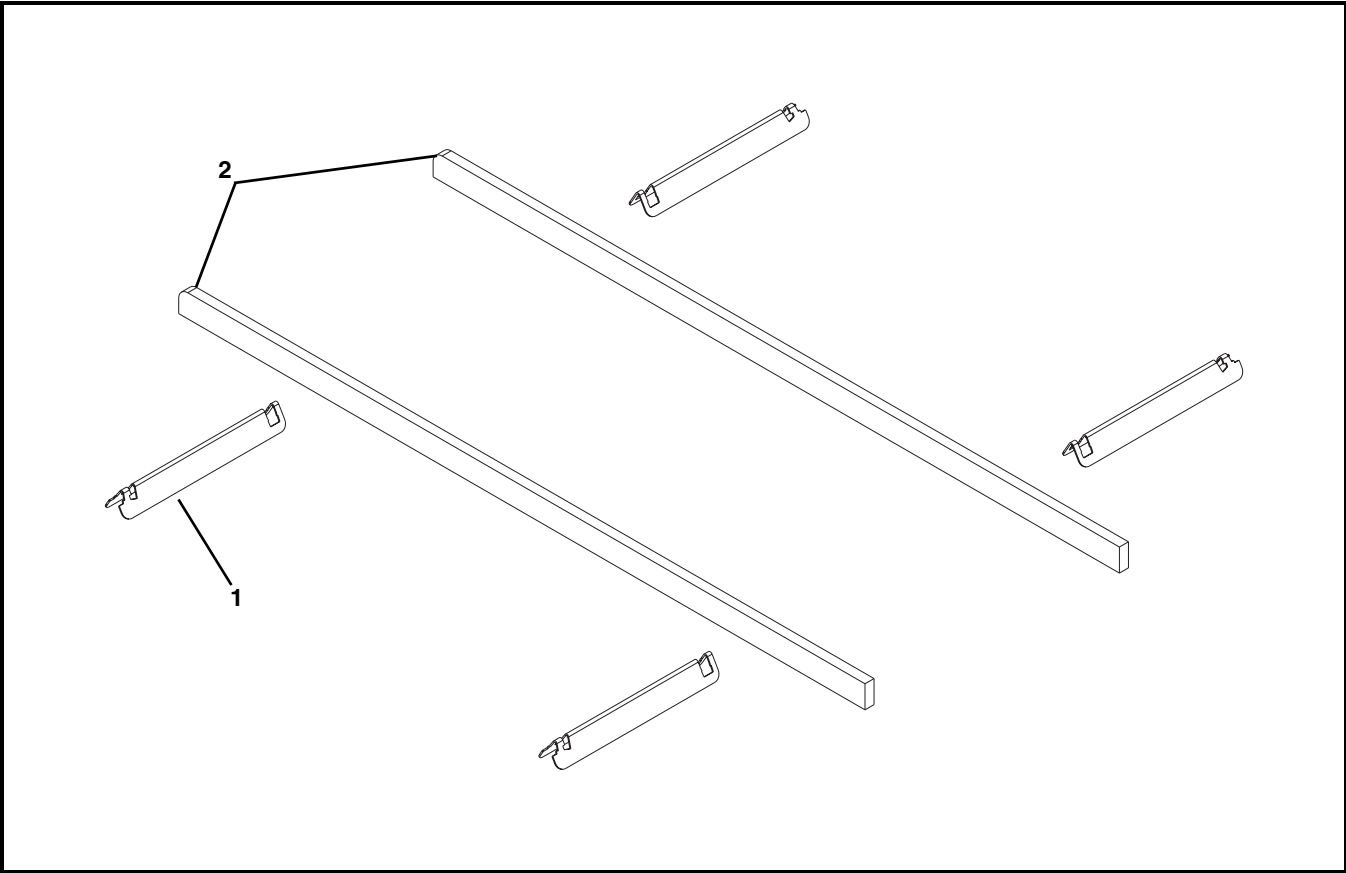
## Cleated Guiding



Item	Part Number	Description
1	382213-LLLLL	Infeed Guiding Right Hand
2	382214-LLLLL	Infeed Guiding Left Hand
3	382200-LLLLL	Infeed Guiding
4	352182	Guide Retaining Clip
5	807-1937	Self-Drilling Hex Head Screw, 1/4-20 x 1"
LLLLL = Length in inches with 2 decimal places.		
Length Example: Guiding Length = 95.25" LLLLL = 09525		



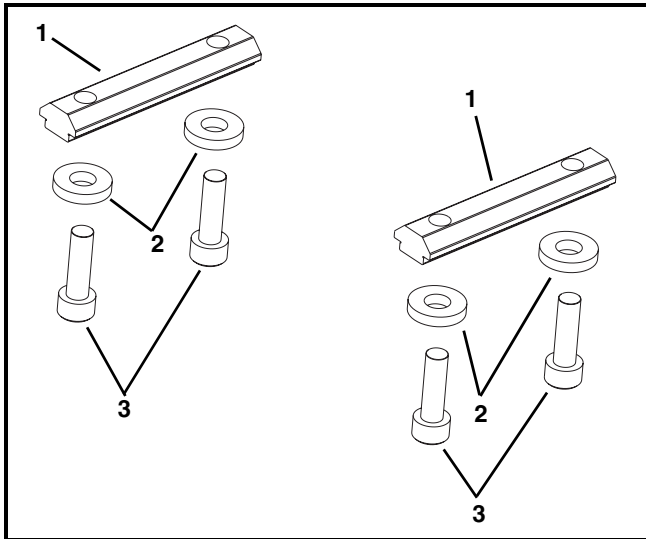
**Flat Belt Returns**



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		

# Service Parts

## 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. Dornier will ship chain kits that are of a reasonable length fully assembled

### Example:

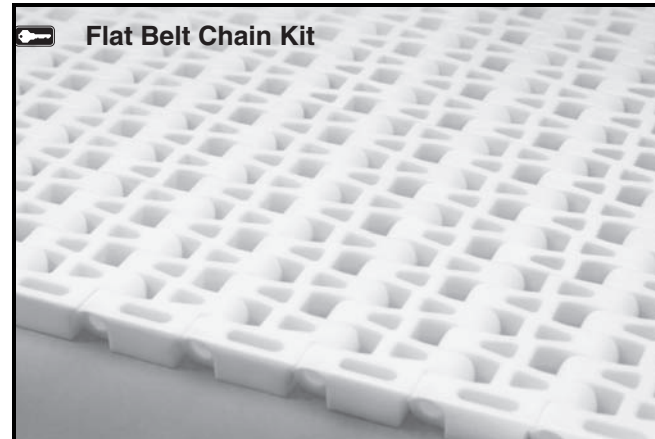
Overall chain length = 42' 5" (rounded up = 43')

Order: Qty (43) of 52BB-WW

BB = Chain reference number

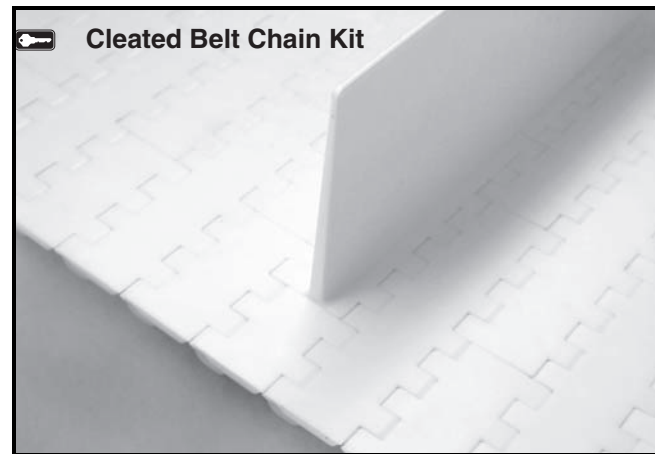
WW = Conveyor width ref: 08-32 in 02 increments

## Flat Belt Chain Repair Kit



Item	Part Number	Description
1	52 <u>BB-WW</u>	Flat Belt Chain Repair Kit (Includes 1 ft (305 mm) of flat belt chain and assembly pins)
<u>BB</u> = Chain Reference number		
<u>WW</u> = Conveyor width ref: 08 - 32 in 02 increments		

## Cleated Belt Chain Repair Kit



Item	Part Number	Description
1	52 <u>BB-WW</u>	Cleated Belt Chain Repair Kit (Includes cleats on 1 ft (305mm) of belt chain and assembly pins)
<u>BB</u> = Chain Reference number		
<u>WW</u> = Conveyor width ref: 08 - 32 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.

## Conveyors and conveyor accessories

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

## Parts

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

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

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

For a copy of Dorner's Warranty, contact factory, distributor, service center or visit our website at [www.dorner.com](http://www.dorner.com).

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



Dorner Mfg. Corp. reserves the right to change or discontinue products without notice. All products and services are covered in accordance with our standard warranty. All rights reserved. © Dorner Mfg. Corp. 2010

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