

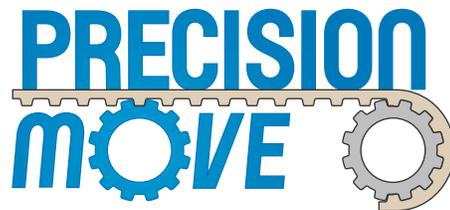


# 3200 Series Version 2 Precision Move Conveyors

Installation, Maintenance & Parts Manual



Fixtured Conveyor



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## Introduction

### IMPORTANT

*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.

Dorner's Limited Warranty applies.

Dorner 3200 series conveyors are covered by Patent Numbers 5,156,260, 6,871,737B2, 6,910,571B1, 6,971,509B2, and corresponding patents and patent applications in other countries.

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

**⚠ WARNING**

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

**⚠ DANGER**



Climbing, sitting, walking or riding on conveyor will cause severe injury. **KEEP OFF CONVEYORS.**

**⚠ DANGER**



**DO NOT OPERATE CONVEYORS IN AN EXPLOSIVE ENVIRONMENT.**

**⚠ WARNING**



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

**⚠ WARNING**



Gearmotors may be **HOT**. **DO NOT TOUCH** Gearmotors.

**⚠ WARNING**



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.

**⚠ WARNING**



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

**⚠ WARNING**



Moving parts can cut or crush. Keep hands clear. **INSTALL GUARDING PRIOR TO OPERATION.**

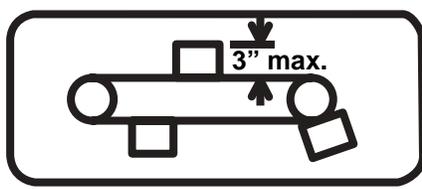
**⚠**

Due to the wide variety of set ups and applications, point of installation guarding is the responsibility of the end user.

**⚠ WARNING**



Moving parts can cut or crush. **DO NOT** exceed 3" high fixtures.

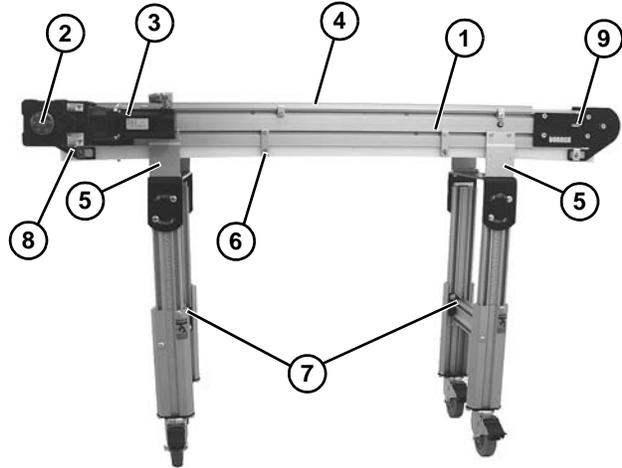


# Product Description

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

## Typical Components:

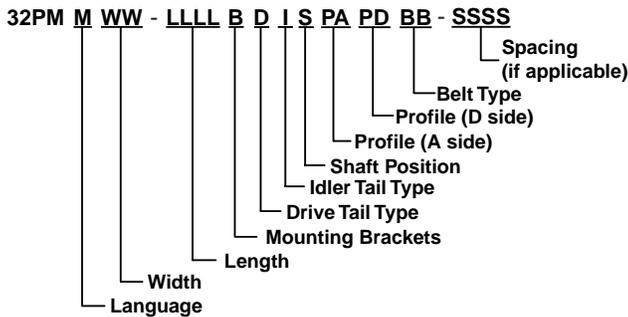
1	Conveyor
2	Gearmotor Mounting Package
3	Gearmotor
4	Guiding & Accessories
5	Mounting Brackets
6	Return Rollers
7	Support Stand
8	Drive End
9	Idler/Tension End



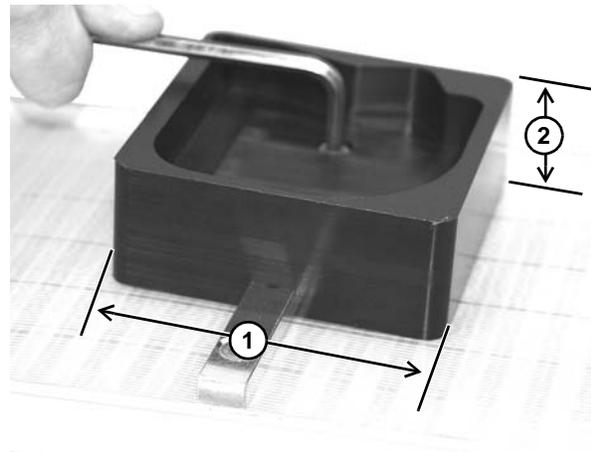
**Figure 1**

# Specifications

## Models:



## Adding Pallets to Belt



**Figure 2**

\* See Ordering and Specifications Catalog for details.

Center drive location to be at center of first frame section.  
Minimum center drive conveyor length is 36" (91 cm).

- Maximum width of Pallet = 3" (**Figure 2, item 1**)
- Maximum height of Pallet = 3" (**Figure 2, item 2**)
- Maximum weight of Empty Pallet = 1.00 lb per belt insert
- Maximum speed of pallet around end roller = 270 ft/min.

# Specifications

## Conveyor Supports:

### Maximum Distances:

1 = 24" (610 mm) (Drive End)

2 = 12 ft (3658 mm)

3 = 36" (914 mm) (Idler End)

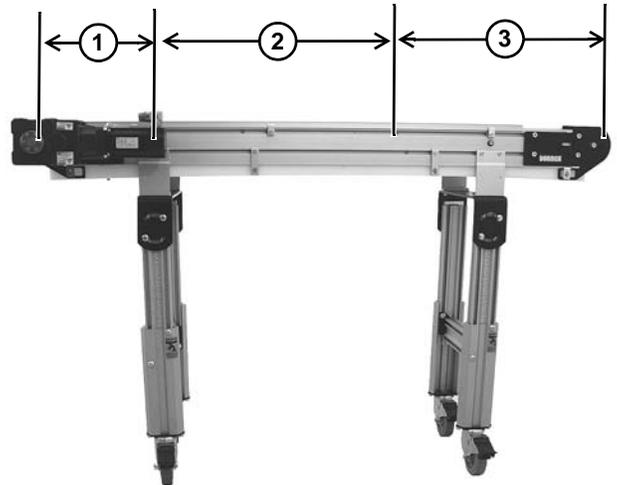


Figure 3

## Specifications:

Conveyor Width Reference (WWW)	04	06	08	10	12	14	16	18
Conveyor Belt Width	3.75" (95 mm)	6" (152 mm)	8" (203 mm)	10" (254 mm)	12" (305 mm)	14" (355 mm)	16" (406 mm)	18" (457 mm)
Maximum Conveyor Load* (See NOTE Below)	200 lb (91 kg)	480 lb (217 kg)	480 lb (217 kg)	480 lb (217 kg)	750 lb (340 kg)	750 lb (340 kg)	750 lb (340 kg)	750 lb (340 kg)
Conveyor Startup Torque*	8 in-lb (0.9 Nm)	10 in-lb (1.1 Nm)	12 in-lb (1.4 Nm)	15 in-lb (1.7 Nm)	18 in-lb (2.0 Nm)	21 in-lb (2.4 Nm)	24 in-lb (2.7 Nm)	27 in-lb (3.1 Nm)
Conveyor Length Reference (LLLL)	0200 to 5000 in 0001 increments							
Conveyor Length	2 ft (610 mm) to 50 ft (15240 mm) in 0.12" (0.31 mm) increments							
Belt Travel	10.5" (266 mm) per revolution of pulley							
Maximum Belt Speed*	517 ft/minute (157 m/minute) for flat belt and 270 ft/minute (82 m/minute) for fixtured belt							
Drive Sprocket	0.5" pitch, 21 tooth, 3.3423" pitch diameter							

\* See Ordering and Specifications Catalog for details.

### NOTE

Maximum conveyor loads based on:

- Non-accumulating product
- Product moving towards gearmotor
- Conveyor being mounted horizontal

# Installation

## NOTE

Conveyor **MUST** be mounted straight, flat and level within confines of conveyor. Use a level (**Figure 4, item 1**) for setup.

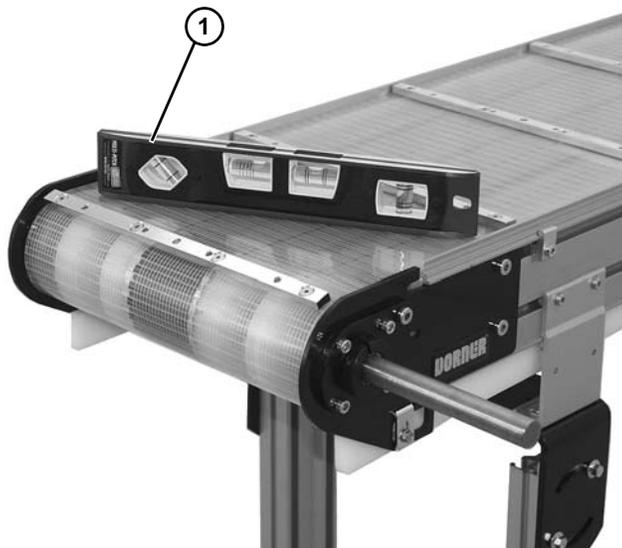


Figure 4

## Required Tools

- Hex-key wrenches:
  - 4 mm, 5 mm, 6 mm
- Level
- Torque wrench

## Recommended Installation Sequence

- Assemble conveyor (if required)
- Attach mounting brackets to conveyor
- Attach conveyor to stands
- Install return rollers on conveyor (optional)
- Mount gearmotor mounting package (see accessory instructions)
- Attach guides/accessories (see page 22 through 37 of “Service Parts” section for details)

## Conveyors Up to 13 ft (3962 mm)

No assembly is required. Install mounting brackets and return rollers. Refer to “Mounting Brackets” on page 7 and “Return Rollers” on page 10. Install stands where applicable.

## Conveyors Longer Than 13 ft (3962 mm)

### Installation Component List:

1	Conveyor frame
2	Section Label

1. Locate and arrange conveyor sections (**Figure 5, item 1**) by section labels (**Figure 5, item 2**).

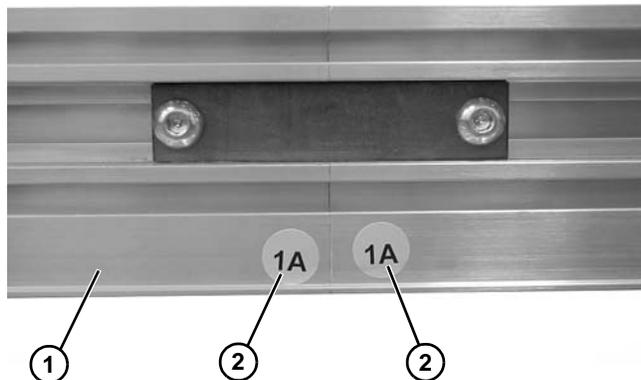


Figure 5

2. On tension end of the conveyor, identified by the pinion access slot (**Figure 6, item 1**): On both sides of the conveyor, loosen the two tail clamp bolts (**Figure 6, item 2**), and push head plate assembly (**Figure 6, item 3**) inward.

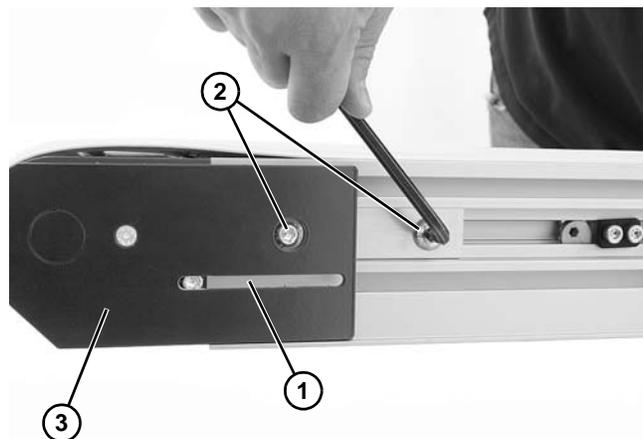
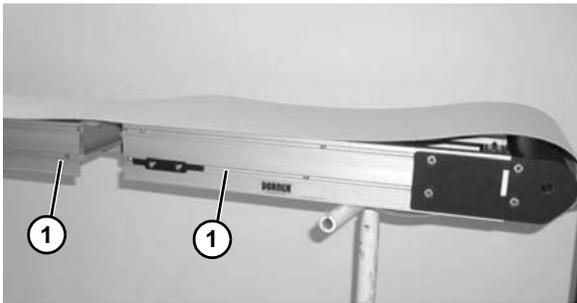


Figure 6

- Roll out conveyor belt and place conveyor frame sections (**Figure 7, item 1**) into belt loop.

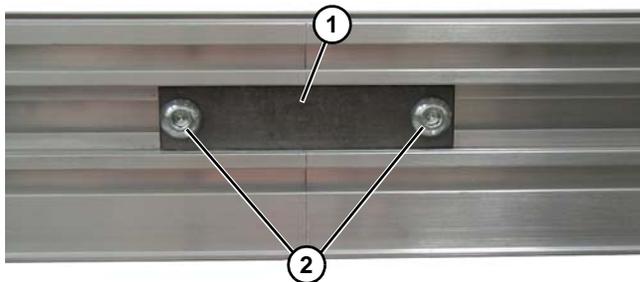


**Figure 7**

**⚠ WARNING**

**SUPPORT CONVEYOR SECTIONS PRIOR TO CONNECTING FRAME SECTIONS.**

- Join conveyor sections and install connector brackets (**Figure 8, item 1**) and screws (**Figure 8, item 2**) on both sides as indicated. Tighten screws to 60 in-lb (7 Nm).



**Figure 8**

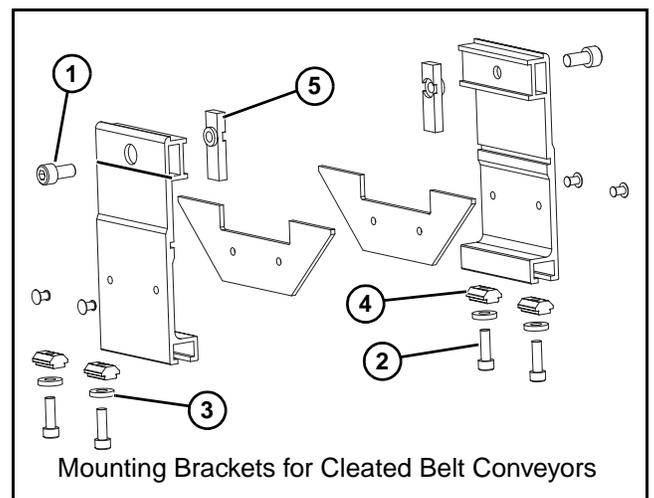
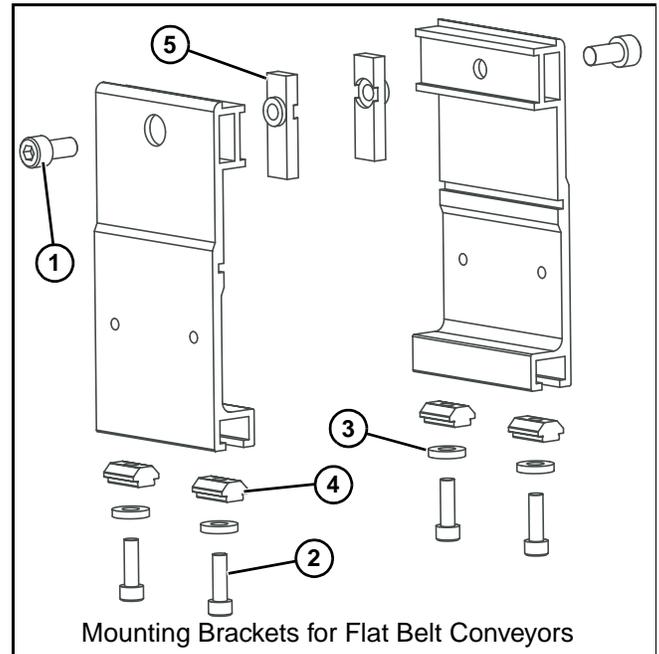
**NOTE**

*For Conveyors longer than 20 ft (6096 mm) use the process outlined in the “Conveyor Belt Tensioning” section on page 14. Extend the Drive End Tail Assembly.*

- Tighten conveyor belt, refer to “Conveyor Belt Tensioning” on page 14.
- Install mounting brackets and return rollers. Refer to “Mounting Brackets” on page 7 and “Return Roller” on page 10.

## Mounting Brackets

- Locate brackets. Exploded views shown in (**Figure 9**)



**Figure 9**

- Remove screws (**Figure 9, item 1 & 2**), washers (**Figure 9, item 3**), nuts (**Figure 9, item 4**) and twist nuts (**Figure 9, item 5**) from brackets.

# Installation

9. Insert twist nuts (Figure 9, item 5) into conveyor side slots (Figure 10, item 1). Fasten brackets (Figure 10, item 2) to conveyor with mounting screw (Figure 10, item 3).

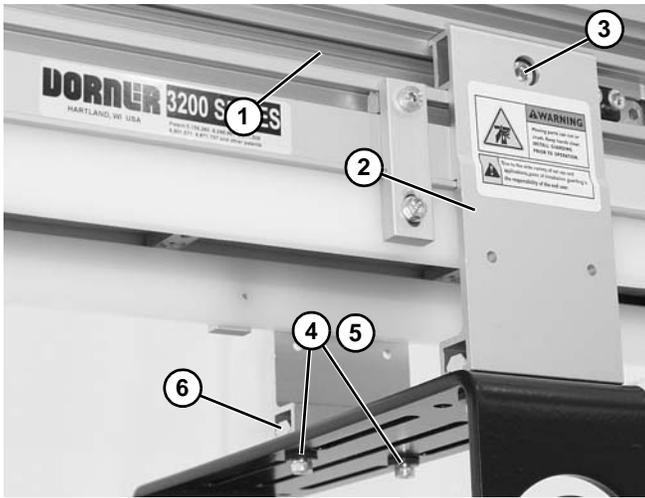


Figure 10

## NOTE

Mounting brackets for flat belt conveyors shown.

## WARNING



Moving parts can cut or crush. Keep hands clear when raising conveyor frame onto stands.

10. Fasten brackets to support stand with mounting screws (Figure 10, item 4), washers (Figure 10, item 5) and nuts (Figure 10, item 6).
11. Tighten screws (Figure 10, item 3 & 4) to 60 in-lb (7 Nm).

## Installation of Pallet to the Belt

There are two methods available to mount pallets to the belt:

- Using Fixture Mounting Bars
- Attaching Directly to the Conveyor Belt

### Using Fixture Mounting Bars

1. Loosen conveyor belt.
2. Install inserts (Figure 11, item 1) from underside of belt.

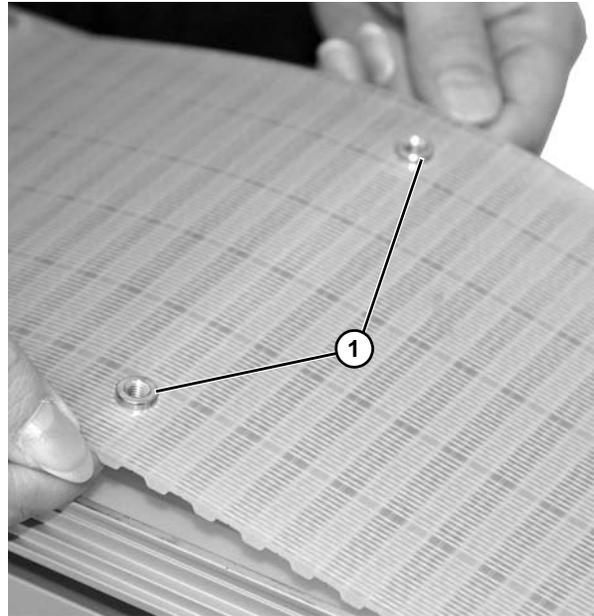


Figure 11

3. Install belt fixture (Figure 12, item 1).
4. Attach with M5 flat head screws (Figure 12, item 2). Tighten to 35 in-lb (4 Nm).

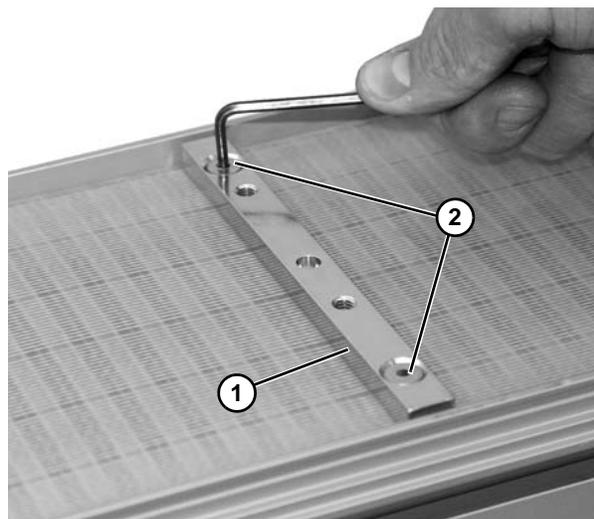


Figure 12

5. Install pallet (Figure 13, item 1) onto belt fixture (Figure 13, item 2). Attach with M6 screw(s) (Figure 13, item 3). Tighten to 60 in-lb (7 Nm).

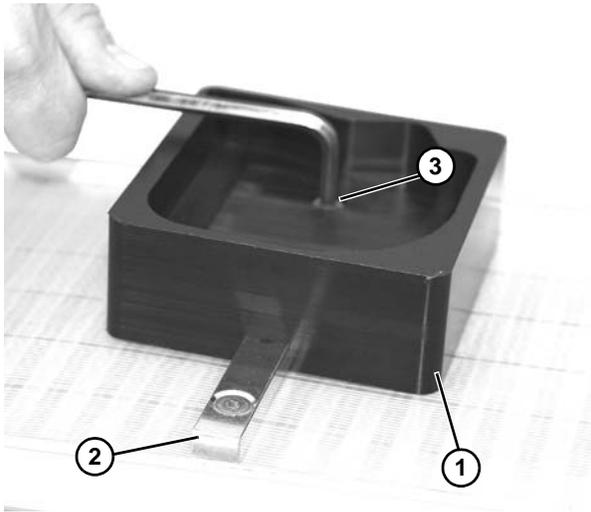


Figure 13

6. Re-tighten conveyor belt.

## NOTE

Confirm that the cut out in the pallet is properly sized so the pallet sits flat and contacts the conveyor belt. Contact factory for exact slot dimensions.

## Attaching Directly to the Conveyor Belt

1. Loosen conveyor belt.
2. Install inserts (Figure 14, item 1) from underside of belt.

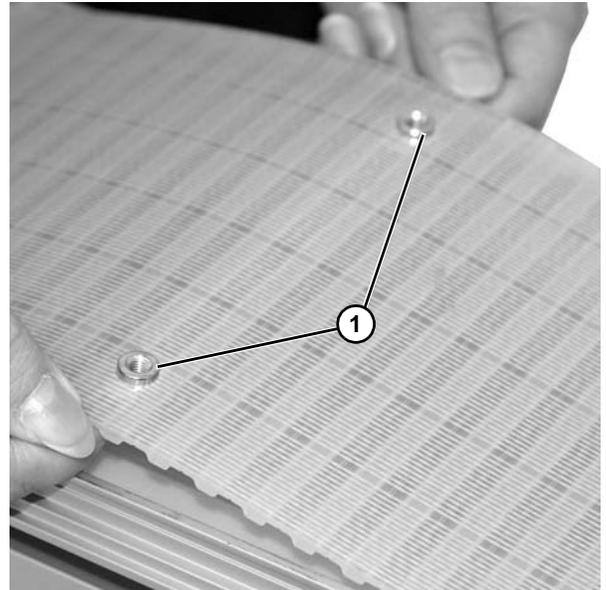


Figure 14

## NOTE

Confirm that the pallet contacts counterbores for the belt inserts. The pallet must sit flat and contact the conveyor belt. Contact factory for exact slot dimensions.

3. Install pallet (Figure 15, item 1) onto mounting inserts, and secure with M5 hex screws (Figure 15, item 2). Tighten M5 screws to 35 in-lb (4 Nm).

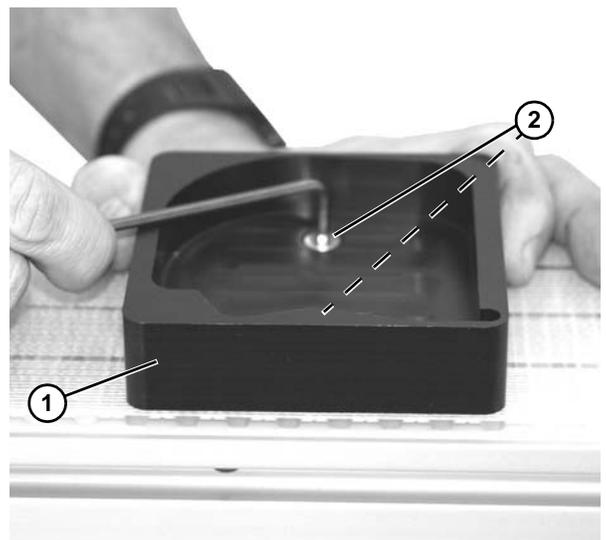


Figure 15

4. Re-tighten conveyor belt.

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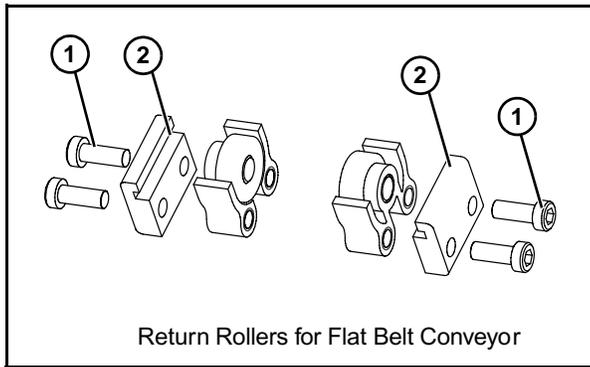
# Installation

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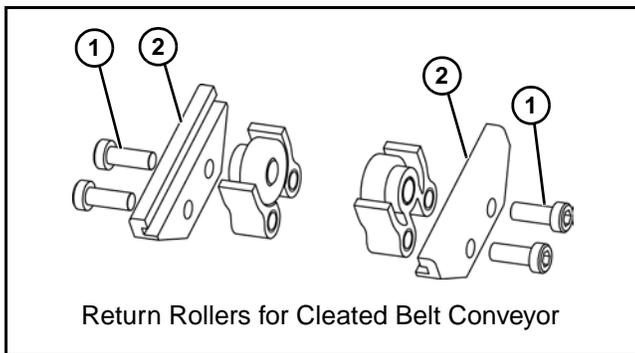
## Return Rollers

### Cleated Belt and 4–18” (101–457 mm) Wide & Flat Belt Conveyors

1. Locate return rollers. Exploded views shown in (Figure 16) & (Figure 17).

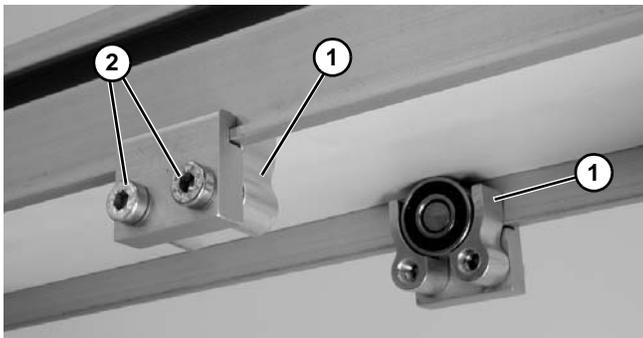


**Figure 16**



**Figure 17**

2. Remove screws (Figure 16, item 1) & (Figure 17, item 1) and clips (Figure 16, item 2) & (Figure 17, item 2) from roller assembly.
3. Install roller assemblies (Figure 18, item 1) as shown. Tighten screws (Figure 18, item 2) to 60 in-lb (7 Nm).



**Figure 18**

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# Preventive Maintenance and Adjustment

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## Required Tools

### Standard Tools

- Hex-key wrenches:
  - 2.5 mm, 4 mm, 5 mm, 6 mm

### Checklist

- Keep service parts on hand (see “Service Parts” section for recommendations)
- Keep supply of belt cleaner (part # 625619)
- Clean entire conveyor and knurled pulley while disassembled
- Replace worn or damaged parts

### Lubrication

No lubrication is required. Replace bearings if worn.

### Maintaining Conveyor Belt

#### Troubleshooting

##### Inspect conveyor belt for:

- Surface cuts or wear
- Stalling or slipping

##### Surface cuts and wear indicate:

- Sharp or heavy parts impacting belt
- Jammed parts
- Foreign material inside the conveyor
- Improperly positioned accessories
- Bolt-on guiding is pinching belt

##### Stalling or slipping indicates:

- Excessive load on belt
- Conveyor belt or drive timing belt are not properly tensioned
- Impacted dirt on drive pulley
- Intermittent jamming or drive train problems

## Cleaning

### IMPORTANT

*Do not use belt cleaners that contain alcohol, acetone, Methyl Ethyl Ketone (MEK) or other harsh chemicals.*

Use Dorner Belt Cleaner (part # 625619). Mild soap and water may also be used. Do not soak the belt.

For /05 woven polyester and /06 black anti-static belts, use a bristled brush to improve cleaning.

## Conveyor Belt Replacement

### ⚠ WARNING



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

## Conveyor Belt Replacement Sequence

- Remove old conveyor belt:
  - Conveyor without Stands or Gearmotor Mounting Package
  - Conveyor with Stands and Gearmotor Mounting Package
- Install new conveyor belt
- Tension conveyor belt

# Preventive Maintenance and Adjustment

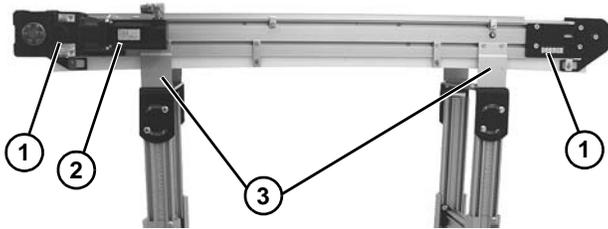
## Belt Removal

**⚠ WARNING**



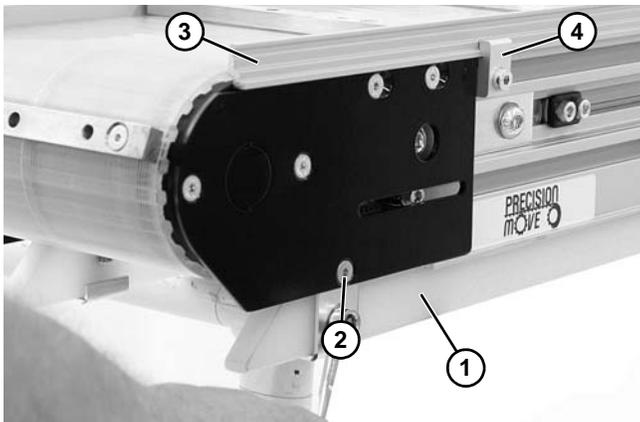
**Removing mounting brackets without support under gearmotor will cause conveyor to tip, causing severe injury. PROVIDE SUPPORT UNDERNEATH THE GEARMOTOR WHEN CHANGING THE BELT**

1. Place temporary support stands at both ends (**Figure 19, item 1**) of the conveyor. Place an additional support stand under the drive motor (**Figure 19, item 2**), if equipped. See WARNING.



**Figure 19**

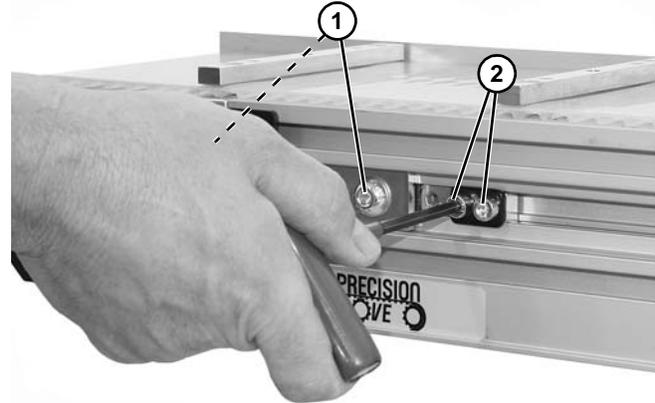
2. Remove mounting brackets (**Figure 19, item 3**) from one side of conveyor. (Reverse steps 3 & 4 of “Mounting Brackets” section on page 7).
3. For flat belt and cleated belt conveyors, remove return rollers and guiding on the opposite side of the gearmotor.
4. For fixture belt conveyors, on the opposite side of the gearmotor, remove the UHMW return rail (**Figure 20, item 1**) by removing support clip screw (**Figure 20, item 2**).



**Figure 20**

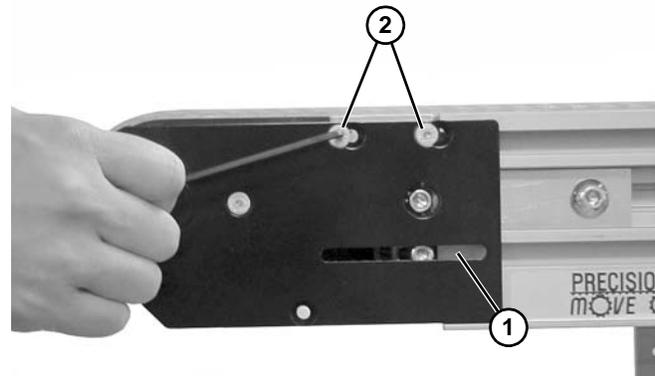
5. Remove guiding (**Figure 20, item 3**) by removing clip (**Figure 20, item 4**) on both ends of conveyor).

6. Ensure that the tail clamp bolts (**Figure 21, item 1**) on both sides of the conveyor are tightened.



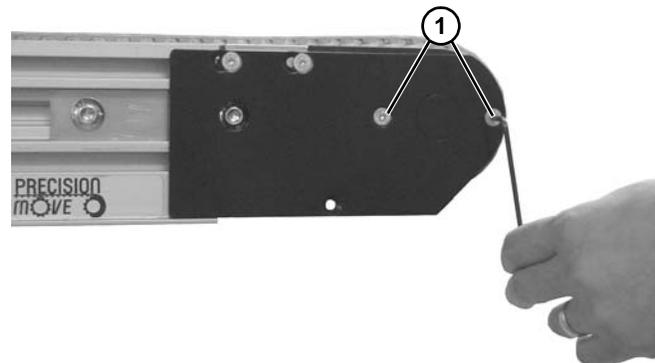
**Figure 21**

7. Loosen two (2) cam fastening screws (**Figure 21, item 2**) on both sides of conveyor. Slide cam assemblies away from plates.
8. On the tension end of the conveyor, identified by the pinion access slot (**Figure 22, item 1**), remove two fastening screws (**Figure 22, item 2**) on one side of the tension end.



**Figure 22**

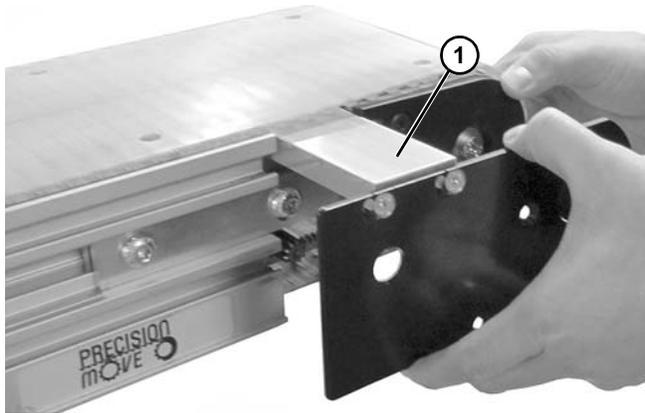
9. On opposite side of tension end, remove two fastening screws (**Figure 23, item 1**).



**Figure 23**

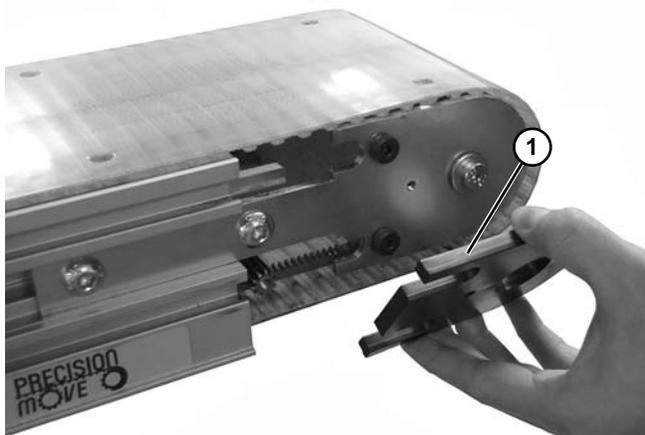
# Preventive Maintenance and Adjustment

10. Remove gap filler plate assembly (**Figure 24, item 1**).



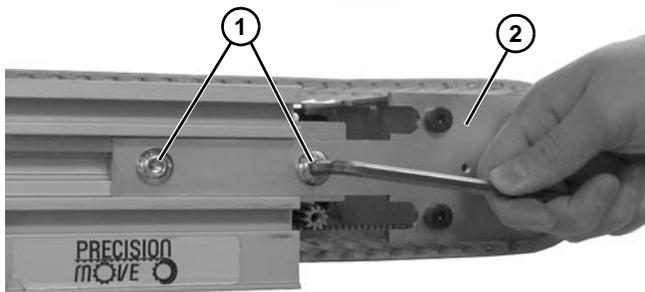
**Figure 24**

11. Remove bearing housing (**Figure 25, item 1**).



**Figure 25**

12. On both sides of the tension end, loosen the two tail clamp bolts (**Figure 26, item 1**), and push head plate assembly (**Figure 26, item 2**) inward.

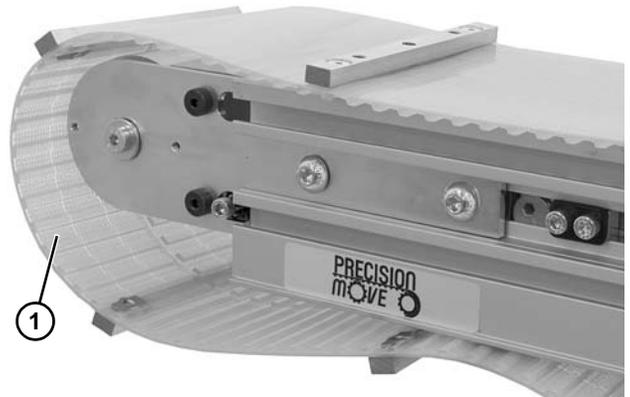


**Figure 26**

## NOTE

*For some sizes of fixtured belt conveyors, the outer support plate of the idler tail needs to be removed to aid in belt removal.*

13. Slide belt (**Figure 27, item 1**) from conveyor from opposite side of gearmotor.



**Figure 27**

# Preventive Maintenance and Adjustment

## Belt Installation

### ⚠ WARNING

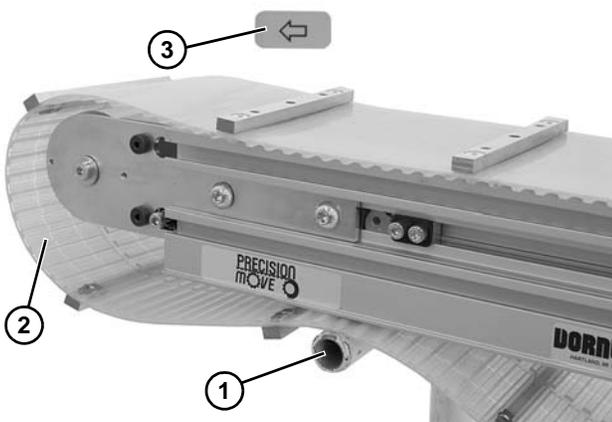


Removing mounting brackets without support under gearmotor will cause conveyor to tip, causing severe injury. PROVIDE SUPPORT UNDERNEATH THE GEARMOTOR WHEN CHANGING THE BELT

### NOTE

For some sizes of fixtured belt conveyors, the outer support plate of the idler tail needs to be removed to aid in belt removal.

1. Ensure temporary support stands (**Figure 28, item 1**) are placed at both ends of the conveyor. Place an additional support stand under the drive motor, if equipped. See WARNING.
2. Orient belt (**Figure 28, item 2**) and point in the direction of belt travel as identified by the conveyor directional label (**Figure 28, item 3**).
3. Install belt (**Figure 28, item 2**) on conveyor. Lift conveyor slightly to avoid pinching belt on temporary support stands.



**Figure 28**

4. Re-install conveyor mounting brackets. Refer to “Mounting Brackets” on page 7, steps 3 through 5.
5. Tension belt. Refer to “Conveyor Belt Tensioning” on page 14.
6. If equipped, re-install return rollers and guiding.

## Conveyor Belt Tensioning

### ⚠ WARNING

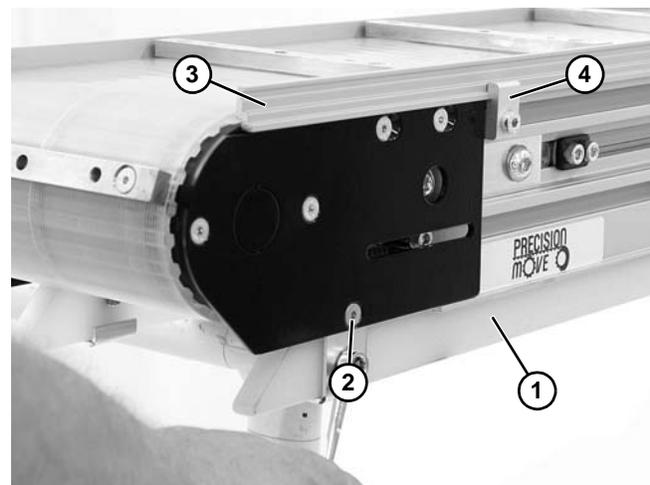


Exposed moving parts can cause severe injury. LOCK OUT POWER before removing guards or performing maintenance.

### NOTE

For conveyors longer than 20 ft (6096 mm) the belt tensioning procedure outlined below may be performed on both the Drive and Idler Ends of the conveyor.

1. For fixture belt conveyors, on the opposite side of the gearmotor, remove the UHMW return rail (**Figure 29, item 1**) by removing support clip screw (**Figure 29, item 2**).

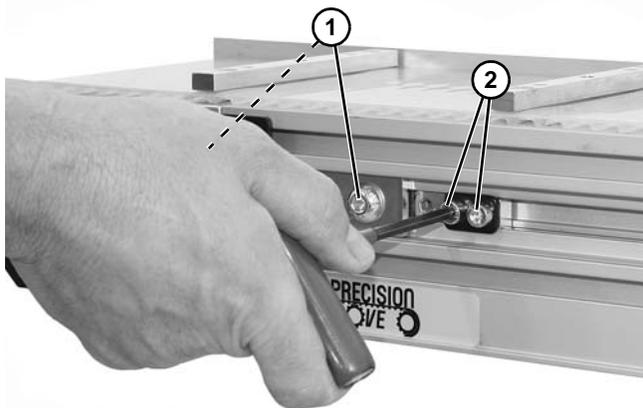


**Figure 29**

2. Remove guiding (**Figure 29, item 3**) by removing clip (**Figure 29, item 4**) on both ends of conveyor.

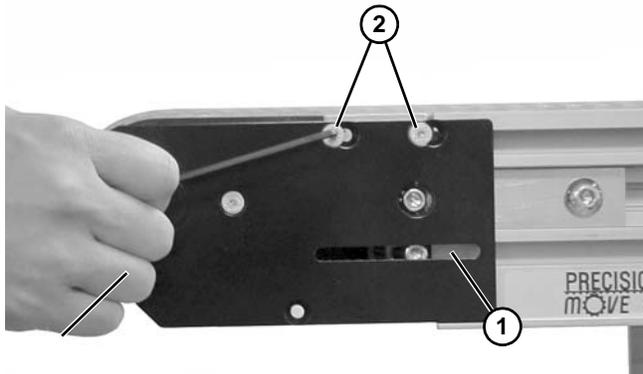
# Preventive Maintenance and Adjustment

3. Ensure that the tail clamp bolts (**Figure 30, item 1**) on both sides of the conveyor are tightened.



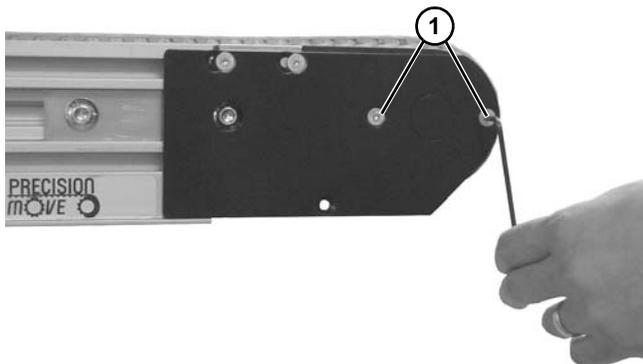
**Figure 30**

4. Loosen two (2) cam fastening screws (**Figure 30, item 2**) on both sides of conveyor. Slide cam assemblies away from plates.
5. On the tension end of the conveyor, identified by the pinion access slot (**Figure 31, item 1**), remove two fastening screws (**Figure 31, item 2**) on one side of the tension end.



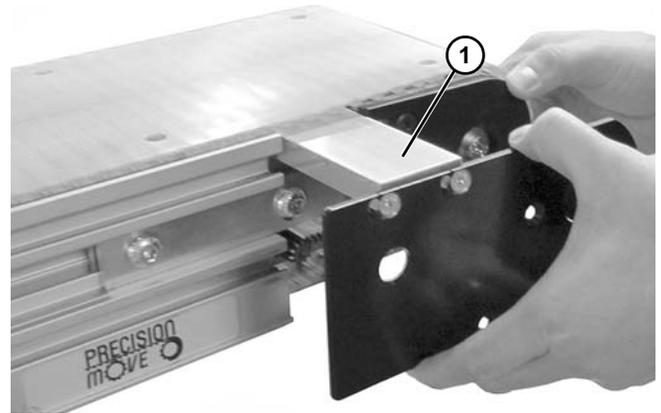
**Figure 31**

6. On opposite side of tension end, remove two fastening screws (**Figure 32, item 1**).



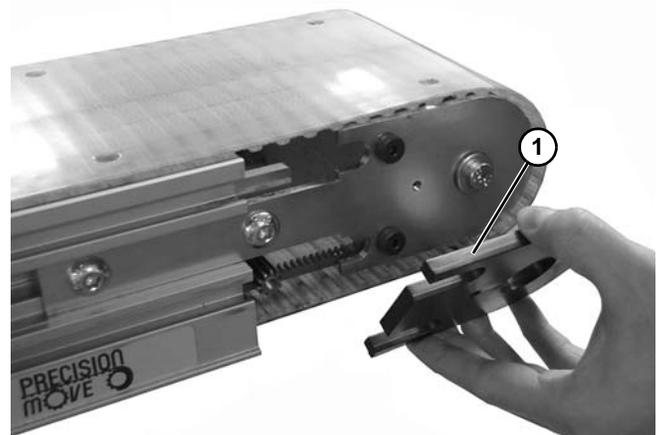
**Figure 32**

7. Remove gap filler plate assembly (**Figure 33, item 1**).



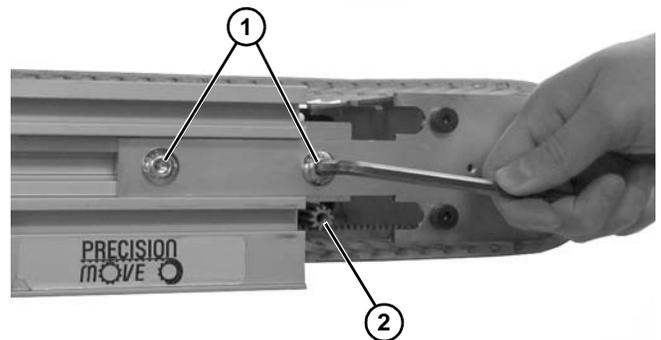
**Figure 33**

8. Remove bearing housing (**Figure 34, item 1**).



**Figure 34**

9. On both sides of the tension end, loosen the two tail clamp bolts (**Figure 35, item 1**).



**Figure 35**

10. Loosen the pinion (**Figure 35, item 2**) to extend head plate assembly.

# Preventive Maintenance and Adjustment

## NOTE

*Bowing of the belt may occur if excessive tension is applied to the belt. Do not over tension the belt.*

## NOTE

*On pinion gear, do not exceed a torque of 100 in-lb (11.3 N-m). Over tensioning the conveyor belt could cause excessive pulley bearing load and early failure.*

11. After adjusting proper tensioning, tighten tail clamp bolts (**Figure 35, item 2**) on both sides of conveyor to 146 in-lb (16.5 N-m).
12. Tighten screws (**Figure 31, item 2**) and (**Figure 32, item 1**).
13. If belt tracking is necessary, refer to “Conveyor Belt Tracking” on page 16.

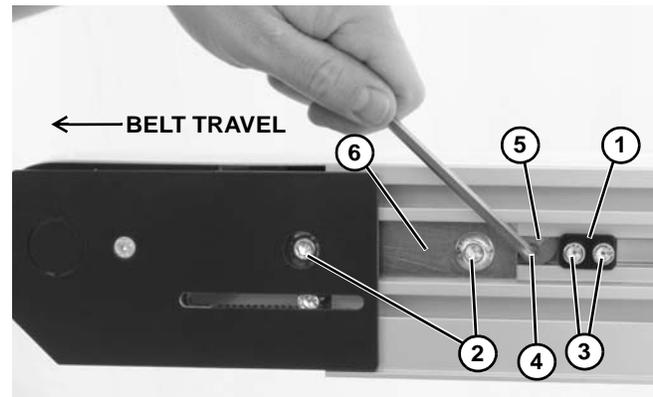
## Conveyor Belt Tracking

### ⚠ WARNING



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

Conveyors are equipped with belt tracking cam assemblies (**Figure 36, item 1**) for belt tracking adjustment.



**Figure 36**

When adjusting belt tracking, always adjust the discharge end of the conveyor first. To adjust belt tracking:

1. Ensure head plate fastening screws (**Figure 36, item 2**) on both sides of conveyor are tightened.
2. On both sides of conveyor, loosen two (2) cam fastening screws (**Figure 36, item 3**). Adjust cams (**Figure 36, item 4**) until indicator arrows (**Figure 36, item 5**) are horizontal and facing end of conveyor. Then slide cam assemblies against head plates (**Figure 36, item 6**) and re-tighten cam fastening screws (**Figure 36, item 3**) to 60 in-lb (7 Nm).
3. On the side toward which the belt is tracking, loosen head plate fastening screws (**Figure 36, item 2**).
4. With the conveyor running, use a 5 mm hex-key wrench to rotate the tracking cam (**Figure 36, item 4**) in small increments until the belt tracks in the center of the conveyor. Then while holding the cam in position, re-tighten the head plate fastening screws (**Figure 36, item 2**) with a 6 mm hex-key wrench to 60 in-lb (7 Nm).

# Preventive Maintenance and Adjustment

## Pulley Removal

<b>⚠ WARNING</b>

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

Remove conveyor belt to access pulley(s). See “Conveyor Belt Replacement” on page 11. Remove the desired pulley following the corresponding instructions below:

- A – Idler Pulley Removal
- B – Drive Pulley Removal

### A – Idler Pulley Removal

1. Temporarily support the idler pulley.
2. On one side of conveyor, remove two (2) flat head screws (Figure 37, item 1).

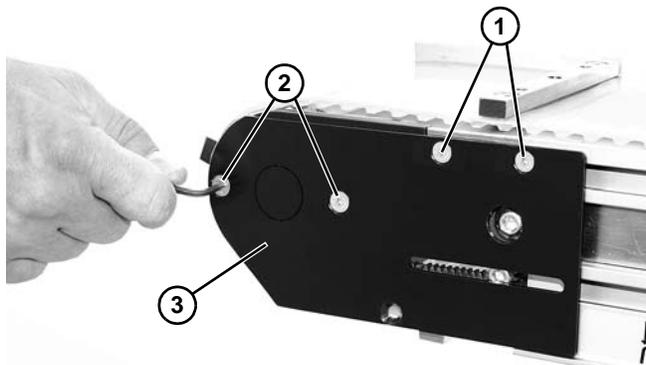


Figure 37

3. Remove flat head screws (Figure 37, item 2).
4. Remove outer headplate (Figure 37, item 3).
5. Remove bearing housing (Figure 38, item 1).

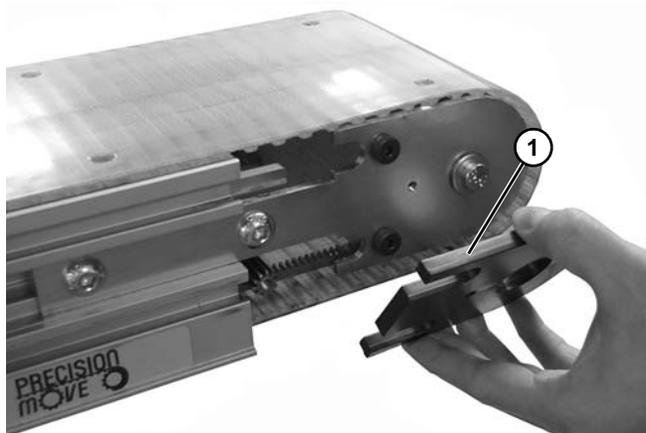


Figure 38

6. Remove socket head screw and washer (Figure 39, item 1) on both sides of conveyor.

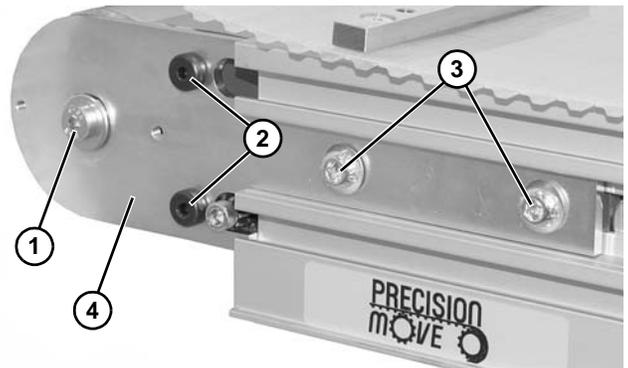


Figure 39

7. On one side of conveyor, remove two socket head screws (Figure 39, item 2).
8. Remove tail clamp bolts (Figure 39, item 3) and remove headplate (Figure 39, item 4).
9. Slide the idler pulley assembly out of the headplate on the opposite side.
10. Remove the pulley shaft assembly: remove the clip ring (Figure 40, item 1) and washer (Figure 40, item 2) from one side of the pulley assembly.

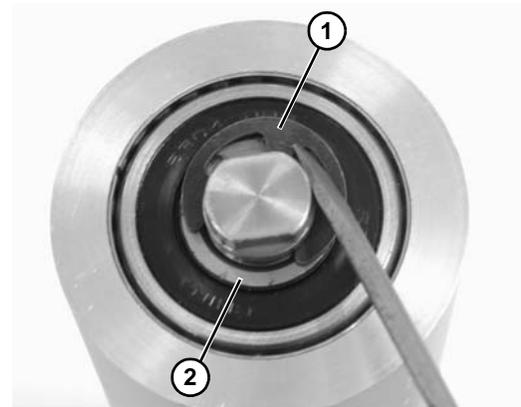


Figure 40

11. Slide the shaft assembly (Figure 41, item 1) out of the pulley (Figure 41, item 2).

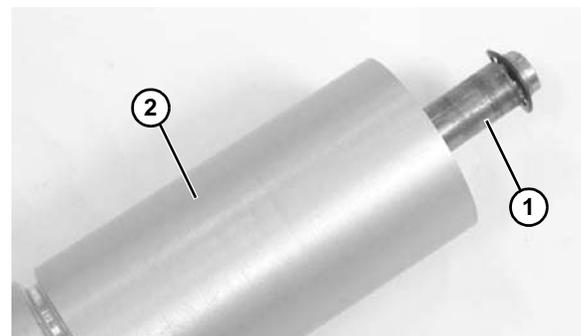


Figure 41

# Preventive Maintenance and Adjustment

## B – Drive Pulley Removal

**⚠ WARNING**



Drive shaft keyway may be sharp. HANDLE WITH CARE.

1. Remove the gearmotor mounting package: Refer to your gearmotor mounting manual for removal procedure.
2. Remove four flat head screws (Figure 42, item 1).

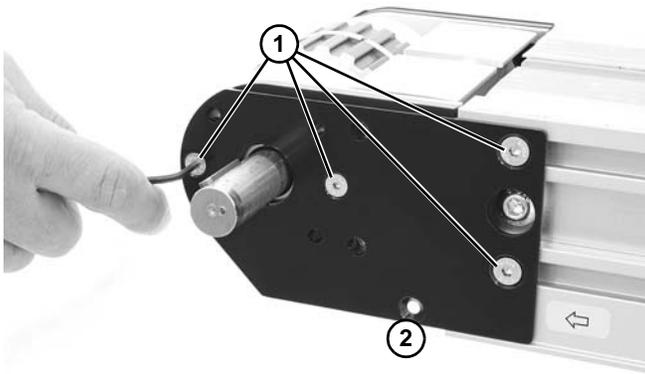


Figure 42

3. Pull back the outer headplate (Figure 43, item 1), and remove the washer (Figure 43, item 2) and inner spacer (Figure 43, item 3).

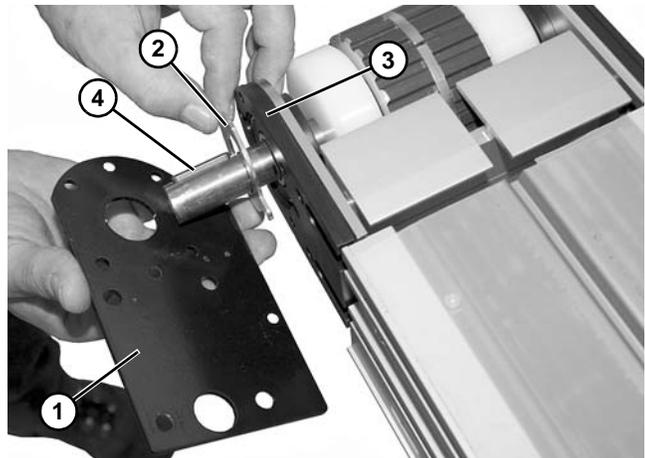


Figure 43

4. Remove drive shaft keyway (Figure 43, item 4).

5. Remove two socket head screws (Figure 44, item 1)

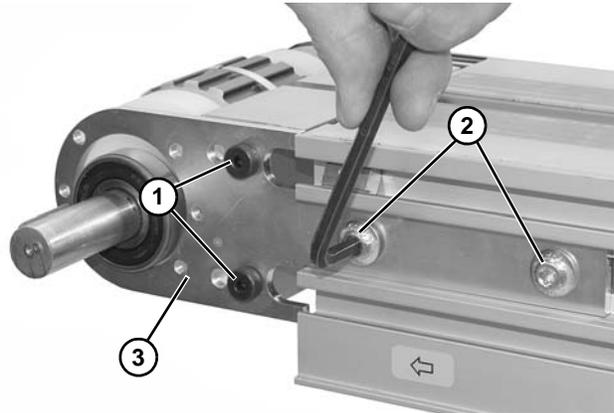


Figure 44

6. Remove tail clamp bolts (Figure 44, item 2) and remove headplate (Figure 44, item 3).
7. Slide the drive pulley (Figure 45, item 1) out of the headplate on the opposite side.

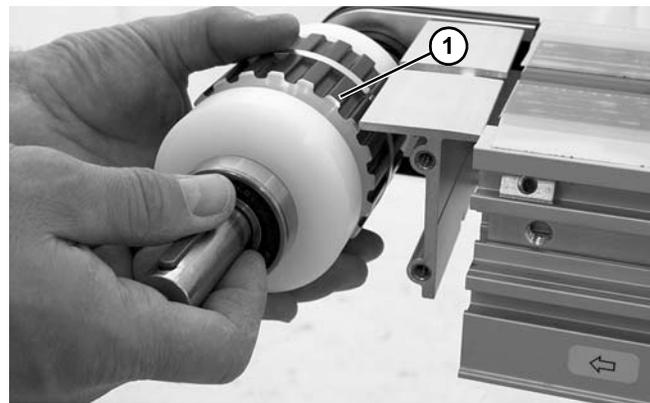


Figure 45

# Preventive Maintenance and Adjustment

## Bearing Replacement

<b>⚠ WARNING</b>

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

- A – Idler Bearing
- B – Drive Bearing

### A – Idler Bearing Replacement

The bearings in a 3200 Series Idler Pulley can not be removed. Replace the entire pulley assembly when worn.

### B – Drive Bearing Removal and Replacement

The bearings in a 3200 Series Drive Pulley can not be removed. Replace the entire pulley assembly when worn.

## Pulley Replacement

### Idler Pulley

To replace the idler pulley, reverse the “Idler Pulley Removal” procedure on page 17.

### Drive Pulley

To replace the drive pulley, reverse the “Drive Pulley Removal” procedure on page 18.

## Upper Wear Strip Replacement

<b>⚠ WARNING</b>

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

1. Remove conveyor belt. See “Belt Removal” section on page 12.

2. With a putty knife (Figure 46, item 1), start by raising edge of wear strip (Figure 46, item 2).

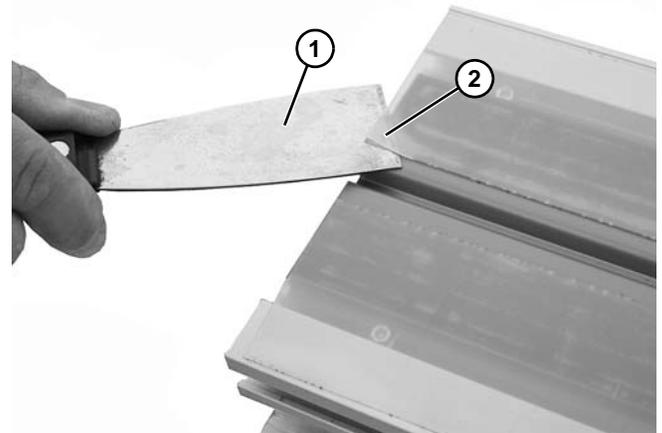


Figure 46

3. Remove old wear strip with a pliers (Figure 47, item 1).

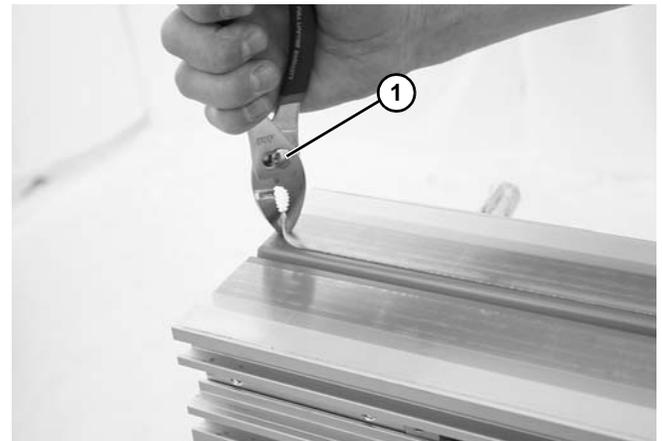


Figure 47

4. Clean conveyor surface with isopropyl alcohol and allow to fully dry.
5. Install new wear strip (Figure 48, item 1).

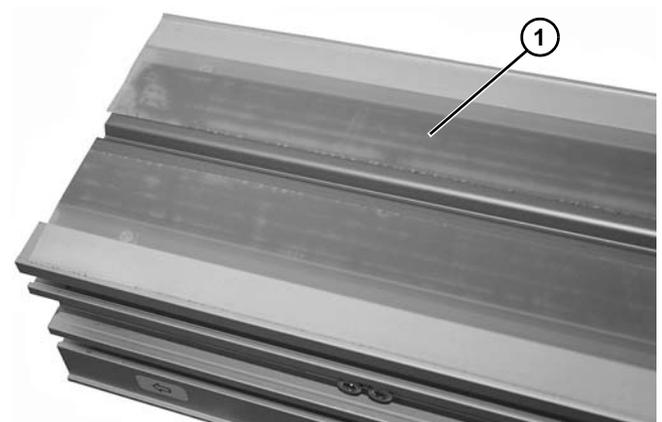


Figure 48

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# Preventive Maintenance and Adjustment

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## Lower Wear Strip Replacement

<b>⚠ WARNING</b>

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

1. Remove conveyor belt. See “Belt Removal” section on page 12.
2. Remove screw (Figure 49, item 1) and support clip (Figure 49, item 2).



**Figure 49**

3. Remove screw(s) (Figure 49, item 3) from each retaining clip (Figure 49, item 4), and remove lower wear strip (Figure 49, item 5).
4. Install new wear strip (Figure 49, item 5) and secure with retaining clips (Figure 49, item 4).
5. Install support clip (Figure 49, item 1) and screw (Figure 49, item 2).
6. Adjust wear strip up or down as needed on slotted holes in support clip (Figure 49, item 1) and retaining clip (Figure 49, item 4), and secure with screws (Figure 49, item 2 and 3).

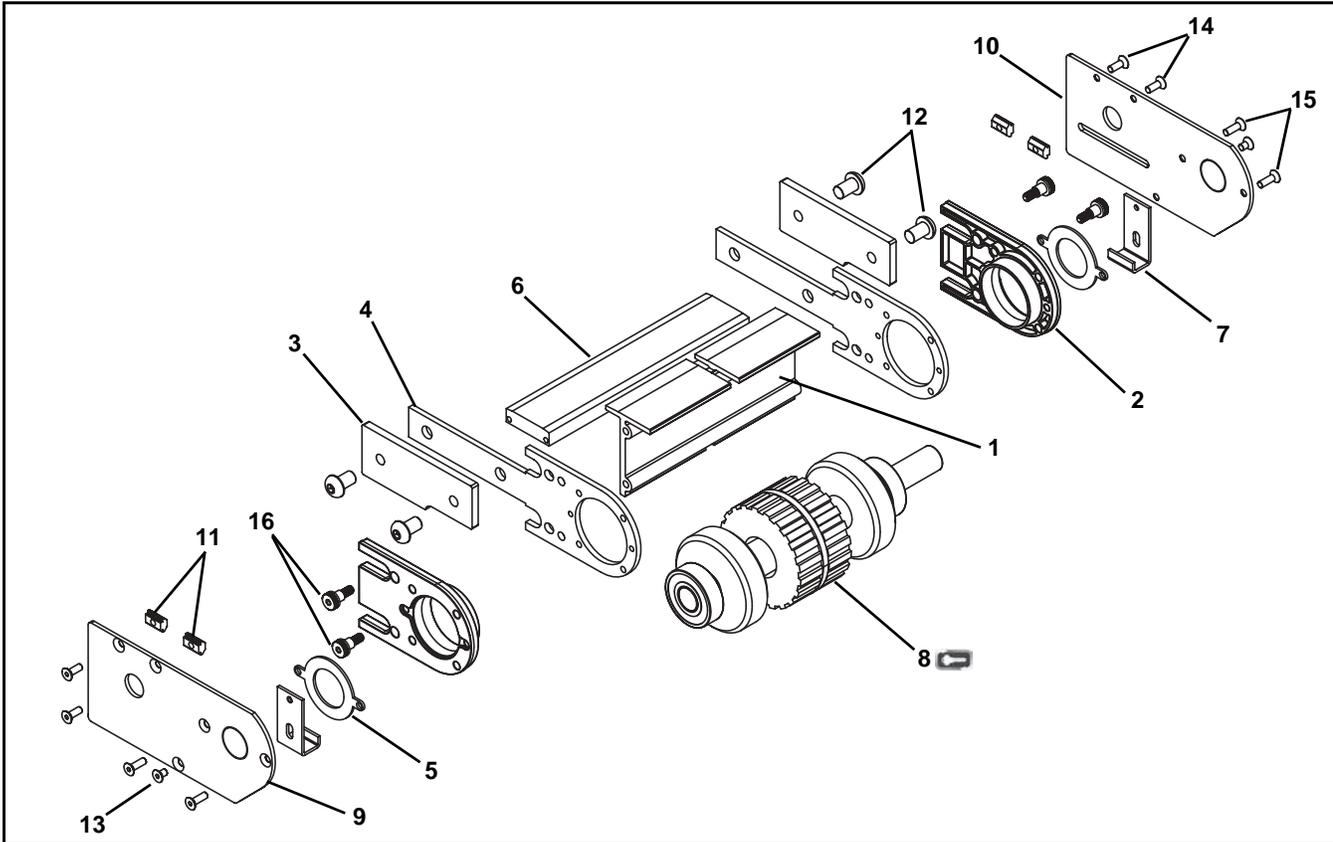


# Service Parts

## 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 & Auxiliary Output Idler End

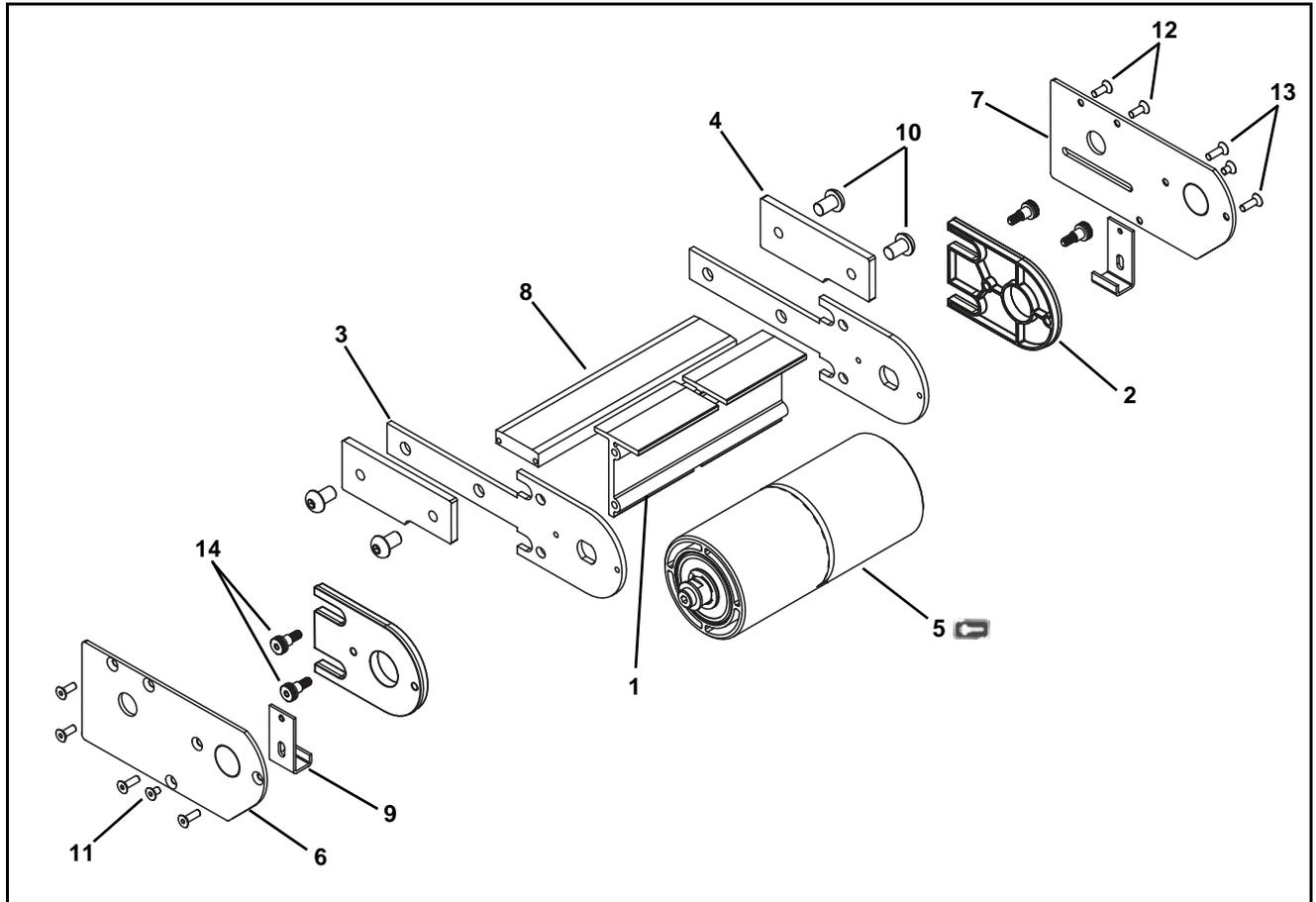


Item	Part Number	Description
1	350311- <u>WW</u>	Articulation Bar
2	350312	Bearing Housing
3	350351	Clamp Plate
4	350360	Backing Plate
5	350365	Bearing Stop Plate
6	350930- <u>WW</u>	Gap Filler Plate
7	350932	Support Bracket for Fixtured Conveyors Only
8	350943- <u>WW</u>	Spindle Assembly
	 350944- <u>WW</u>	Spindle Assembly for Servo Drive
	350945- <u>WW</u>	Dual Shaft Spindle Assembly
	350946- <u>WW</u>	Dual Shaft Spindle Assembly for Servo Drive
9	350937	Cover Plate, Right Hand for Drive Tail
	351060	Cover Plate, Right Hand for Auxiliary Shaft Idler Tail

Item	Part Number	Description
10	350938	Cover Plate, Left Hand for Drive Tail
	351061	Cover Plate, Left Hand for Auxiliary Shaft Idler Tail
11	639971M	Drop-In Tee Bar for Drive Tail
12	911016M	Button Head Screw, M10-1.50 x 16 mm
13	930508M	Flat Head Screw, M5-.80 x 6 mm for Fixtured Conveyors Only
14	930514M	Flat Head Screw, M5-.80 x 14 mm
15	930516M	Flat Head Screw, M5-.80 x 16 mm
16	940808M	SHLD Screw, 8 mm x 8 mm

WW = Conveyor Width Reference: 04, 06, 08, 10, 12, 14, 16 & 18

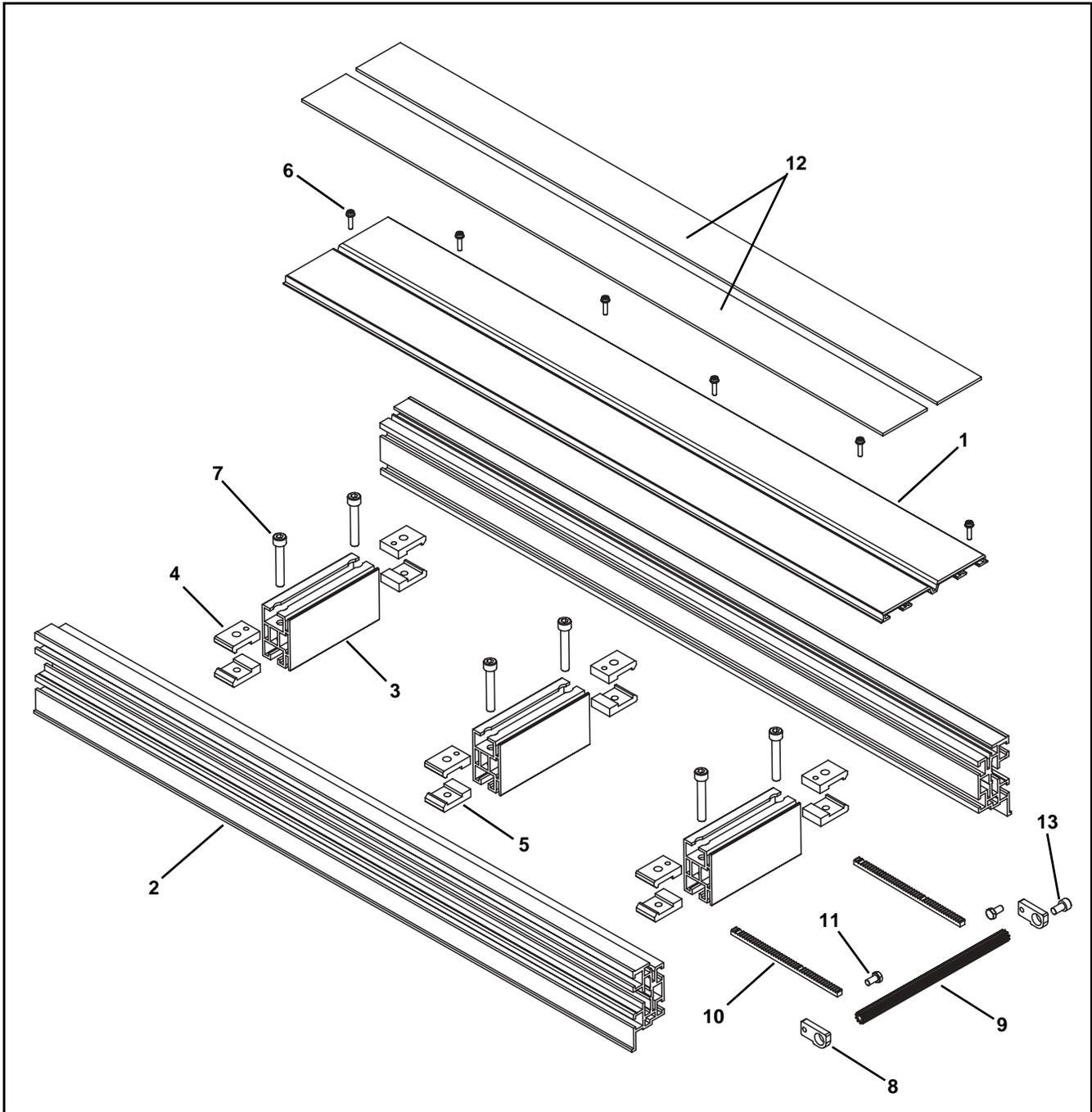
## Idler End Assembly



Item	Part Number	Description
1	350311- <u>WW</u>	Articulation Bar
2	350314	Bearing Housing
3	350348	Backing Plate
4	350351	Clamp Plate
5	350926- <u>WW</u>	Spindle Assembly
6	350928	Cover Plate, Right Hand
7	350929	Cover Plate, Left Hand
8	350930- <u>WW</u>	Gap Filler Plate
9	350932	Support Bracket for Fixtured Conveyors Only
10	911016M	Button Head Screw, M10-1.50 x 16 mm
11	930508M	Flat Head Screw, M5-.80 x 6 mm for Fixtured Conveyors Only
12	930514M	Flat Head Screw, M5-.80 x 14 mm
13	930516M	Flat Head Screw, M5-.80 x 16 mm
14	940808M	SHLD Screw, 8 mm x 8 mm
<u>WW</u> = Conveyor Width Reference: 04, 06, 08, 10, 12, 14, 16 & 18		

# Service Parts

## Frame Assembly



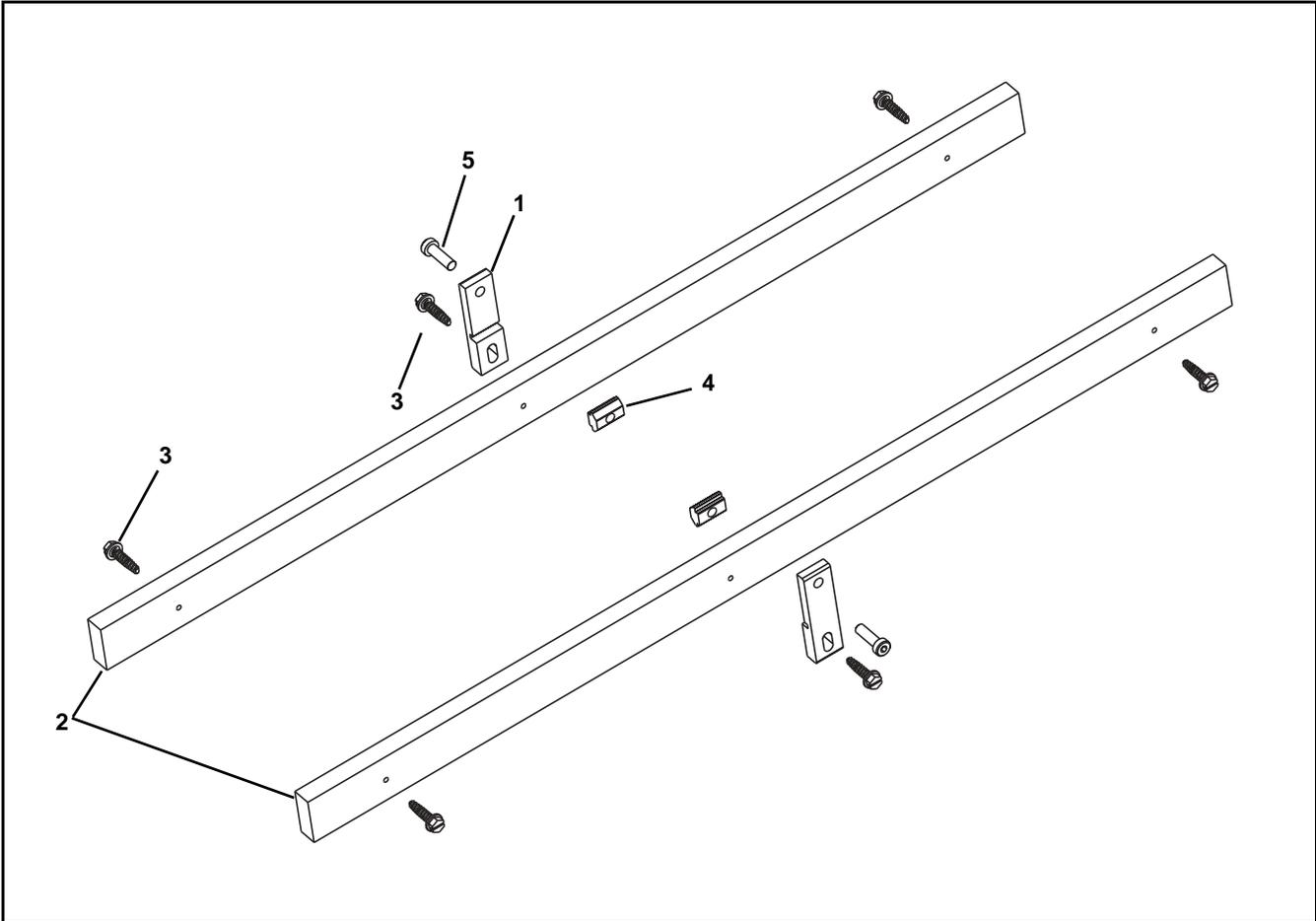
# Service Parts

Item	Part Number	Description
1	300887- <u>LLLL</u>	1.75" Bedplate Rail
	300888- <u>LLLL</u>	2" BedPlate Rail
	300889- <u>LLLL</u>	4" BedPlate Rail
	300890- <u>LLLL</u>	6" BedPlate Rail
2	350298- <u>LLLL</u>	Side Rail
3	350308- <u>WW</u>	Crossmember
4	350556	Top Frame Clip for 4" wide conveyors only
	350309	Top Frame Clip for 6" wide and wider conveyors
5	350555	Bottom Frame Clip for 4" wide conveyors only
	350310	Bottom Frame Clip for 6" wide and wider conveyors
6	920484M	Flange Screw, M4-.70 x 16 mm
7	920850M	Socket Head Screw, M8-1.25 x 50 mm
8	350352	Pinion Retainer
9	350353- <u>WW</u>	Pinion
10	350354	Rack
11	960612M	Hex Head Cap Screw, M6-1.00 x 12 mm
12	807-2052	UHMW Tape, 1.625" Wide
	807-2053	UHMW Tape, 2.50" Wide
	807-2054	UHMW Tape, 5.75" Wide
13	920612M	Socket Head Screw, M6-1.00 x 12 mm
<u>LLLL</u> = Length is inches width 2 decimal places		
Length Example: Length = 35.25" <u>LLLL</u> = 03525		
<u>WW</u> = Conveyor width reference: 04 to 18 in 02 increments		

Conveyor Width	Item 1: Bed Plate Rail Configuration
4"	1.75"
6"	4"
8"	6"
10"	2", 4", 2"
12"	2", 6", 2"
14"	4", 4", 4"
16"	4", 6", 4"
18"	6", 4", 6"

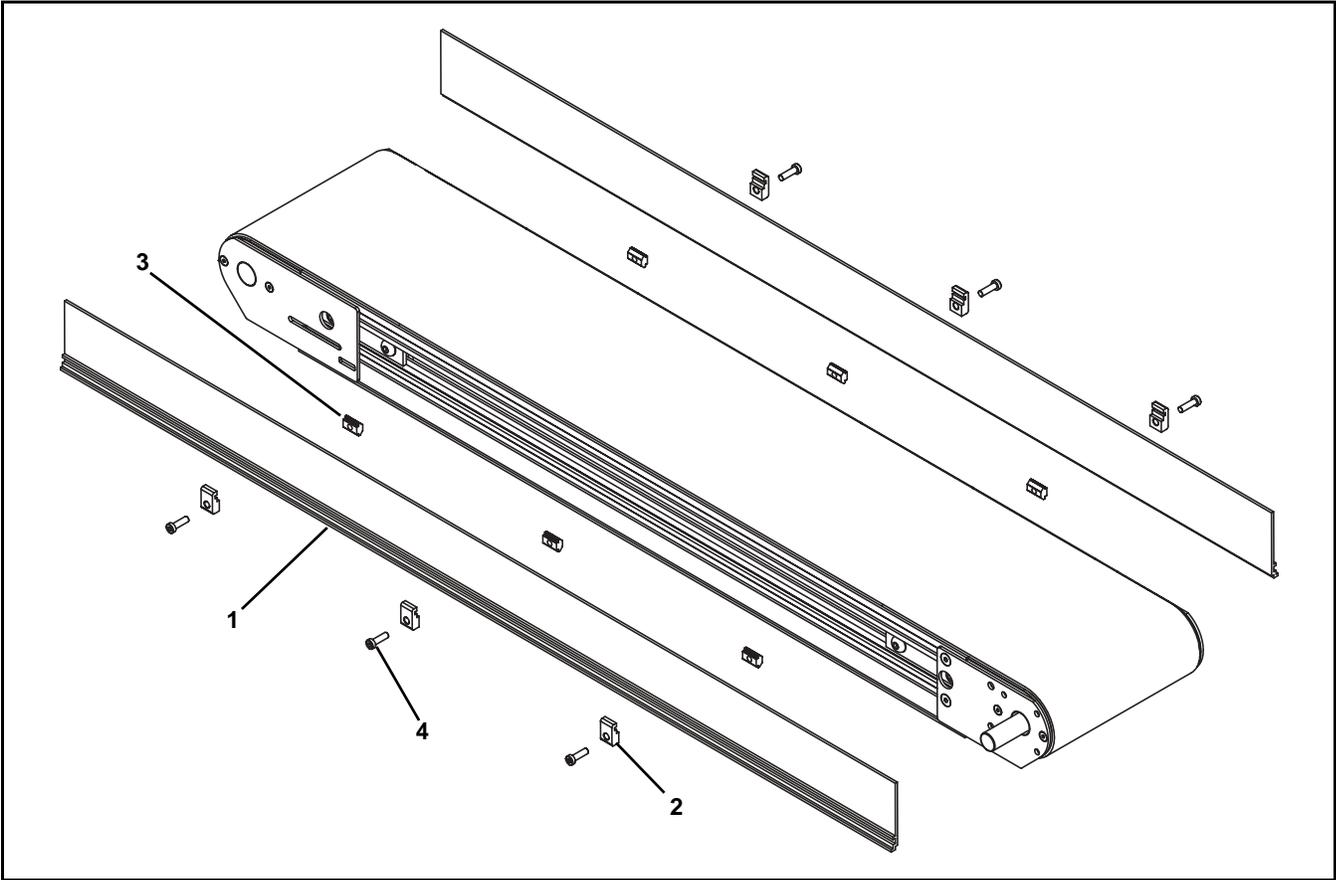
# Service Parts

## Lower Wear Strip



Item	Part Number	Description
1	350163	Return Clip
2	350162-LLLLL	Return Wear Strip
3	807-1840	Hex Washer Head Sheet Metal Screw
4	639971M	Single Drop-In Tee Bar
5	920694M	Low Head Cap Screw, M6-1.00 x 20 mm
LLLLL = Length in inches with 2 decimal places.		
Length Example: Length = 35.25" LLLLL = 03525		

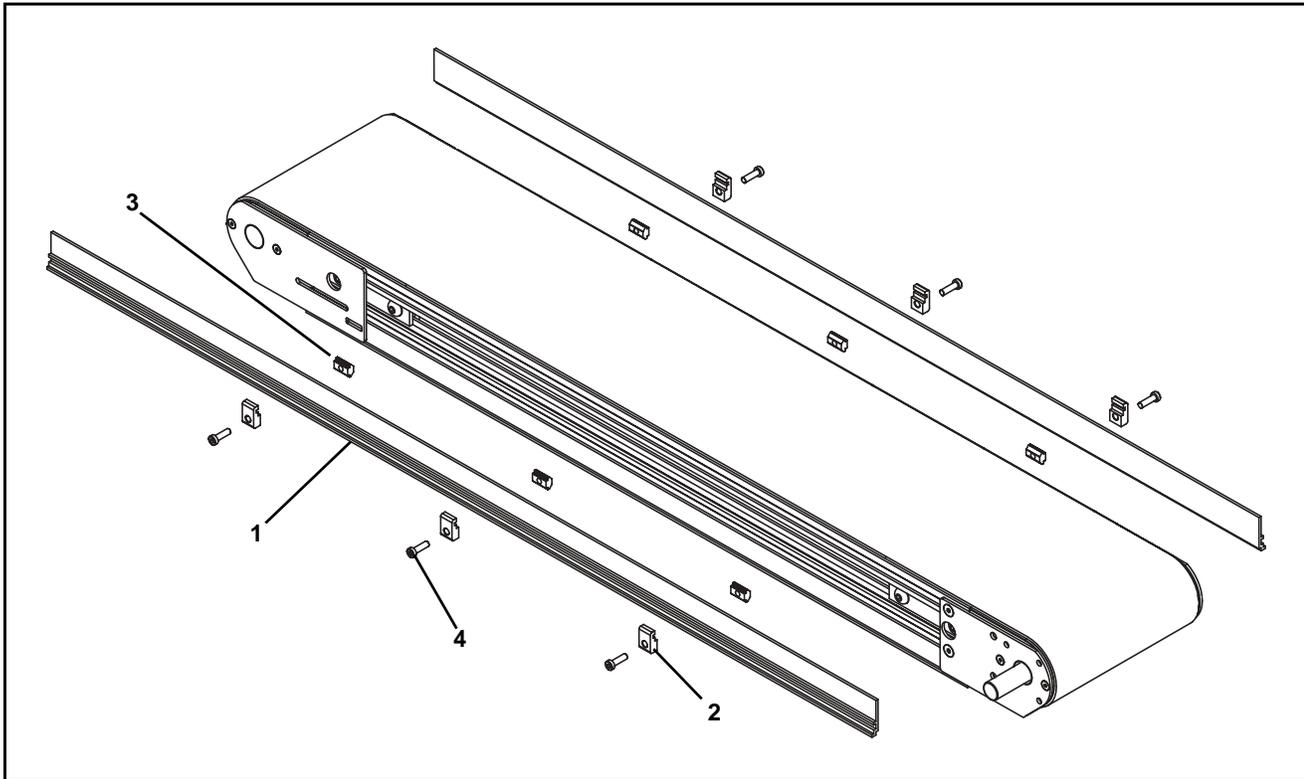
**#04 3" (76mm) Aluminum Side**



Item	Part Number	Description
1	380400- <u>LLLLL</u>	3.00" Guides
2	200121	Guide Clip
3	639971MK10	Single Drop-In Tee Bar (x10)
4	950620M	Low Head Cap Screw, M6-1.00 x 20 mm
<u>LLLLL</u> = Length is inches width 2 decimal places		
Length Example: Length = 35.25" <u>LLLLL</u> = 03525		

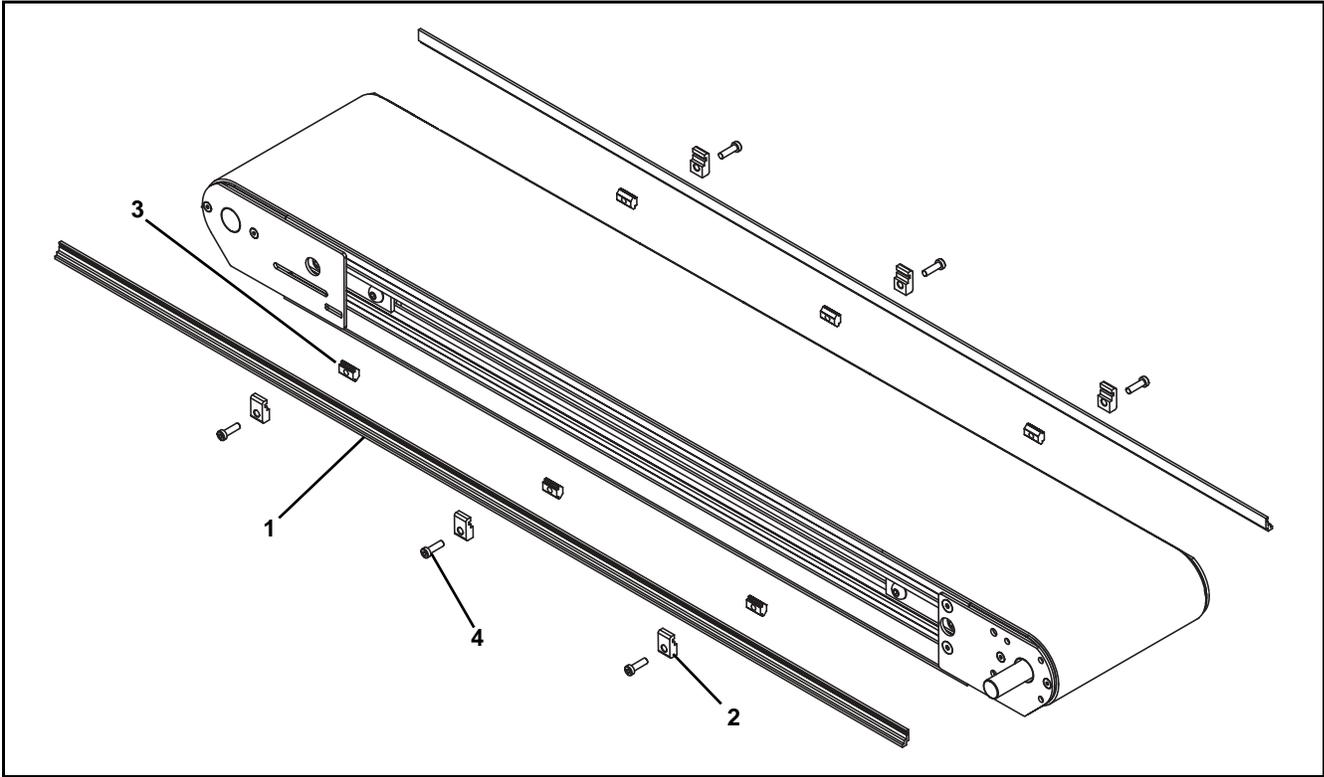
# Service Parts

## #05 1.5" (38mm) Aluminum Side



Item	Part Number	Description
1	380500-LLLLL	1.50" Guides
2	200121	Guide Clip
3	639971MK10	Single Drop-In Tee Bar (x10)
4	950620M	Low Head Cap Screw, M6-1.00 x 20 mm
LLLLL = Length is inches width 2 decimal places		
Length Example: Length = 35.25" LLLLL = 03525		

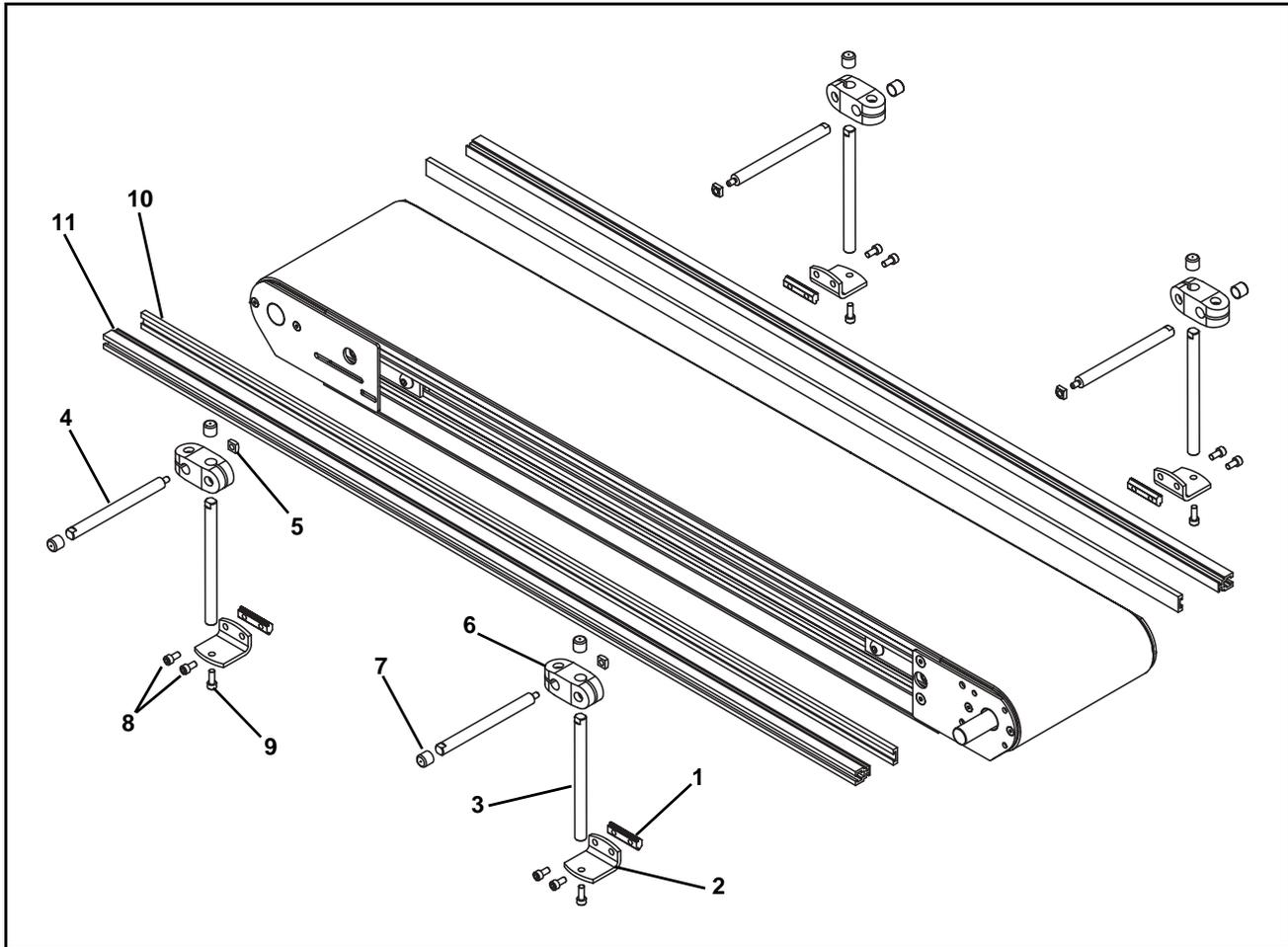
**#09 Low to High Side**



Item	Part Number	Description
1	380900-LLLLL	0.50" Guides
2	200121	Guide Clip
3	639971MK10	Single Drop-In Tee Bar (x10)
4	950620M	Low Head Cap Screw, M6-1.00 x 20 mm
LLLLL = Length is inches width 2 decimal places		
Length Example: Length = 35.25" LLLLL = 03525		

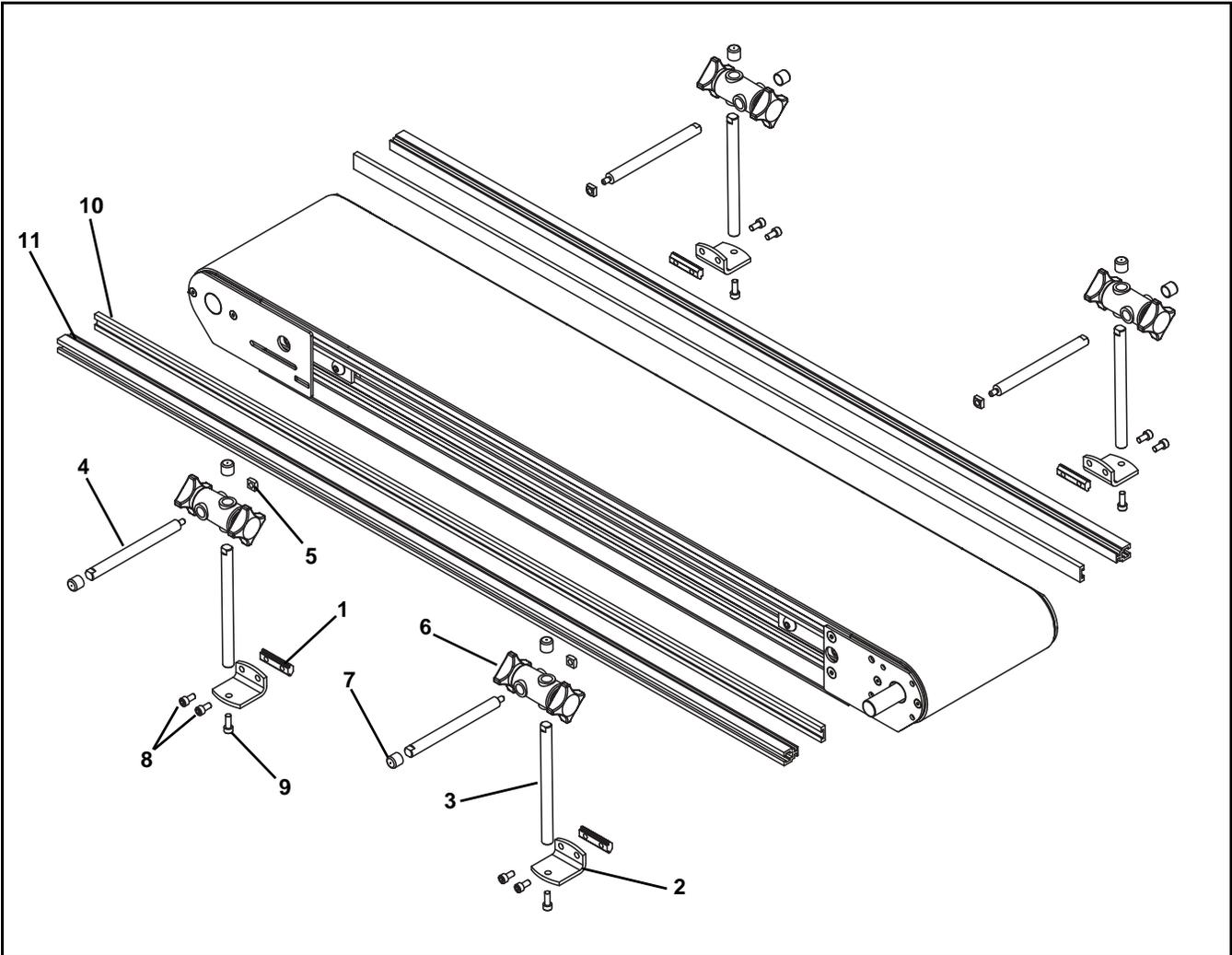
# Service Parts

## #13 Adjustable Guiding



Item	Part Number	Description
1	200830M	Drop-In Tee Bar
2	202004	Mounting Bracket
3	202027M	Guide Mounting Shaft Vertical
4	202028M	Guide Mounting Shaft Horizontal
5	674175MP	Square Nut
6	807-652	Cross Block
7	807-948	Vinyl Shaft Cap
8	920612M	Socket Head Screw, M6-1.00 x 12mm
9	920616M	Socket Head Screw, M6-1.00 x 16mm
10	614068P	Flat Extruded Guide (per foot)
11	460063-LLLLL	Aluminum Profile Guide
LLLLL = Length is inches width 2 decimal places		
Length Example: Length = 35.25" LLLLL = 03525		

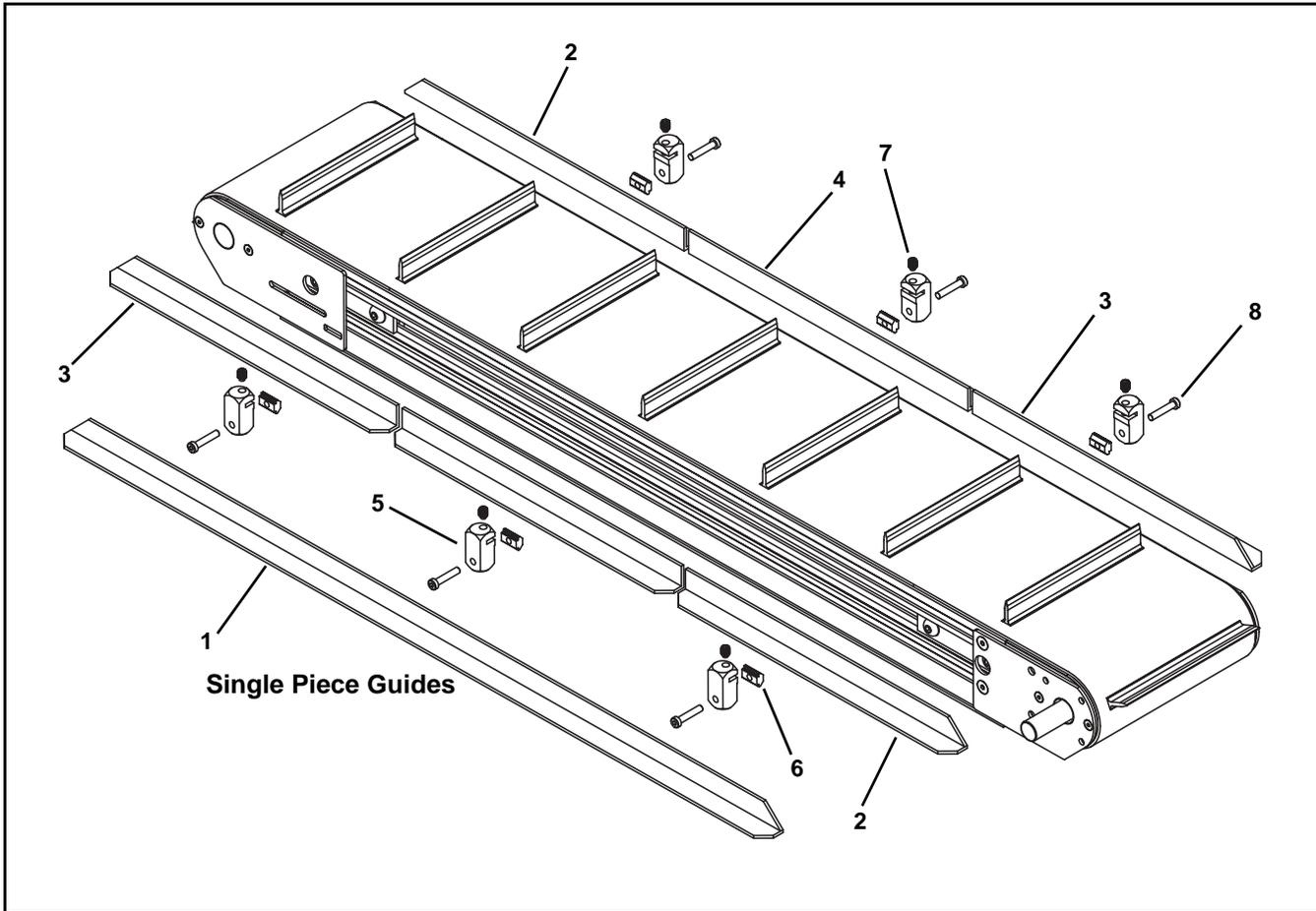
## #14 Tool-Less Adjustable Guiding



Item	Part Number	Description
1	200830M	Drop-In Tee Bar
2	202004	Mounting Bracket
3	202027M	Guide Mounting Shaft Vertical
4	202028M	Guide Mounting Shaft Horizontal
5	674175MP	Square Nut
6	807-1470	Cross Block
7	807-948	Vinyl Shaft Cap
8	920612M	Socket Head Screw, M6-1.00 x 12mm
9	920616M	Socket Head Screw, M6-1.00 x 16mm
10	614068P	Flat Extruded Guide (per foot)
11	460063-LLLLL	Aluminum Profile Guide
LLLLL = Length is inches width 2 decimal places		
Length Example: Length = 35.25" LLLLL = 03525		

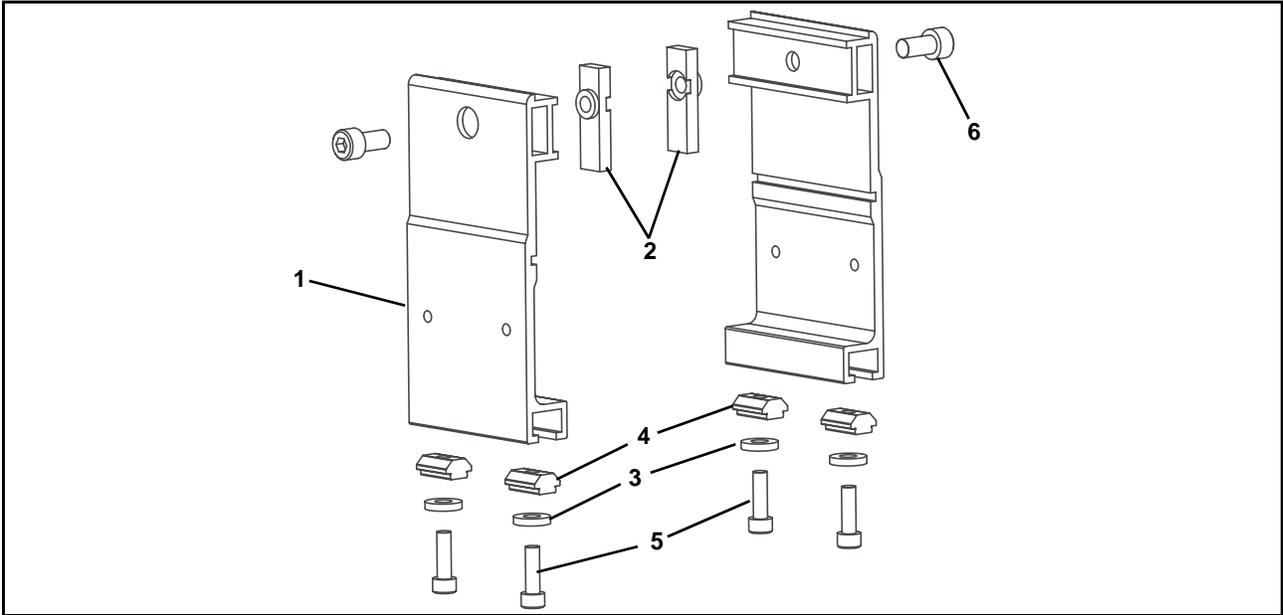
# Service Parts

## 1" (25 mm) Cleated Guiding



Item	Part Number	Description
1	380184-LLLLL	1.00" Cleated Guiding for Single Piece Guides
2	380182-LLLLL	1.00" End 1 Section Cleated Guiding for Multi Piece Guides
3	380183-LLLLL	1.00" End 2 Section Cleated Guiding for Multi Piece Guides
4	380181-LLLLL	1.00" Mid Section Cleated Guiding for Multi Piece Guides
5	350177	Guide Clamping Block
6	639971MK10	Single Drop-in Tee Bar (x10)
7	807-2121	Set Screw
8	950630M	Low Head Cap Screw, M6-1.00 x 30 mm
LLLLL = Length in inches with 2 decimal places.		
Length Example: Length = 35.25" LLLLL = 03525		

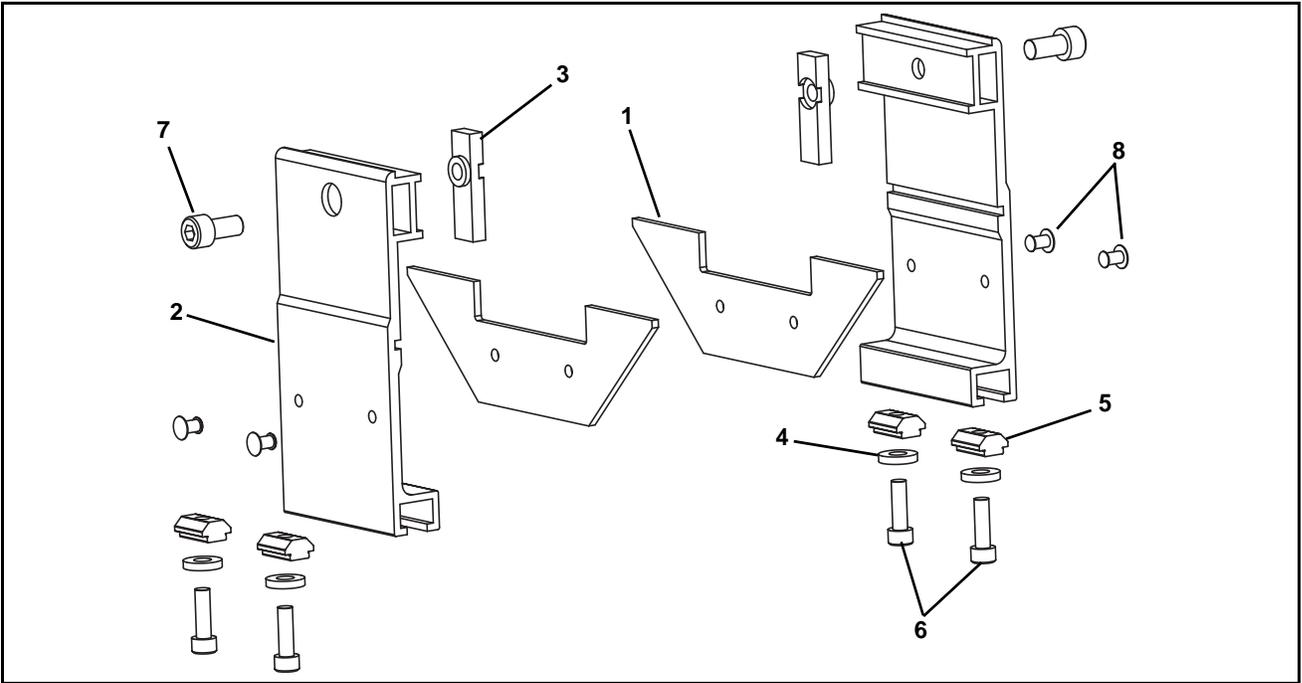
## Flat Belt Mounting Brackets



Item	Part Number	Description
1	350533	Stand Mount
2	350534	Twist Nut
3	605279P	Washer

Item	Part Number	Description
4	639971MK10	Single Drop-In Tee Bar (x10)
5	920620M	Socket Head Screw, M6-1.00 x 20mm
6	920816M	Socket Head Screw, M8-1.25 x 16 mm

## Cleated Belt Mounting Brackets

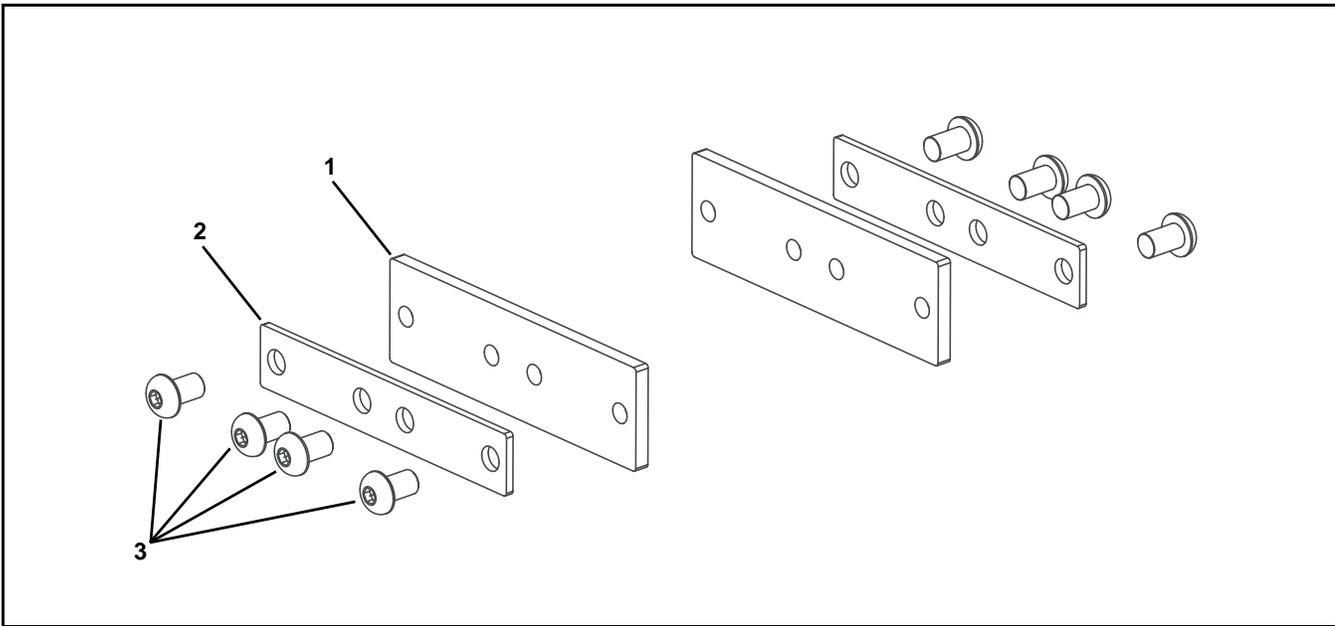


Item	Part Number	Description
1	240835	Cleated Mount Plate
2	350533	Stand Mount
3	350534	Twist Nut
4	605279P	Washer

Item	Part Number	Description
5	639971MK10	Single Drop-In Tee Bar (x10)
6	920620M	Socket Head Screw, M6-1.00 x 20 mm
7	920816M	Socket Head Screw, M8-1.25 x 16 mm
8	914-006	Rivet

# Service Parts

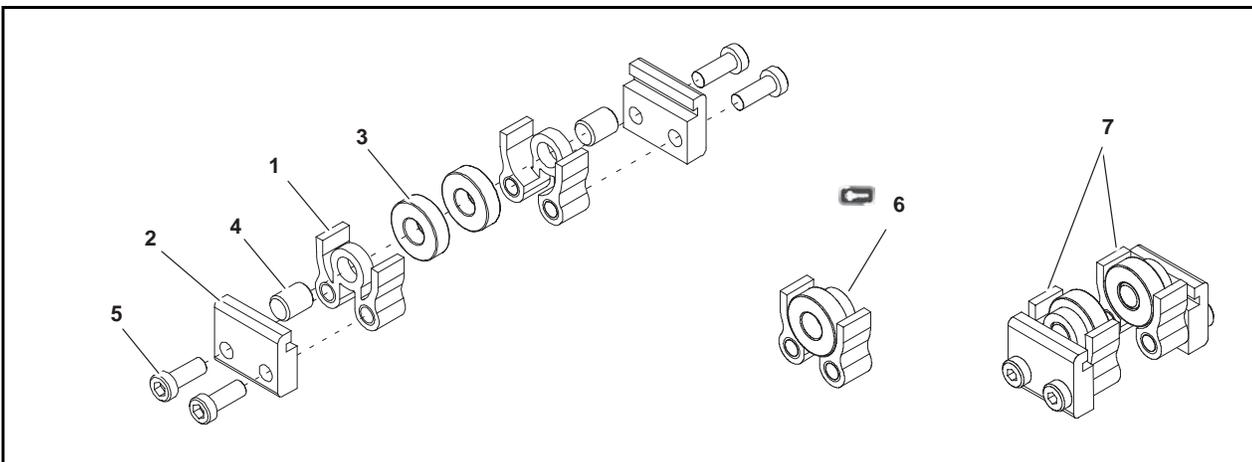
## Connecting Assembly



Item	Part Number	Description
1	350581	Clamp Plate for conveyor 18" wide and wider
	350583	Clamp Plate for conveyor 3.75" to 16" wide
2	350580	Cover Plate for conveyor 18" wide and wider
	350582	Cover Plate for conveyor 3.75" to 16" wide

Item	Part Number	Description
3	911016M	Button Head Screw, M10-1.50 x 16 mm

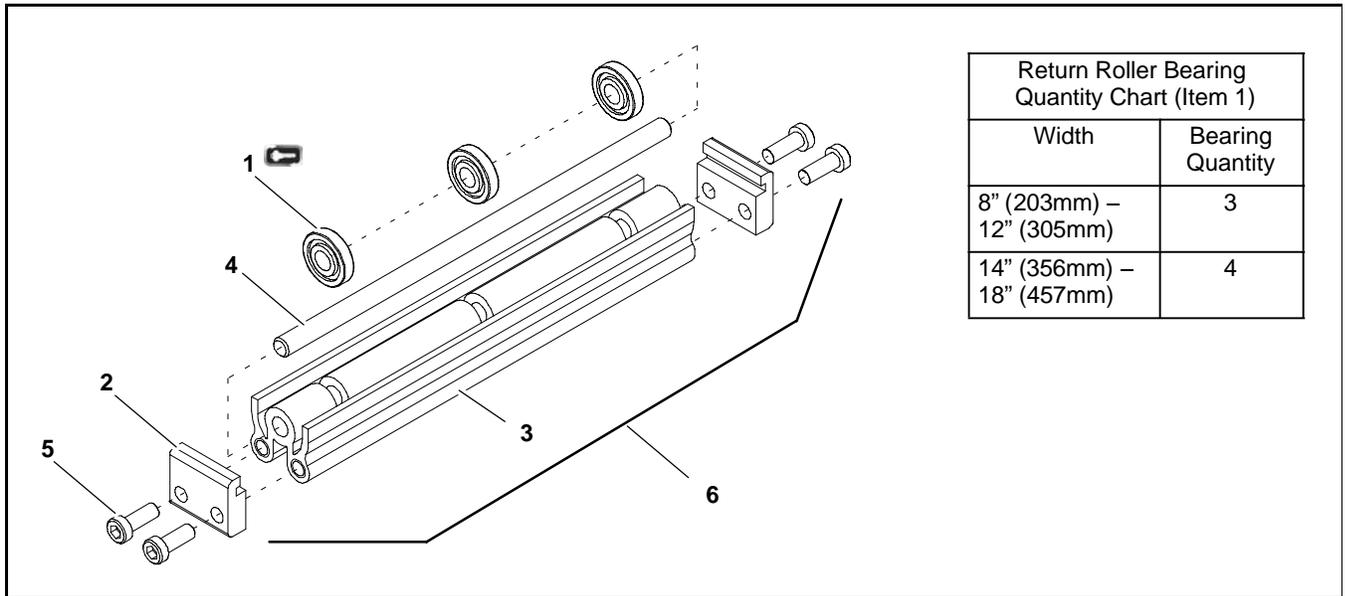
## 4" (102mm) to 6" (152mm) Flat Belt Return Roller



Item	Part Number	Description
1	240825	Return Roller Guard – Short
2	240827	Return Roller Clip
3	802-027	Bearing
4	913-100	Dowel Pin

Item	Part Number	Description
5	920693M	Socket Low Head Screw M6 x 16mm
6	240840	Roller Assembly (Includes Items 1, 3 and 4)
7	240830	4" (102mm) to 6" (152mm) Flat Belt Return Roller Assy

## 8" (203 mm) to 18" (457 mm) Flat Belt Return Roller



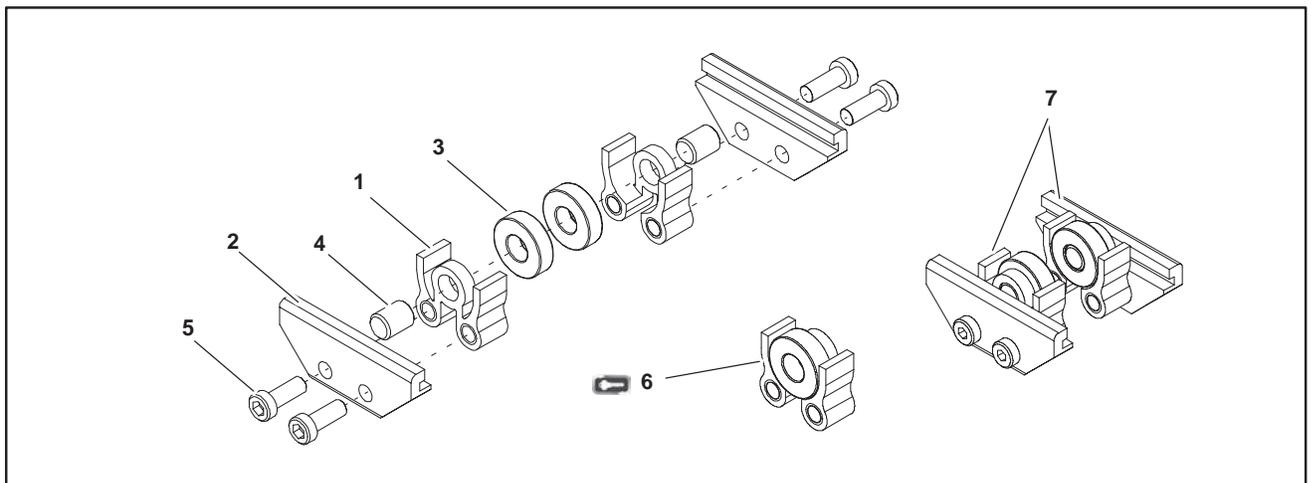
Return Roller Bearing Quantity Chart (Item 1)	
Width	Bearing Quantity
8" (203mm) – 12" (305mm)	3
14" (356mm) – 18" (457mm)	4

Item	Part Number	Description
1	240826	Return Roller Bearing
2	240827	Return Roller Clip
3	2409WW	Return Roller Guard
4	2410WW	Return Roller Rod

Item	Part Number	Description
5	920693M	Socket Head Screw M6 x 16mm
6	3249WW	8" (203mm) – 48" (1219mm) Flat Belt Return Roller Assembly

WW = Conveyor width reference: 04, 06, 08, 10, 12, 14, 16, & 18

## Cleated Belt Return Roller (Also Used for Flat Belt Conveyors with Belt Inserts)

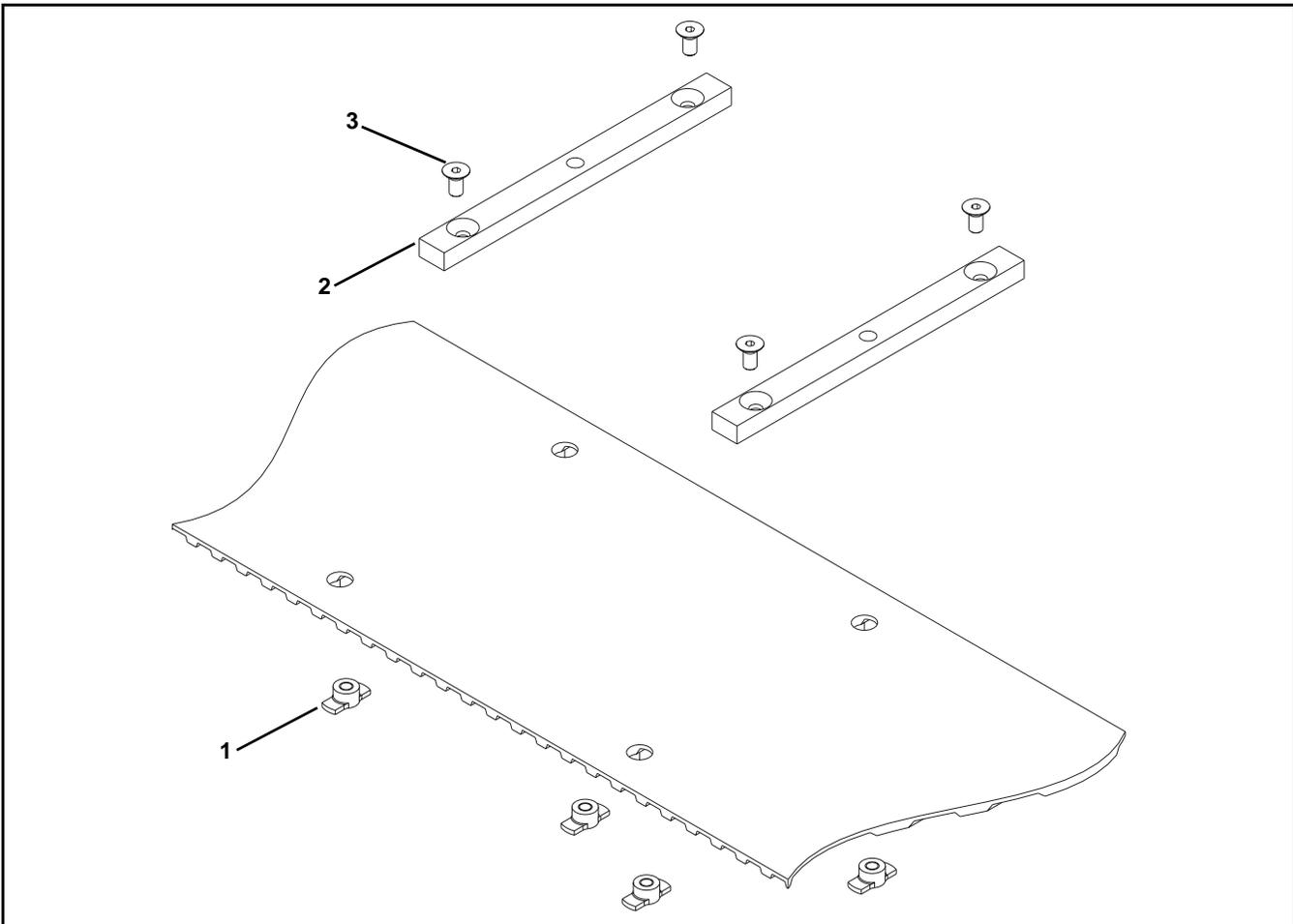


Item	Part Number	Description
1	240825	Return Roller Guard – Short
2	240828	Cleated Return Roller Clip
3	802-027	Bearing
4	913-100	Dowel Pin

Item	Part Number	Description
5	920693M	Socket Low Head Screw M6 x 16mm
6	240840	Roller Assembly (Includes Items 1, 3 and 4)
7	240832	Cleated Belt Return Roller Assembly

# Service Parts

## Belt Inserts & Fixtures



Item	Part Number	Description
1	350152	T-Nut 5 mm
2	350164- <u>WW</u>	Belt Fixture
3	930510M	Flat Head Screw, M5-.80 x 10 mm

WW = Conveyor Width Reference: 04, 06, 08, 10, 12, 14, 16 & 18

Conveyor Belt Part Number Configuration

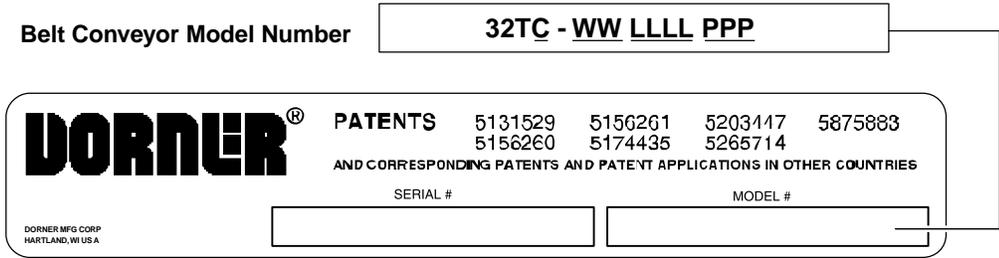
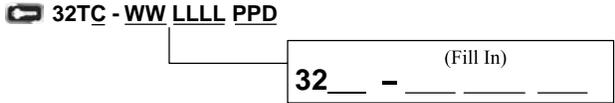


Figure 50

Belt Part Number Configuration

Refer to Dorner patent plate (Figure 50). From the model number, determine configuration type ("C"), width ("WW"), length ("LLLL"), pocket spacing ("PPP"). Use data to configure belt part number as indicated below.



# 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.

Product Type									
Standard Products									Engineered to order parts
Product Line	Conveyors	Gearmotors & Mounting Packages	Support Stands	Accessories	Spare Parts (non-belt)	Spare Belts - Standard Flat Fabric	Spare Belts - Cleated & Specialty Fabric	Spare Belts - Plastic Chain	All equipment and parts
1100	30% return fee for all products except: 50% return fee for conveyors with modular belt, cleated belt or specialty belts						non-returnable		case-by-case
2200									
2200 Modular Belt									
2200 Precision Move									
2300									
2300 Modular Belt									
3200									
3200 LPZ									
3200 Precision Move									
4100									
5200									
5300									
6200									
Controls									
7200 / 7300	50% return fee for all products								
7350	non-returnable								
7360									
7400									
7600									

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.

 <p>Dorner Mfg. Corp. reserves the right to change or discontinue products without notice. All products and services are covered in accordance with our standard warranty. All rights reserved. © Dorner Mfg. Corp. 2012</p>	<p><b>DORNER MFG. CORP.</b>            975 Cottonwood Ave., PO Box 20            Hartland, WI 53029-0020 USA            TEL 1-800-397-8664 (USA)            FAX 1-800-369-2440 (USA)            Internet: <a href="http://www.dorner.com">www.dorner.com</a></p>	<p>Outside the USA:            TEL 1-262-367-7600            FAX 1-262-367-5827</p>
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