2300 Series DustPruf Center Drive Conveyors

Installation, Maintenance & Parts Manual

Featuring: SmartSlot™

DORNER MFG. CORP.
P.O. Box 20 • 975 Cottonwood Ave.
Hartland, WI 53029-0020 USA

INSIDE THE USA
TEL: 1-800-397-8664
FAX: 1-800-369-2440

OUTSIDE THE USA
TEL: 262-367-7600
FAX: 262-367-5827

For other service manuals visit our website at:
www.dorner.com/service_manuals.asp

851-701 Rev. C

Table of Contents

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 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.

Dorner 2300 series conveyors are covered by Patent Numbers 5,174,435, 6,298,981, 6,422,382 and corresponding patents and patent applications in other countries.

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

⚠ 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.

Product Description

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

1	Conveyor
2	Drive Module
3	Guiding & Accessories
4	Gearmotor Mounting Package
5	Gearmotor
6	Mounting Brackets
7	Support Stand
8	Variable Speed Controller
9	Fixed End
10	Tension End

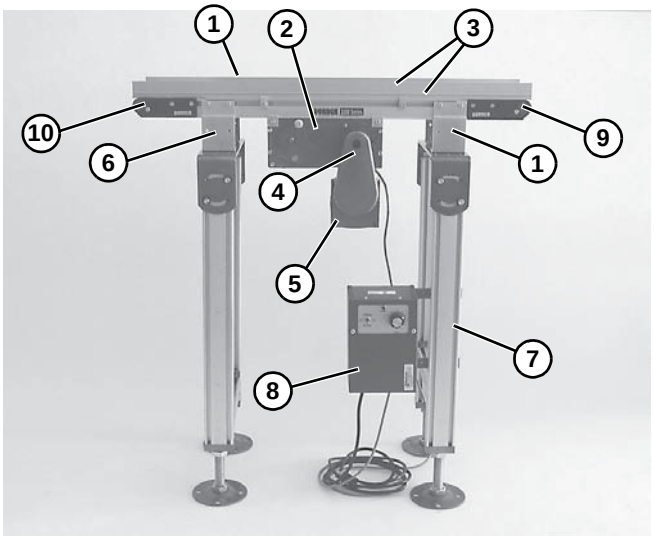


Figure 1

Specifications

2300 Series DustPruf Center Drive Conveyor

2300 Series DustPruf Center Drive Conveyor

25F M WW–LLLL G D T S PA PD BB

- BB – Belt Type
- PD – Profile (D side)
- PA – Profile (A side)
- S – Motor Shaft Position
- T – Idler Tail Type
- D – Drive Tail Type
- G – Tracking / Mounting Brackets
- LLLL – Conveyor Length
- WW – Conveyor Width
- M – Document Language

* See Ordering and Specifications Catalog for details.

Conveyor Supports

Maximum Distances:

1 = 18¨ (457 mm)

2 = 6 ft (1829 mm)**

** For conveyors longer than 13 ft (3962 mm), install support at joint.

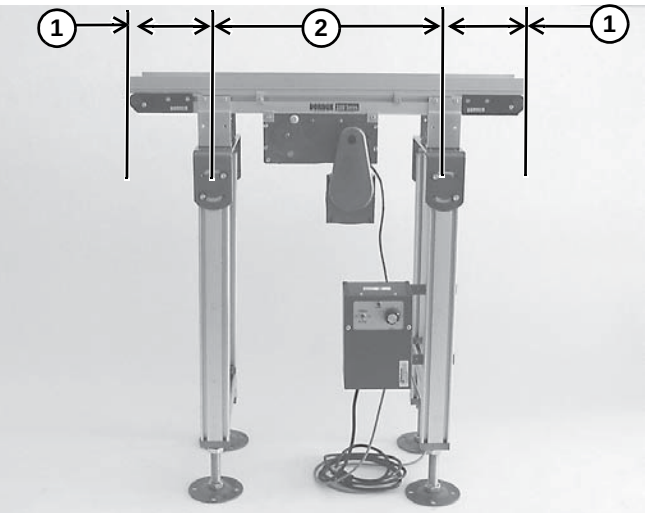


Figure 2

Specifications

Conveyor Width Reference (WW)	02	04	06	08	12	18	24
Conveyor Belt Width	1.75¨ (44mm)	3.75¨ (95mm)	6¨ (152mm)	8¨ (203mm)	12¨ (305mm)	18¨ (457mm)	24¨ (609mm)
Maximum Conveyor Load* (See NOTE Below)	36 lb (16kg)	50 lb (23kg)	72 lb (33kg)	84 lb (38kg)	96 lb (44kg)	96 lb (44kg)	96 lb (44kg)
Conveyor Startup Torque*	2 in-lb (0.5Nm)	4 in-lb (0.7Nm)	8 in-lb (0.9Nm)	10 in-lb (1.1Nm)	14 in-lb (1.5Nm)	15 in-lb (1.7Nm)	20 in-lb (2.3Nm)
Belt Travel	4.0¨ (88 mm) per revolution of pulley						
Maximum Belt Speed*	264 ft/minute (80.5 m/minute)						
Belt Takeup	0.38¨ (10 mm) of stroke = 0.75¨ (19 mm) of belt take-up						
Conveyor Length Reference (LLLL)	1.5 ft (457 mm) to 24 ft (7315 mm) in 0.12” (0.31 mm) increments**						

* 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 3, item 1)*** *for setup.*

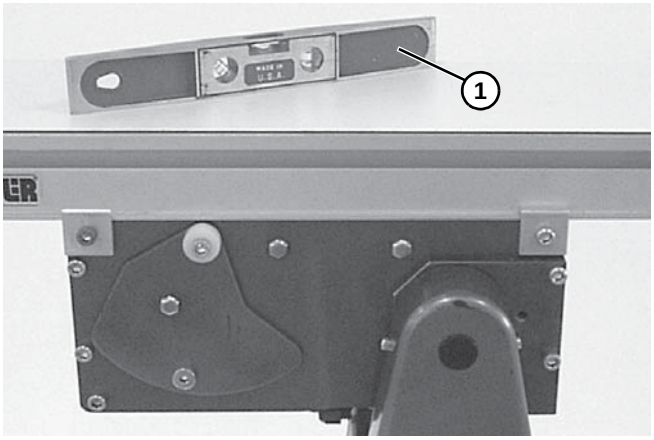


Figure 3

Installation Component List

Conveyor frame (two sections if longer than 8 ft)
Conveyor brackets
Return rollers (for longer conveyors)

Required Tools

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

Recommended Installation Sequence

- Install stands (see accessory instructions)
- 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 "Service Parts" section, page 26)

Conveyors Up to 8 ft (2438 mm)

No assembly is required. Install mounting brackets and return rollers. Refer to "Mounting Brackets", page 7 and "Return Rollers", page 8.

Conveyors Longer Than 8 ft (2438 mm)

1. Locate and arrange conveyor sections **(Figure 4, item 1)** by section labels.

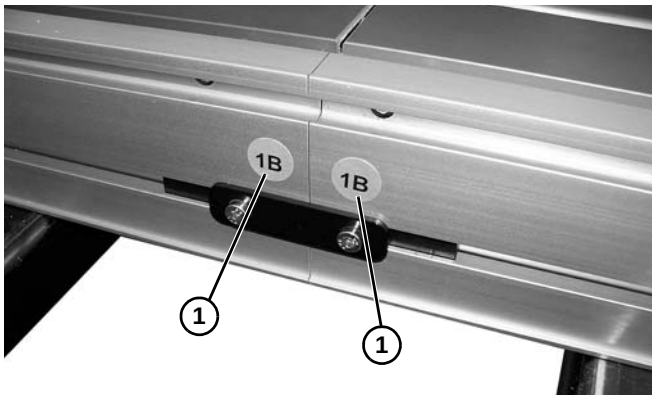


Figure 4

2. On tension end of the conveyor, identified with a label **(Figure 5, item 1)**, push in head plate assembly **(Figure 5, item 2)**: On both sides of conveyor, loosen and move cam tracking assemblies **(Figure 5, item 3)** (if equipped) away from head plates, then loosen fastening screws **(Figure 5, item 4)** and push head plate assembly inward.

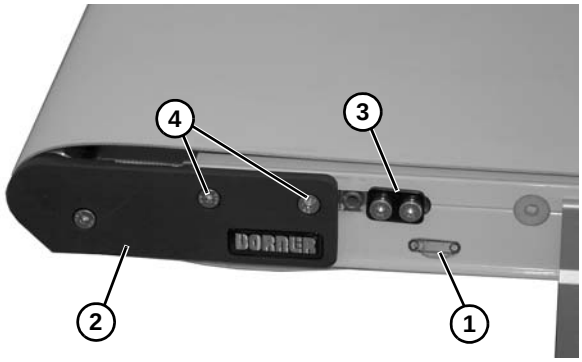


Figure 5

3. Roll out conveyor belt and place conveyor frame sections **(Figure 6, item 1)** into belt loop.

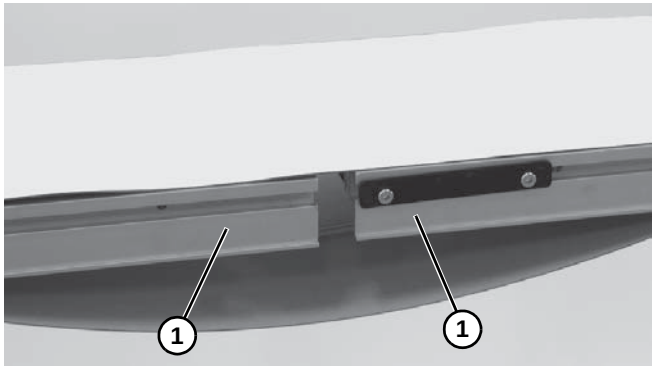


Figure 6

4. Join conveyor sections and install connector brackets **(Figure 7, item 1)** or connector/mount brackets **(Figure 7, item 2)** and screws **(Figure 7, item 3)** on both sides as indicated. Tighten screws to 60 in-lb (7 Nm).

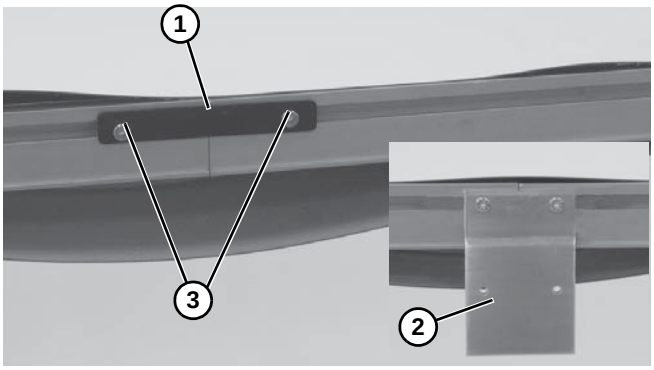


Figure 7

5. With a 5 mm hex-key wrench, rotate pinion gear **(Figure 8, item 1)** to tension the conveyor belt. Tighten fastening screws **(Figure 8, item 2)** on both sides of conveyor to 60 in-lb (7 Nm). For proper tensioning, refer to "Conveyor Tension End Adjustment" on page 17.

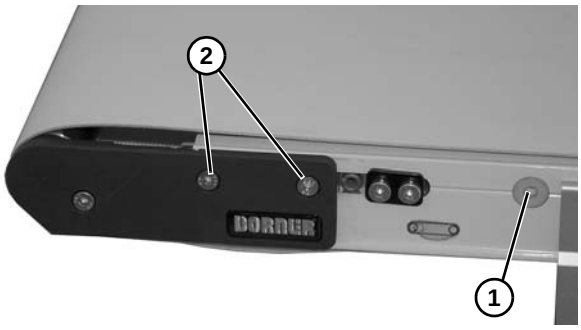


Figure 8

6. Install mounting brackets and return rollers. Refer to "Mounting Brackets" on page 7 and "Return Rollers" on page 8.
7. If equipped with cam tracking assemblies **(Figure 5, item 3)**, adjust belt tracking. Refer to "Conveyor Belt Tracking" on page 20.

Mounting Brackets

1. Locate brackets. Exploded views shown in **Figure 9**.

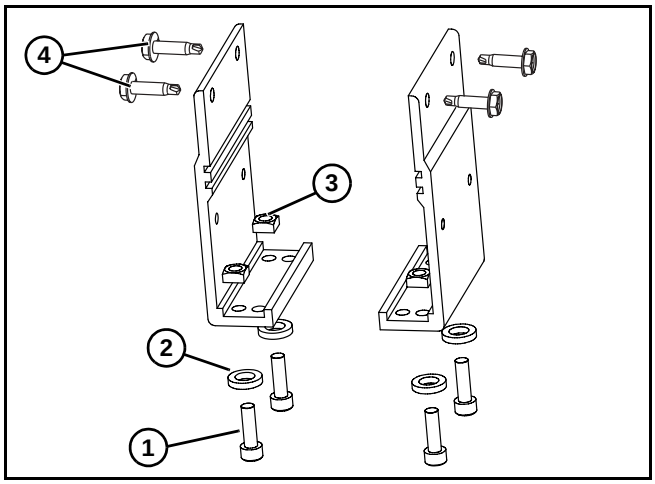


Figure 9

2. Remove screws **(Figure 9, item 1)**, washers **(Figure 9, item 2)**, nuts **(Figure 9, item 3)** a from brackets.

IMPORTANT

For proper methods of attachment to conveyor side rail see page 9.

3. Locate and retain self-drilling screws **(Figure 9, item 4**).

NOTE

For maximum support distance see page 5.

4. Measure an equal distance **(Figure 10, item 1)** from end of head plate (on both sides of conveyor) and mark placement of mounting brackets **(Figure 10, item 2)**. Fasten mounting brackets to conveyor with mounting screws **(Figure 10, item 3)** following proper methods of attachment instructions on page 10.

NOTE

Mounting brackets for flat belt conveyors shown.

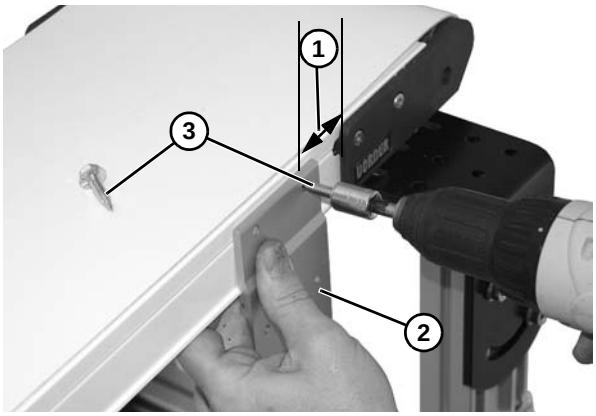


Figure 10

5. Fasten brackets **(Figure 13, item 1)** to support stand **(Figure 13, item 2)** with mounting screws **(Figure 13, item 3)**, washers **(Figure 13, item 4)** and nuts **(Figure 13, item 5)**.

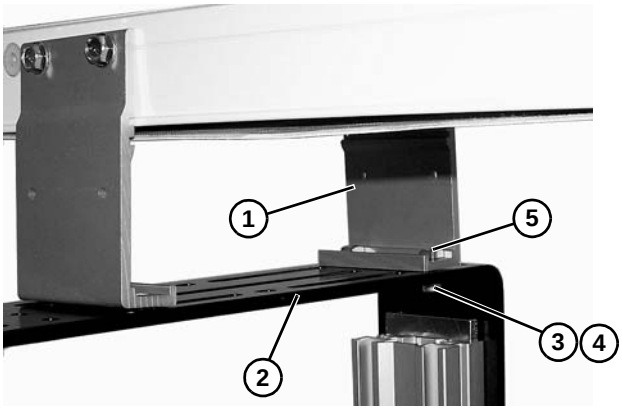


Figure 11

6. Fasten brackets **(Figure 12, item 2)** to conveyor with mounting screws **(Figure 12, item 3)**.

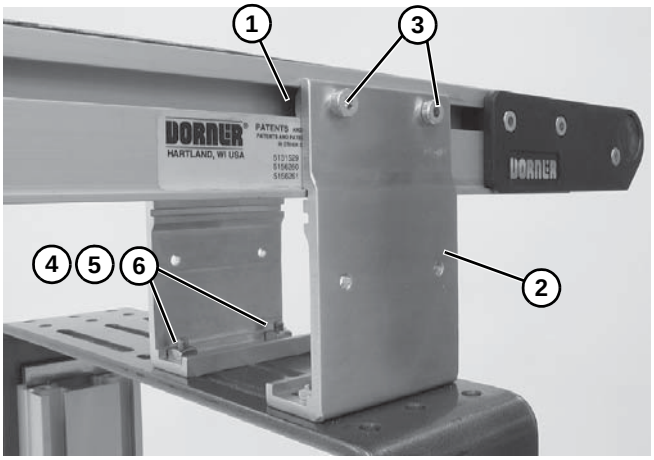


Figure 12

7. Fasten brackets to support stand with mounting screws **(Figure 12, item 4)**, washers **(Figure 12, item 5)** and nuts **(Figure 12, item 6)**.
8. Tighten screws **(Figure 12, item 3 & 4)** to 60 in-lb (7 Nm).

Return Rollers

2–6¨ (51–152 mm) Wide Flat Belt Conveyors

1. Locate return rollers. Exploded views shown in **Figure 13**.

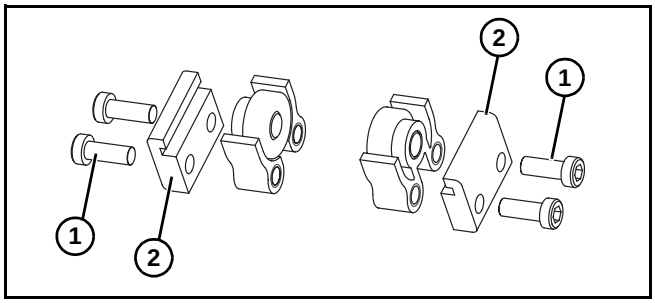


Figure 13

2. Remove screws **(Figure 13, item 1)** and clips **(Figure 13, item 1)** from roller assembly.
3. Install roller assemblies **(Figure 14, item 1)** as shown. Tighten screws **(Figure 14, item 2)** to 60 in-lb (7 Nm).

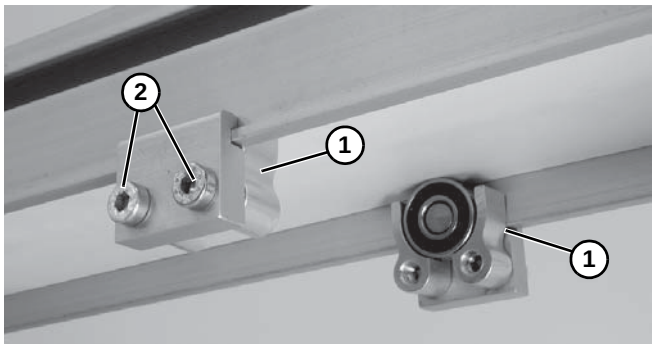


Figure 14

8–24¨ (203–610 mm) Wide Flat Belt Conveyors

1. Locate return rollers. Exploded view shown in **Figure 15**.

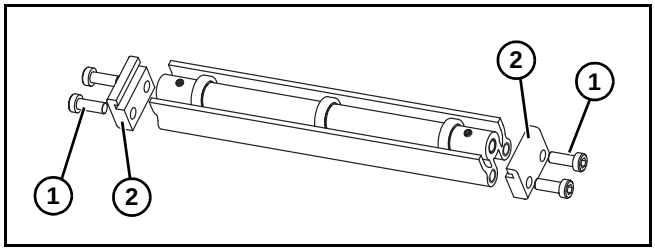


Figure 15

2. Remove screws **(Figure 15, item 1)** and clips **(Figure 15, item 2)** from roller assembly.

3. Install roller assembly as shown **(Figure 16, item 1)**. Tighten screws **(Figure 16, item 2)** to 60 in-lb (7 Nm).

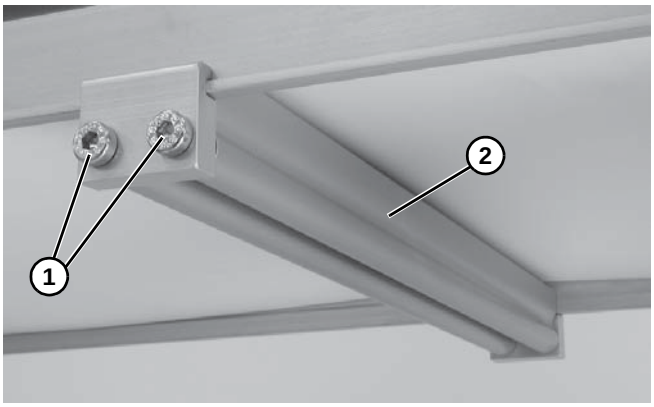


Figure 16

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 2300 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 and hold bracket **(Figure 17, item 1)** to side rail. Hole should line up with notch **(Figure 17, item 2)** in side rail.

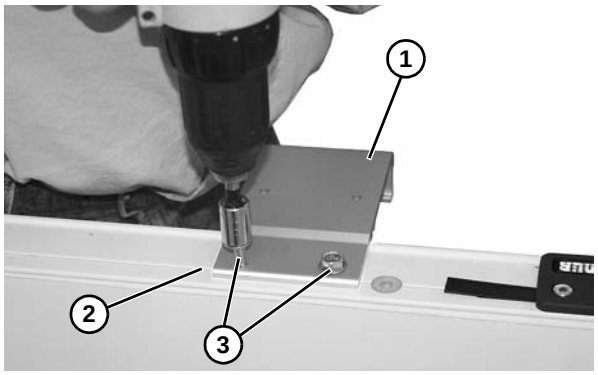


Figure 17

2. With a cordless drill or equivalent install self-drilling screws **(Figure 17, item 3)**. 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 18)**. Recommended torque is 150 in.lbs (17 Nm).

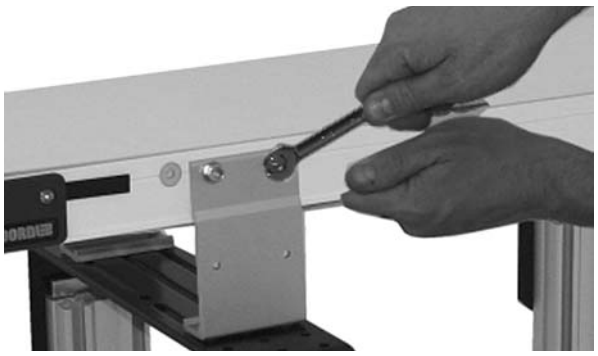


Figure 18

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 and hold bracket **(Figure 19, item 1)** to side rail. Hole should line up with notch **(Figure 19, item 2)** in side rail. Mark the hole locations with a center punch **(Figure 19, item 3)** and remove the bracket.

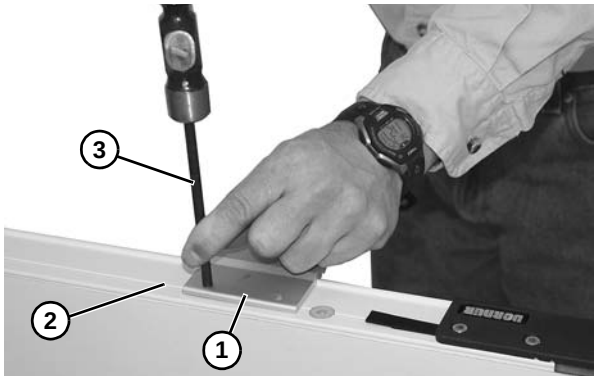


Figure 19

2. Drill the hole locations **(Figure 20, item 1)** with a 3/16" drill bit **(Figure 20, item 2)**.

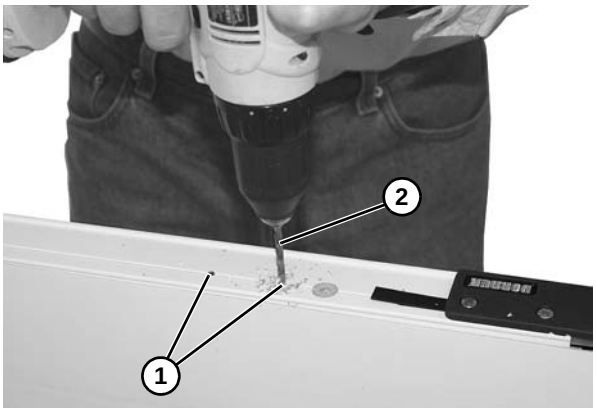


Figure 20

3. Position and hold bracket **(Figure 21, item 1)** to side rail. With a standard M6-1.0 or 1/4-20 screw, install screws **(Figure 21, item 2)** with cordless drill or equivalent. Do not fully tighten with drill.

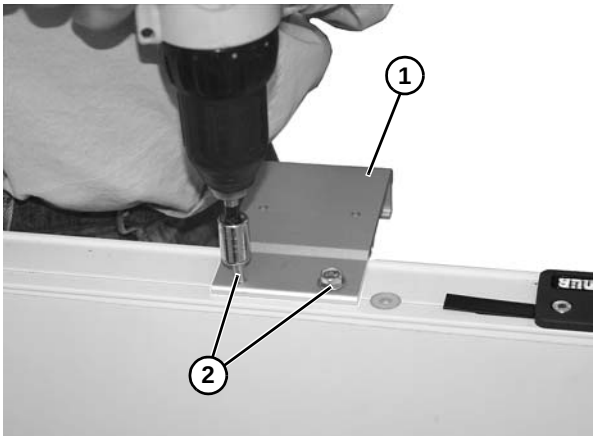


Figure 21

4. Hand tighten the screws to secure **(Figure 22)**. Recommended torque is 150 in.lbs (17 Nm).

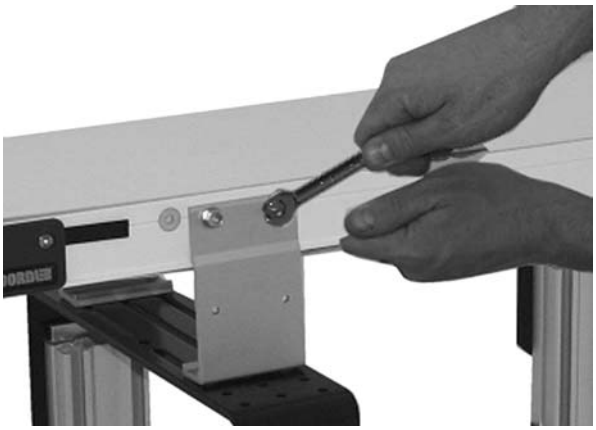


Figure 22

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 23, item 1)** locations. The end clips should be no greater than 12" **(Figure 23, item 2)** from end of the conveyor.

NOTE

Profile -09, Low to High Side shown below. For other guide profile layouts see pages page 34 thru page 41.

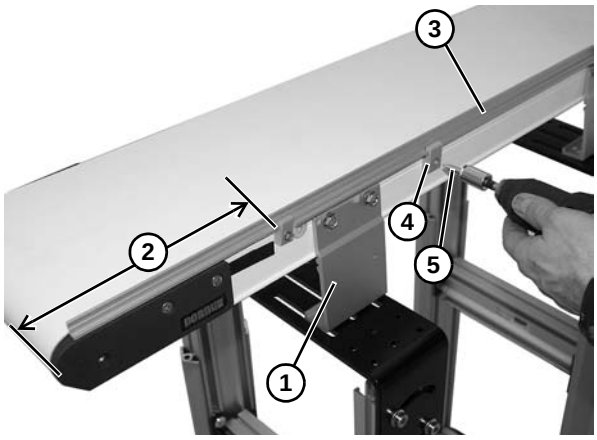


Figure 23

2. Hold guide **(Figure 23, item 3)** and retaining clips **(Figure 23, item 4)** to conveyor side rail. Install self-drilling screws **(Figure 23, item 5)** following the "Proper Methods of Attachment to Side Rails" on page 9 procedure.

Required Tools

Standard Tools

- Hex key wrenches:
  - 2 mm – 4 mm – 2.5 mm
  - 5 mm – 3 mm – 6 mm
- Small flat blade screwdriver
- Adjustable wrench
- Arbor press

Special Tools

- 807–1716 Bearing Puller Tool (or equivalent)
- 450293 Bearing Installation Tool (Bearing Pusher)
- 456063 Bearing Removal Tool

Checklist

- Keep service parts on hand. See “Service Parts” for recommendations.
- Keep supply of belt cleaner.
- Clean entire conveyor and knurled pulley while disassembled.
- Replace worn or damaged parts.

Lubrication

⚠ WARNING

Exposed moving parts can cause severe injury.

LOCK OUT POWER before removing guards or performing maintenance.

Conveyor Pulley Bearings

No lubrication is required. Replace pulley if worn.

Drive Module Idler Pulley Bearings

No lubrication is required. Replace pulley if worn.

Drive Module Drive Pulley Bearings

No lubrication is required. Replace bearings if worn.

Return Rollers

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
- Improperly installed bottom wiper
- Accumulated dirt in wiper
- 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
- Worn knurl or 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. 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

NOTE

See Table of Contents for beginning page numbers of following procedures.

- Remove old conveyor belt:

Conveyor without Stands or Gearmotor Mounting Package

Conveyor with Stands and Gearmotor Mounting Package

- Drive Module Removal
- Conveyor Belt Removal from Drive Module
- Install New Conveyor Belt
- Tension Conveyor Belt

Belt Removal for Conveyor Without Stands or Gearmotor Mounting Package

1. If equipped, remove bottom wipers **(Figure 24, item 1)**: Remove fastening screws **(Figure 24, item 2)** then remove wiper.

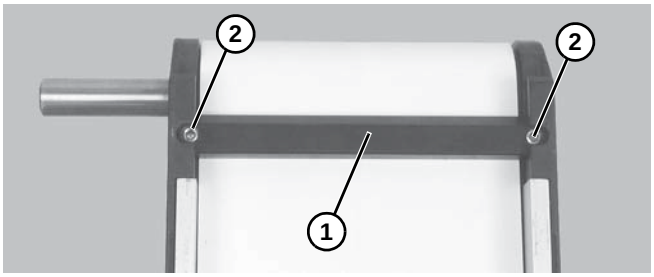


Figure 24

2. If equipped, remove return rollers and guiding and accessories from one side of conveyor.
3. Loosen corner screws **(Figure 25, item 1)**, on each side of the drive module **(Figure 25, item 2)**.

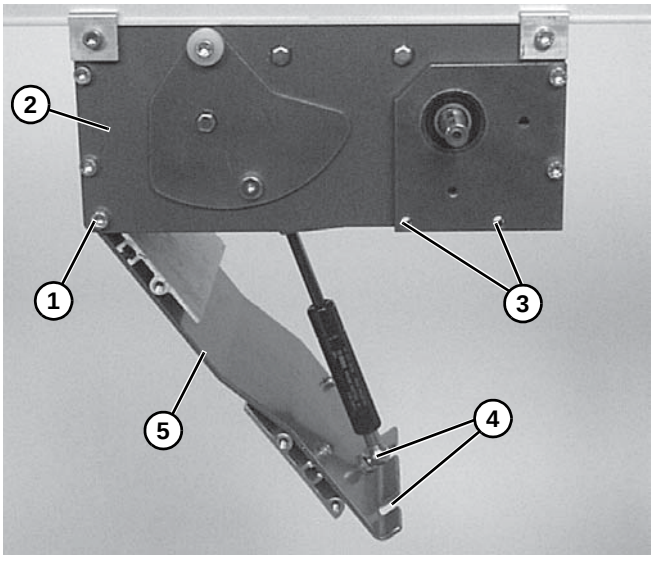


Figure 25

4. Remove tension door screws **(Figure 25, item 3)** on each side of the drive module.
5. Using finger grip holes **(Figure 25, item 4)**, open the tension door **(Figure 25, item 5)** to release conveyor belt tension.
6. On tension end of the conveyor, identified with a label **(Figure 26, item 1)**, push in head plate assembly **(Figure 26, item 2)**: On both sides of conveyor, loosen and move cam tracking assemblies **(Figure 26, item 3)** (if equipped) away from head plates, then loosen fastening screws **(Figure 26, item 4)** and push head plate assembly inward.

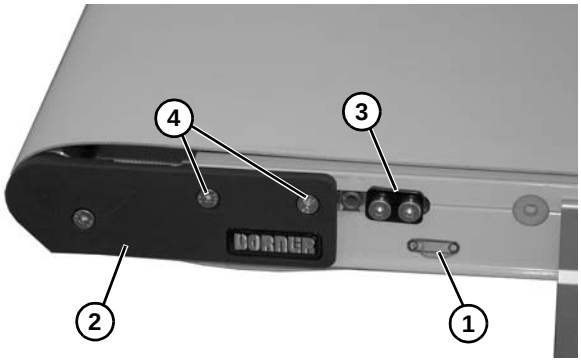


Figure 26

7. Remove conveyor belt from conveyor ends. See NOTE.

NOTE

On conveyors 4-ft (1219 mm) and shorter by 8¨ (203 mm) and wider, it is be necessary to remove the drive module at the same time the conveyor belt is removed. See "Drive Module Removal" on page 15.

8. Proceed to "Drive Module Removal" on page 15 and "Belt Removal from Drive Module" on page 15.

Belt Removal for Conveyor With Stands and Gearmotor Mounting Package

1. If equipped, remove bottom wipers **(Figure 27, item 1)**: Remove fastening screws **(Figure 27, item 2)** then remove wiper.

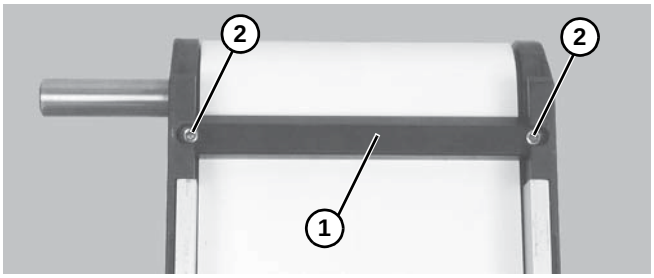


Figure 27

2. If equipped, remove return rollers and guiding and accessories from one side of conveyor.
3. Remove Gearmotor Mounting Package. See "Gearmotor Mounting Package Removal" on page 14.
4. Loosen corner screws **(Figure 28, item 1)**, on each side of the drive module **(Figure 28, item 2)**.

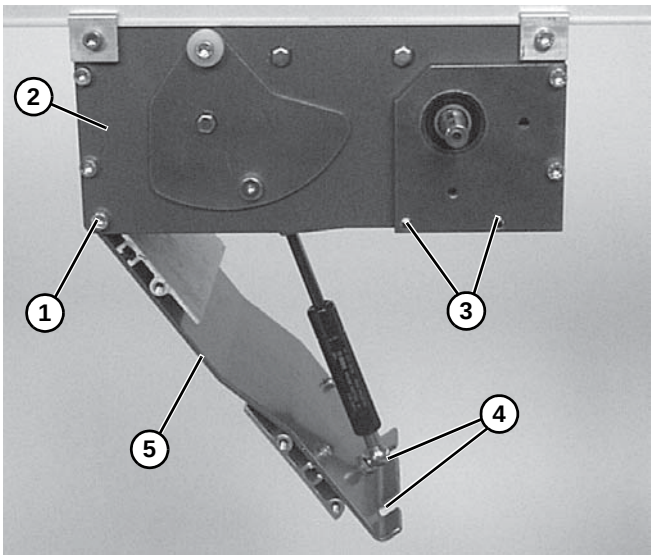


Figure 28

5. Remove tension door screws **(Figure 28, item 3)** on each side of the drive module.

> **NOTE**
>
> *With vertically mounted gearmotors, tension door screws **(Figure 28, item** 3) are removed from one side when the gearmotor mounting package is removed.*

6. Using finger grip holes **(Figure 28, item 4)**, open the tension door **(Figure 28, item 5)** to release conveyor belt tension.
7. On tension end of the conveyor, identified with a  label **(Figure 29, item 1)**, push in head plate assembly **(Figure 29, item 2)**: On both sides of conveyor, loosen and move cam tracking assemblies **(Figure 29, item 3)** (if equipped) away from head plates, then loosen fastening screws **(Figure 29, item 4)** and push head plate assembly inward.

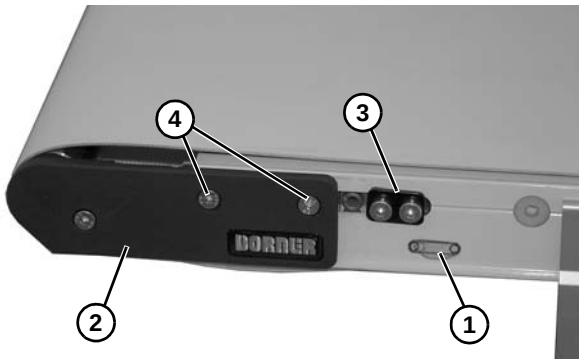


Figure 29

8. Place temporary support stands **(Figure 30, item 1)** at both ends of the conveyor.

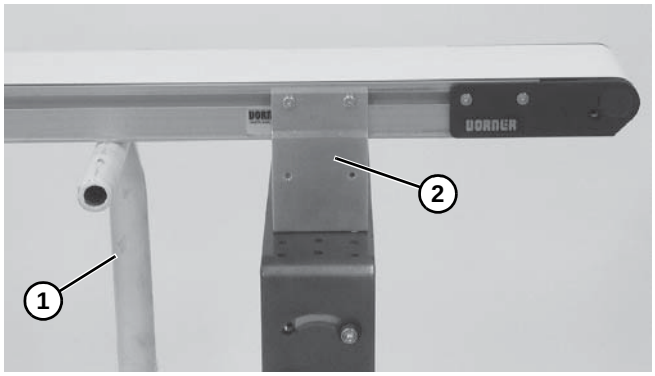


Figure 30

9. Remove mounting brackets **(Figure 30, item 2)** from one side of conveyor. (Reverse steps 3 & 4 of "Mounting Brackets" on page 7.)
10. Remove conveyor belt from conveyor ends. See NOTE.

> **NOTE**
>
> *On conveyors 4-ft (1219 mm) and shorter by 8¨ (203 mm) and wider, it is be necessary to remove the drive module at the same time the conveyor belt is removed. See "Drive Module Removal" on page 15.*

11. Proceed to "Drive Module Removal" on page 15 and "Belt Removal from Drive Module" on page 15.

Gearmotor Mounting Package Removal

1. Remove cover screws **(Figure 31, item 1)** and remove cover **(Figure 31, item 2)**.

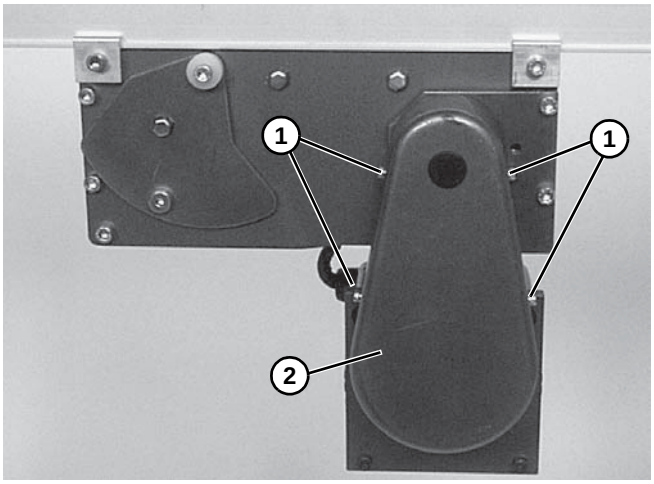


Figure 31

NOTE
Figure 31 *&* ***Figure 32*** *show vertically mounted gearmotor. Horizontally mounted gearmotor is similar.*

2. Loosen belt tensioner **(Figure 32, item 1)** then remove timing belt **(Figure 32, item 2)**.

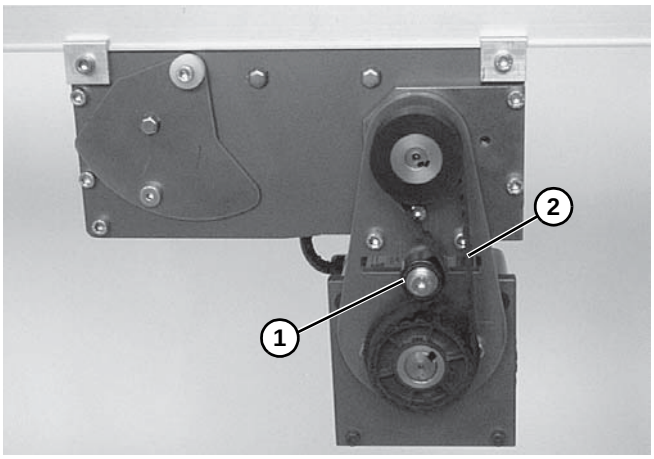


Figure 32

NOTE
If the timing belt does not slide over the pulley flange, loosen the driven pulley set screws ***(Figure 33, item 1)*** *and remove the pulley* ***(Figure 33, item 2)*** *with the belt* ***(Figure 33, item 3)****.*

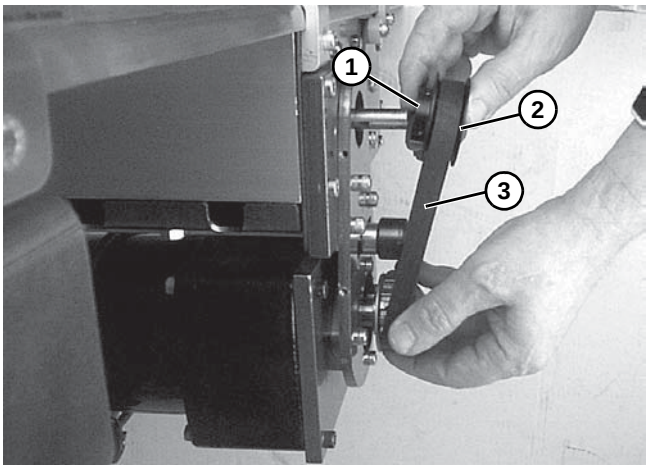


Figure 33

3. Remove three mounting screws **(Figure 34, item 1)** and remove gearmotor.

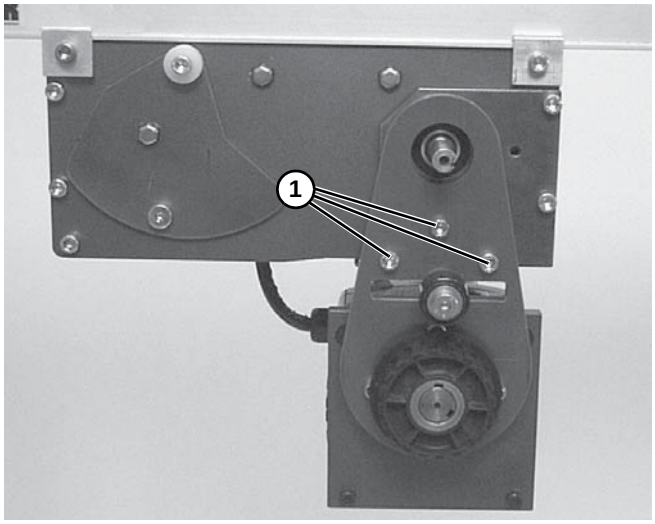


Figure 34

Drive Module Removal

⚠ WARNING

Removing drive module without support under the module may lead to personel injury.

PROVIDE SUPPORT UNDERNEATH THE DRIVE MODULE BEFORE REMOVING THE MODULE.

NOTE

If desired, mark position of drive module on conveyor before removal.

1. Place temporary support **(Figure 35, item 1)** underneath the drive module.

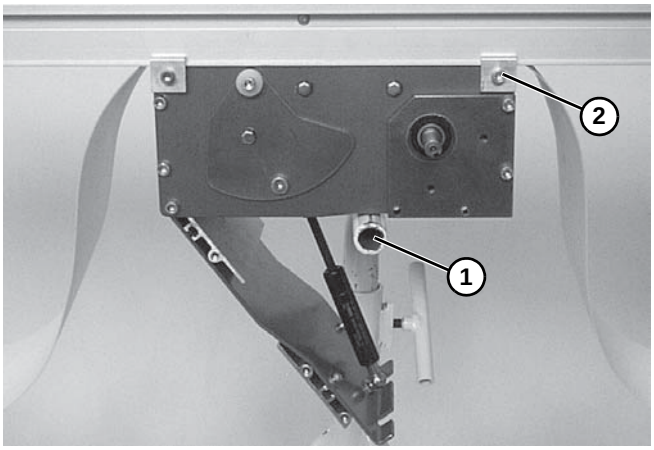


Figure 35

2. Loosen clamp screws **(Figure 35, item 2)** on each corner of the module. Remove the module.

Belt Removal from Drive Module

1. Remove drive plate screws **(Figure 36, item 1)**. Remove the tension drive plate **(Figure 36, item 2)**.

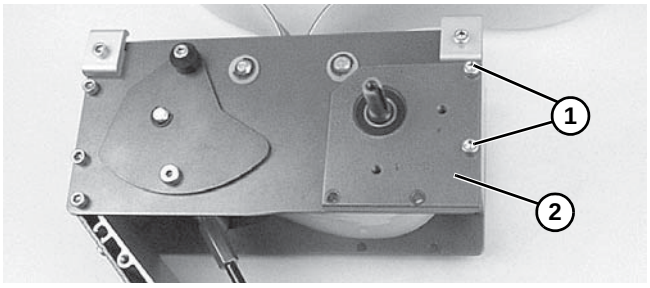


Figure 36

2. Remove drive pulley **(Figure 37, item 1)**.

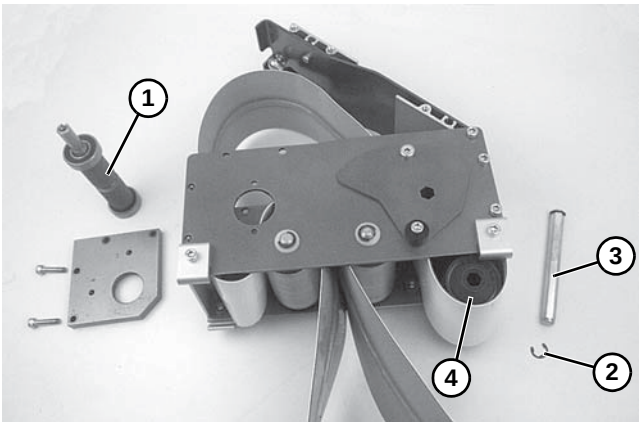


Figure 37

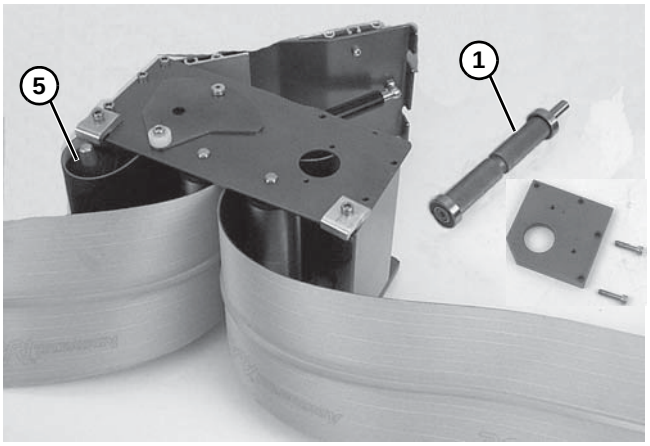


Figure 38

3. Remove grooved idler pulley:

- For 2” (44 mm), 3” (70 mm) or 4” (95 mm) wide conveyor, detach E-ring clip **(Figure 37, item 2)**. Remove pulley shaft **(Figure 37, item 3)** and remove pulley **(Figure 37, item 4)**.
- For 5” (127 mm) or wider conveyor, depress both sides of spring-loaded shaft and remove pulley **(Figure 38, item 5)**.

4. Remove the conveyor belt.

Conveyor Belt Installation

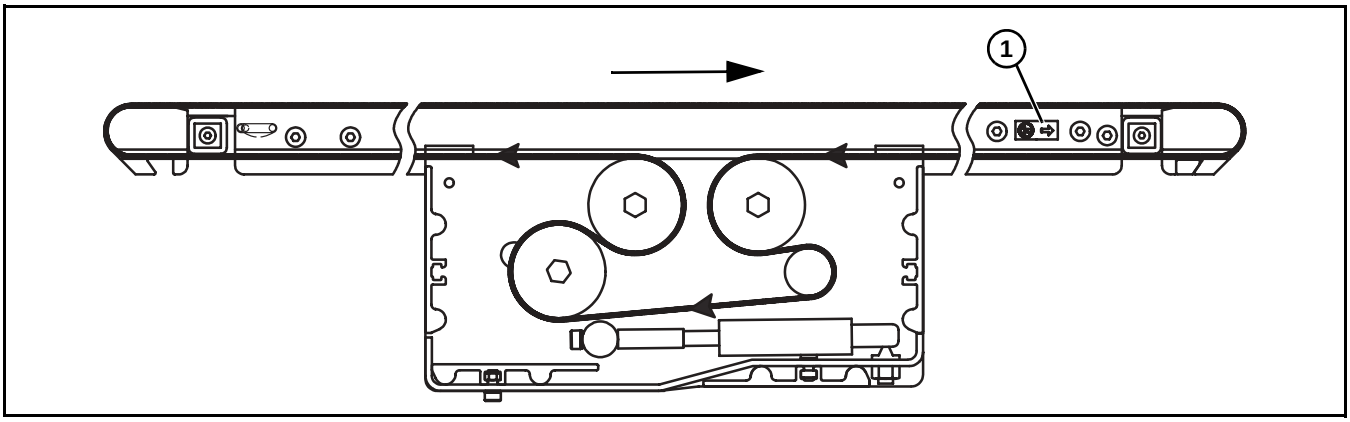


Figure 39

IMPORTANT

On a center drive conveyors, belt travel direction is identified by an arrow decal on the side of the conveyor ***(Figure 40, item 1)*** *&* ***(Figure 39, item 1)****.*

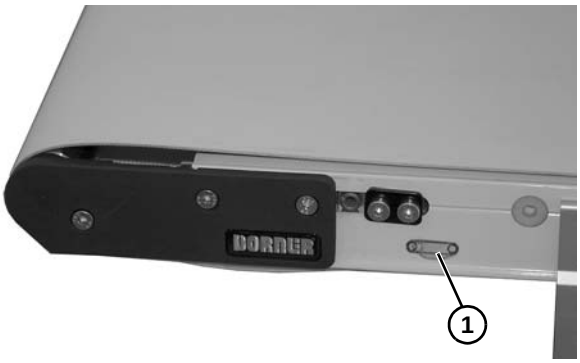


Figure 40

NOTE

It is necessary to replace the drive module at the same time the conveyor belt is replaced on conveyors 4-foot (1219 mm) and shorter by 8¨ (203 mm) and wider.

1. Orient the conveyor belt so that the splice leading fingers **(Figure 41, item 1)** point in the direction of belt travel, indicated by the label **(Figure 40, item 1)**.

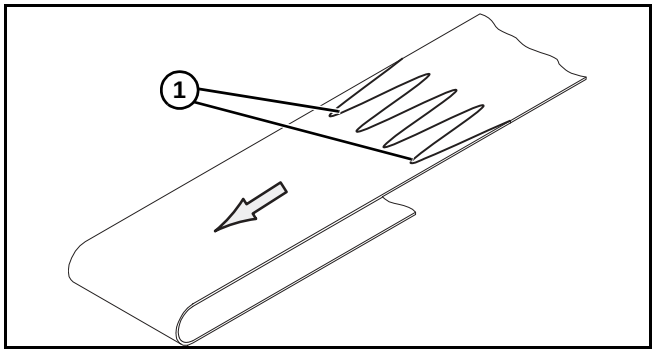


Figure 41

2. Place loop of belt **(Figure 42, item 1)** into the drive module between top idler pulleys **(Figure 42, item 2)**.

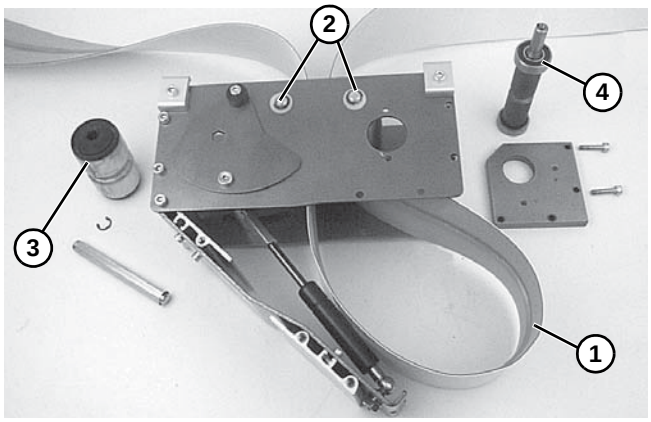


Figure 42

3. Place grooved idler pulley **(Figure 42, item 3)** into the belt loop and install it in the drive module. Refer to "Belt Removal from Drive Module" on page 15 and reverse step 3.
4. Place drive pulley **(Figure 42, item 4)** into the belt loop and install it in the drive module. Refer to "Belt Removal from Drive Module" on page 15 and reverse steps 1 and 2. Tighten screws **(Figure 36, item 1)** to 80 in-lb (9 Nm).

5. Install the drive module onto the conveyor and attach clamps **(Figure 35, item 2)** in each corner. Tighten screws to 80 in-lb (9 Nm).
6. Route and install the belt over both ends of the conveyor.
7. On conveyors with stands, re-install conveyor mounting brackets. Refer to "Mounting Brackets" on page 7, steps 3 through 5.
8. Adjust the conveyor tensioning end. See "Conveyor Tension End Adjustment" on page 17.

⚠ WARNING

Tension door closes quickly, may cause injury.

KEEP FINGERS CLEAR OF TENSION DOOR.

9. Carefully close the drive module tension door **(Figure 43, item 1)**. See WARNING.

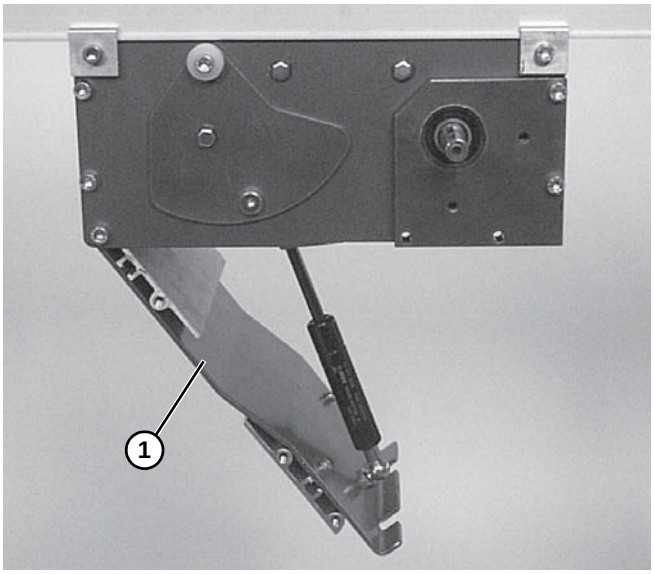


Figure 43

10. Tighten corner screws **(Figure 44, item 1)** on each side of the drive module to 80 in-lb (9 Nm).

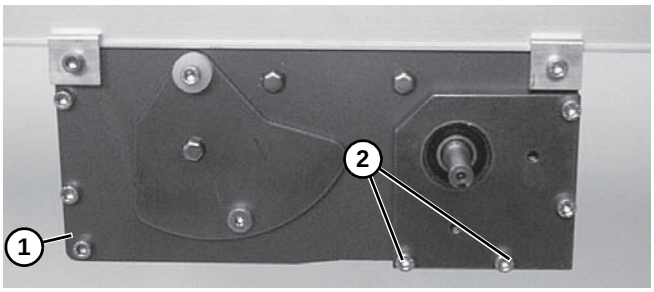


Figure 44

11. If equipped, re-install the gearmotor mounting package. Reverse steps of "Gearmotor Mounting Package Removal" on page 14.
12. Re-install tension door screws **(Figure 44, item 2)** on each side of the module. Tighten screws to 80 in-lb (9 Nm).

NOTE

*With vertically mounted gearmotors, tension door screws **(Figure 44, item** 2) are installed on one side when the gearmotor mounting package is installed.*

13. If equipped, re-install bottom wipers **(Figure 45, item 1)**: Install wiper **(Figure 45, item 2)** then install screws.

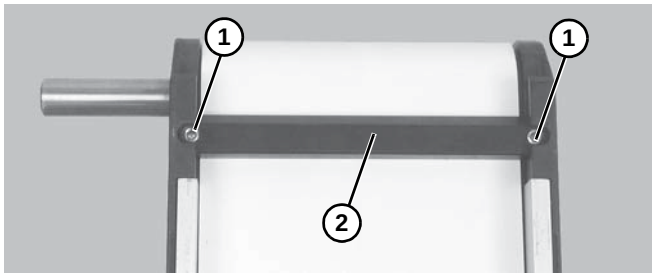


Figure 45

14. If equipped, replace guiding.

Conveyor Tension End Adjustment

⚠ WARNING

Exposed moving parts can cause severe injury.

LOCK OUT POWER before removing guards or performing maintenance.

Conveyors with 1.25¨ (32 mm) Diameter Pulleys

1. On tension end of the conveyor, identified with a label **(Figure 46, item 1)**, adjust head plate assembly **(Figure 46, item 2)**: On both sides of conveyor, loosen fastening screws **(Figure 46, item 3)** and rotate pinion gear **(Figure 46, item 4)** to adjust head plate assembly.

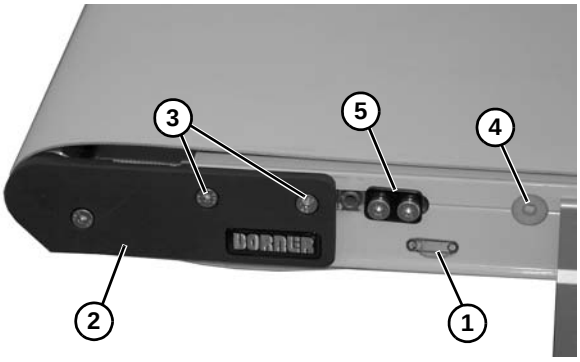


Figure 46

2. Adjust head plate assembly so end of conveyor frame aligns with first tensioning mark **(Figure 47, item 1)**. Tighten fastening screws **(Figure 46, item 2)** on both sides of conveyor to 60 in-lb (7 Nm).

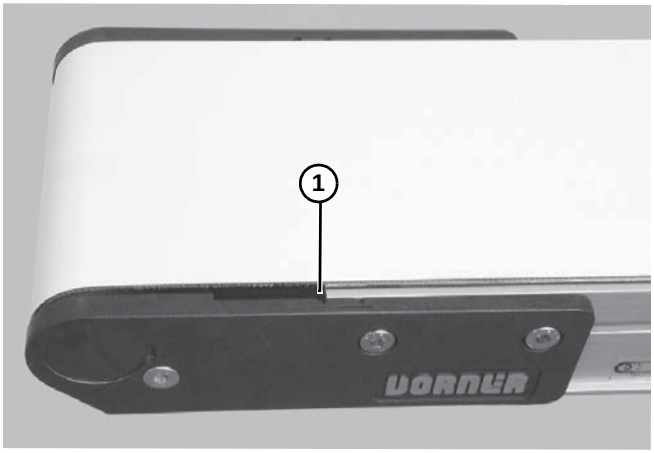


Figure 47

3. If equipped with cam tracking assemblies **(Figure 46, item 1)**, reposition against head plates and adjust belt tracking. Refer to “Conveyor Belt Tracking”, page 20.

Conveyors with Nose Bar Idlers

1. On tension end of the conveyor, identified with a label **(Figure 48, item 1)**, adjust head plate assembly **(Figure 48, item 2)**: On both sides of conveyor, loosen fastening screws **(Figure 48, item 3)** and rotate pinion gear **(Figure 48, item 4)** to adjust head plate assembly.

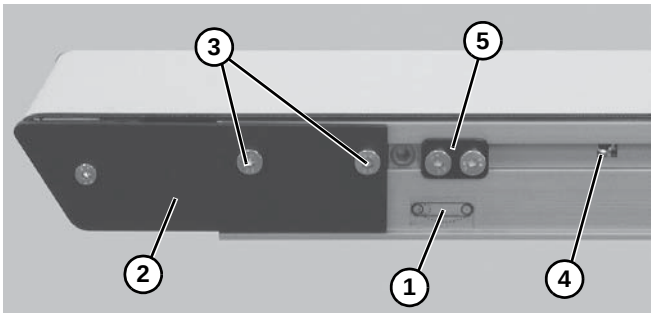


Figure 48

2. Adjust head plate assembly so the edge of the axle support plate **(Figure 49, item 1)** is separated from the end of the conveyor **(Figure 49, item 2)** by 1.125¨ (29 mm). Tighten fastening screws **(Figure 48, item 1)** on both sides of conveyor to 60 in-lb (7 Nm).

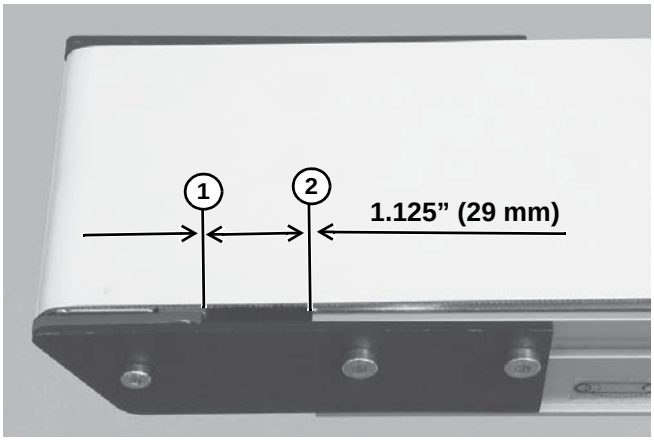


Figure 49

3. If equipped with cam tracking assemblies **(Figure 48, item 3)** position against head plates and adjust belt tracking. Refer to “Conveyor Belt Tracking” on page 20.

Mid Drive Belt Replacement

⚠ WARNING

SEVERE HAZARD!

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

1. Remove belt tension. See "Conveyor Belt Replacement" on page 11 for belt releasing belt tension.
2. Remove two M6x25 socket head screws **(Figure 50, item 1)** from bottom of mid drive assembly **(Figure 50, item 2)**.

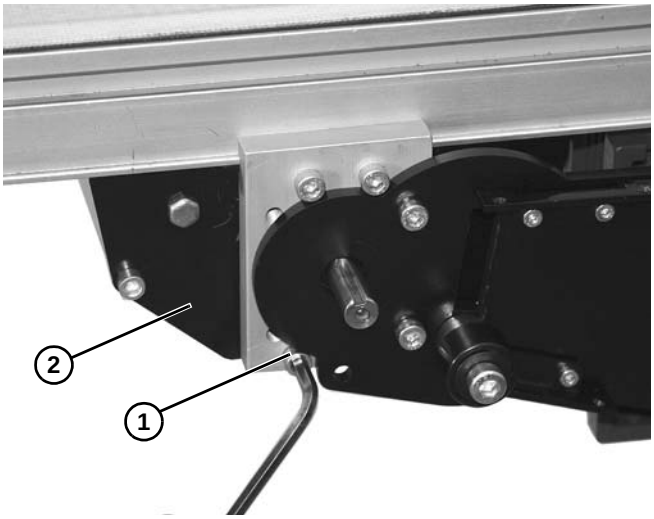


Figure 50

3. Lower and remove mid drive module **(Figure 51, item 1)** from belt **(Figure 51, item 2)**.

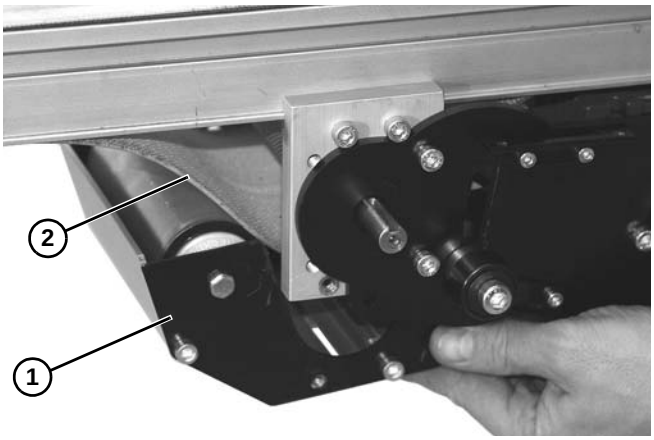


Figure 51

4. Remove belt **(Figure 52, item 1)** from conveyor frame.

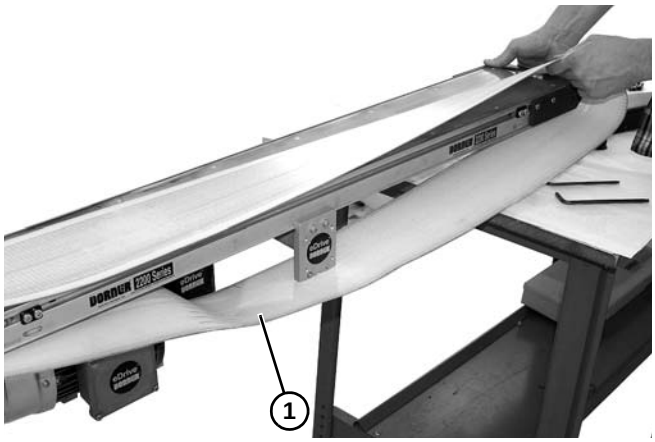


Figure 52

Conveyor Belt Tensioning

The conveyor is equipped with an automatic tensioning cylinder. No tensioning adjustment is required.

For a new belt, the tension plate **(Figure 53, item 1)** will be in position indicated below left. When the tension plate extends to position indicated below right, the conveyor belt must be replaced.

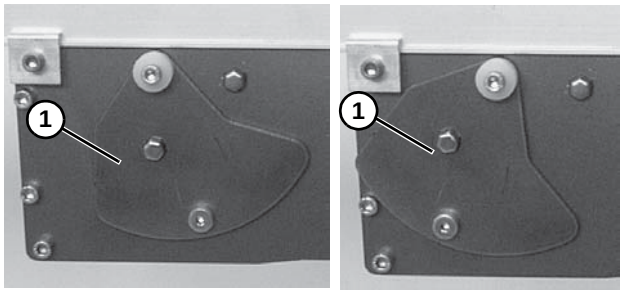


Figure 53

Preventive Maintenance and Adjustment

Conveyor Belt Tracking

V-Guided Belts

V-guided belts do not require tracking adjustment.

Non V-Guided Belts

Non V-guided belt conveyors are equipped with belt tracking cam assemblies **(Figure 54, item 1)** for belt tracking adjustment.

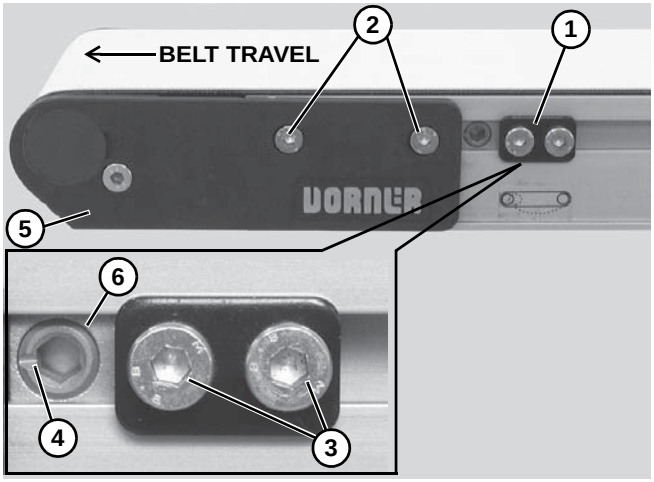


Figure 54

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

1. Ensure head plate fastening screws **(Figure 54, item 2)** on both sides of conveyor are tightened.
2. On both sides of conveyor, loosen two (2) cam fastening screws **(Figure 54, item 3)**. Adjust cams **(Figure 54, item 4)** until indicator slots **(Figure 54, item 5)** are horizontal and facing end of conveyor. Then slide cam assemblies against head plates **(Figure 54, item 6)** and re-tighten cam fastening screws **(Figure 54, item 3)** to 60 in-lb (7 Nm).
3. On the side toward which the belt is tracking, loosen head plate fastening screws **(Figure 54, item 2)**.
4. With the conveyor running, use a 5 mm hex-key wrench to rotate the tracking cam **(Figure 54, 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 54, item 2)** with a 4 mm hex-key wrench to 60 in-lb (7 Nm).

Pulley Removal

⚠ WARNING

Exposed moving parts can cause severe injury.

LOCK OUT POWER before removing guards or performing maintenance.

Remove the conveyor belt to access the pulley(s). Perform the indicated steps of one of the following procedures:

- "Belt Removal for Conveyor Without Stands or Gearmotor Mounting Package" on page 12, steps 1 through 7.
- "Belt Removal for Conveyor With Stands and Gearmotor Mounting Package" on page 12, steps 1 through 10.

Remove desired pulley following procedures:

- Conveyor End Pulley Removal
- Module Drive Pulley Removal
- Module Idler Pulley Removal

Conveyor End Pulley Removal

1. On one side of the conveyor, loosen two (2) head plate fastening screws **(Figure 55, item 1)** and remove them.

> **NOTE**
>
> *To prevent damage to the head plates and pulley, be sure to remove them slowly because they are not attached to pulley.*

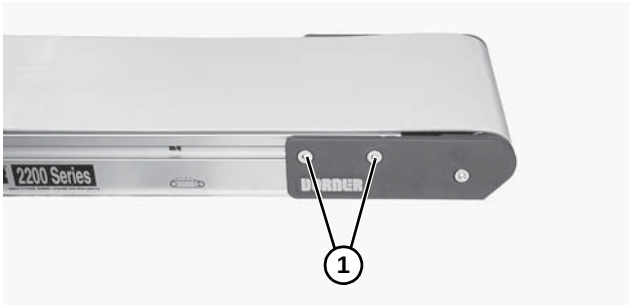


Figure 55

2. Remove the head plate **(Figure 56, item 1)** from the conveyor frame.

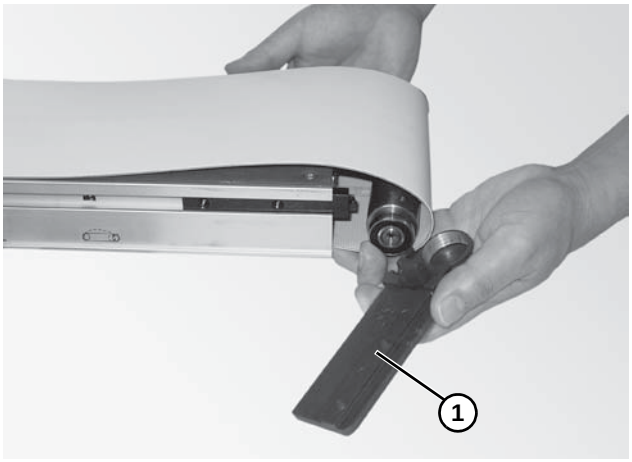


Figure 56

3. Pulley will slide out of opposite head plate and drop into slack of belt **(Figure 57)**.

Figure 57

4. Slide spindle out of the belt loop.

Drive Module Drive Pulley Removal

1. Remove the gearmotor drive package. Refer to "Gearmotor Mounting Package Removal" on page 14.
2. Remove the drive module. Refer to "Drive Module Removal" on page 15.
3. Remove the drive pulley. Refer to "Belt Removal from Drive Module" on page 15, steps 1 and 2.

Drive Module Idler Pulley Removal

1. Remove the gearmotor drive package. Refer to "Gearmotor Mounting Package Removal" on page 14.
2. Remove the drive module. Refer to "Drive Module Removal" on page 15".
3. Remove the grooved idler pulley. Refer to "Belt Removal from Drive Module" on page 15, step 3.
4. Remove smooth idler pulleys:

- For 2" (44 mm), 3" (70 mm) or 4" (95 mm) wide conveyor, detach E-ring clips and remove washers **(Figure 58, item 1)**. Remove pulley shafts **(Figure 58, item 2)** and pulleys **(Figure 58, item 3)**.

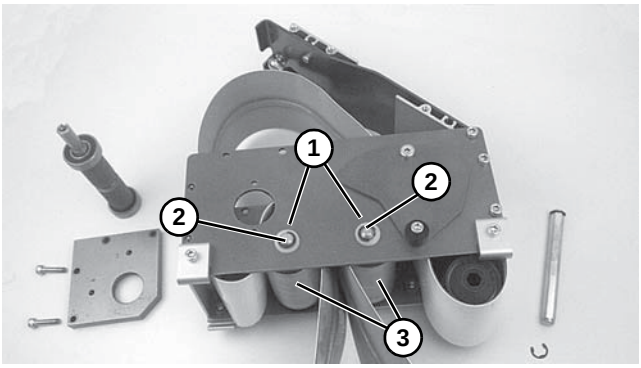


Figure 58

- For 5" (127 mm) or wider conveyor, depress both sides of each spring-loaded shaft **(Figure 59, item 1)**. Remove pulleys **(Figure 59, item 2)**.

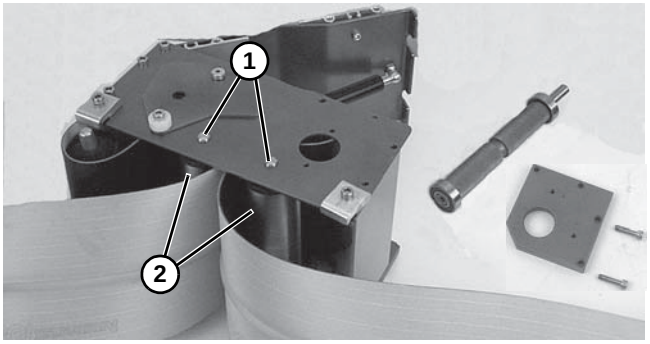


Figure 59

Conveyor Pulley Bearing Removal and Replacement

Removal

IMPORTANT

Do not use any removed bearings. Replace them.

1. Place bearing removal tool **(Figure 60, item 1)** (part # 456063) below bearing **(Figure 60, item 2)** with lip **(Figure 60, item 3)** located in gap **(Figure 60, item 4)** between bearing and spindle hub **(Figure 60, item 5)** as shown.

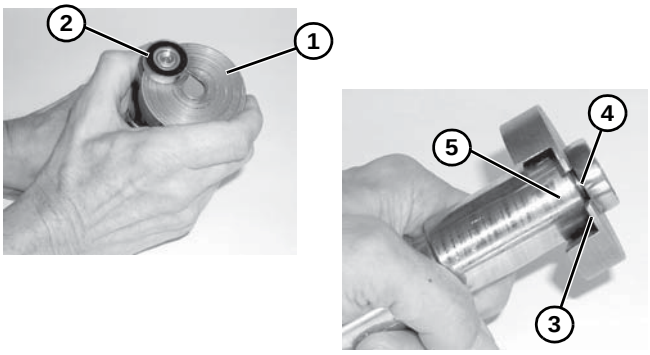


Figure 60

2. Using puller part #807−1716 **(Figure 61, item 1)**, remove and discard bearing.

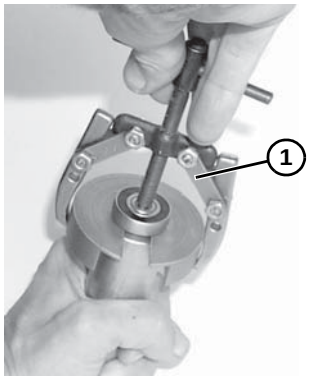


Figure 61

Replacement

1. Inspect the head plates bearing seating surface **(Figure 62, item 1)**. If they are worn or damaged, replace. See "Service Parts" on page 26.

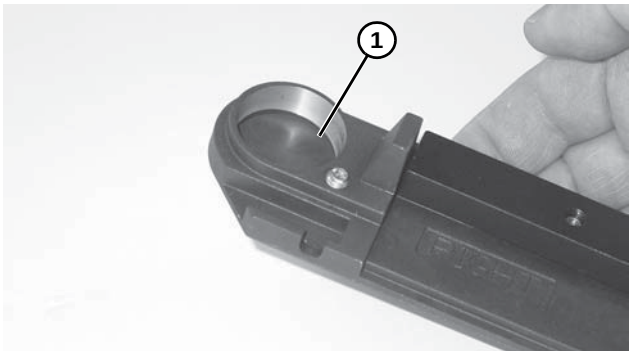


Figure 62

2. Inspect spindle **(Figure 63, item 1)**. Replace if worn.
3. Slide bearing **(Figure 63, item 2)** onto spindle.

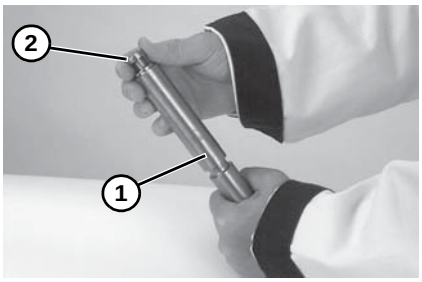


Figure 63

4. Using an arbor press or similar device, press bearing onto pulley shaft **(Figure 64)**.

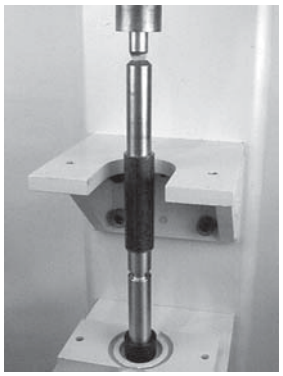


Figure 64

5. Repeat steps 1 through 4 for each bearing.

Conveyor Pulley Installation

1. With opposite head plate installed, position the conveyor pulley through the loop of the belt, into the opposite head plate.

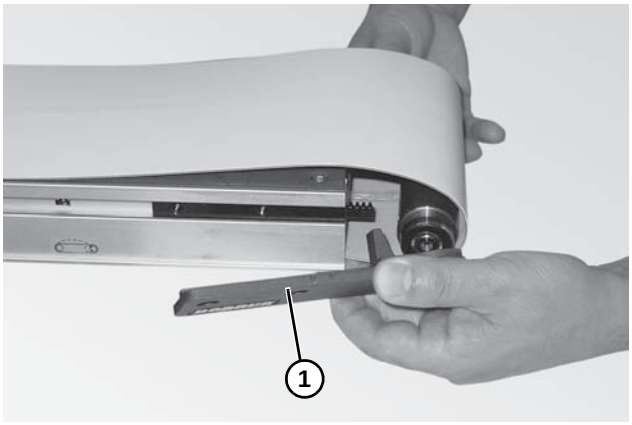


Figure 65

2. Place the head plate **(Figure 65, item 1)** and attach the head plate to the conveyor frame with the two (2) plates removed. tighten screws 60 in-lb (7 Nm).

Drive Module Drive Pulley

1. Reverse "Drive Module Drive Pulley Removal" procedure on page 21.
2. Re-install belt on end of conveyor, then tension the belt. See "Conveyor Tension End Adjustment", page 17.
3. Re-position the cam assemblies against the head plates and adjust belt tracking. See "Conveyor Belt Tracking", page 20.

Drive Module Idler Pulley

1. Reverse "Drive Module Idler Pulley Removal" procedure on page 21.
2. Re-install belt on end of conveyor, then tension the belt. See "Conveyor Tension End Adjustment", page 17.
3. Re-position the cam assemblies against the head plates and adjust belt tracking. See "Conveyor Belt Tracking", page 20.

Nose Bar Bearing Replacement

⚠ WARNING

Exposed moving parts can cause severe injury.

LOCK OUT POWER before removing guards or performing maintenance.

1. Remove the conveyor belt to access the bearings. Perform the indicated steps of one of the following procedures:

- "Belt Removal for Conveyor Without Gearmotor Mounting Package or Stands", page 12, steps 1 through 7.
- "Belt Removal for Conveyor With Stands and Gearmotor Mounting Package", page 12, steps 1 through 10.

2. On one side of conveyor, use a 3 mm and 4 mm hex-key wrench to remove head plate fastening screws **(Figure 66, item 1 & 2)** and remove head plate **(Figure 66, item 3)**.

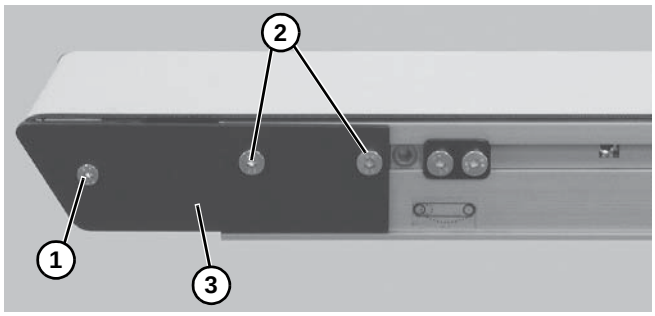


Figure 66

3. Slide bearing rods **(Figure 67, item 1)** out side of conveyor and replace bearings **(Figure 67, item 2)** as necessary.

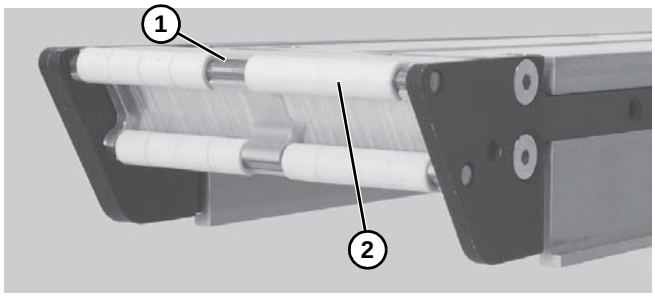


Figure 67

4. After replacing bearings, re-install head plate **(Figure 66, item 3)**. Use a 3 mm hex-key wrench to tighten one (1) fastening screw **(Figure 66, item 1)** to 30 in-lb (3.4 Nm). Leave two (2) fastening screws **(Figure 66, item 2)** loose for belt tensioning.
5. Re-install belt on end of conveyor, then tension the belt. See "Conveyor Tension End Adjustment", page 17.
6. Re-position the cam assemblies against the head plates and adjust belt tracking. See "Conveyor Belt Tracking", page 20.

Mid Drive Spindle Replacement

1. Remove belt. See “Conveyor Belt Replacement” on page 11.
2. Remove two M6x25 socket head screws **(Figure 68, item 1)** from each side of mounting block **(Figure 68, item 2)**.

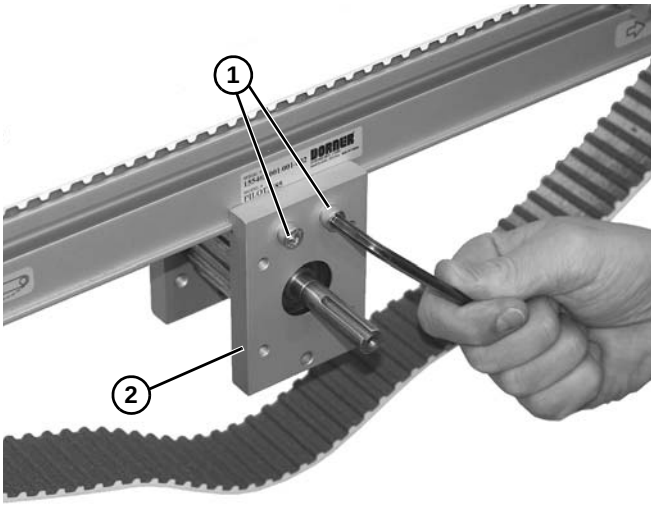


Figure 68

3. Lower center spindle assembly **(Figure 69, item 1)** clamp block **(Figure 69, item 2)** from conveyor channel **(Figure 69, item 3)** on each side of conveyor frame.

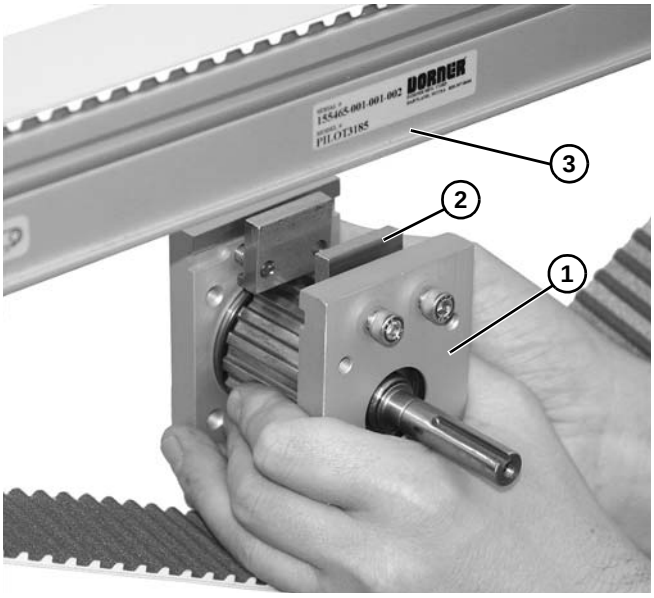


Figure 69

4. Separate mounting blocks **(Figure 70, item 1)** from spindle **(Figure 70, item 2)**.

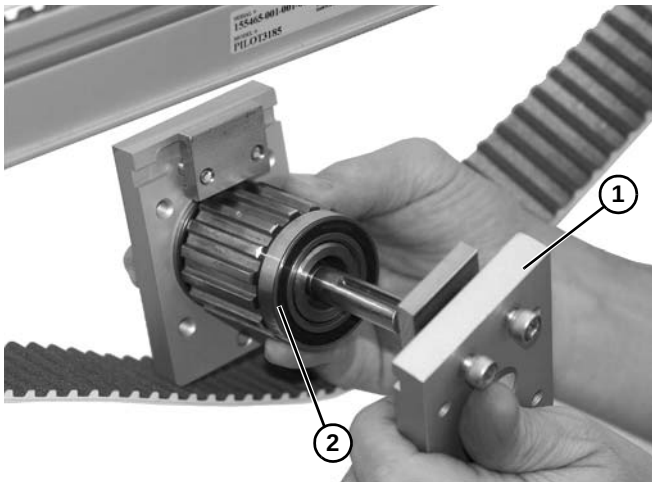


Figure 70

5. Replace spindle.
6. Install mounting block **(Figure 71, item 1)** onto spindle **(Figure 71, item 2)**.

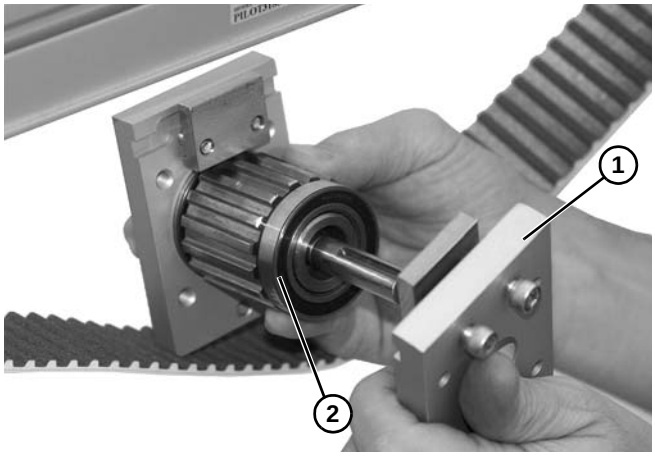


Figure 71

7. Raise center spindle assembly **(Figure 72, item 1)** tracking clamp block **(Figure 72, item 2)** onto conveyor channel **(Figure 72, item 3)** on each side of conveyor frame.

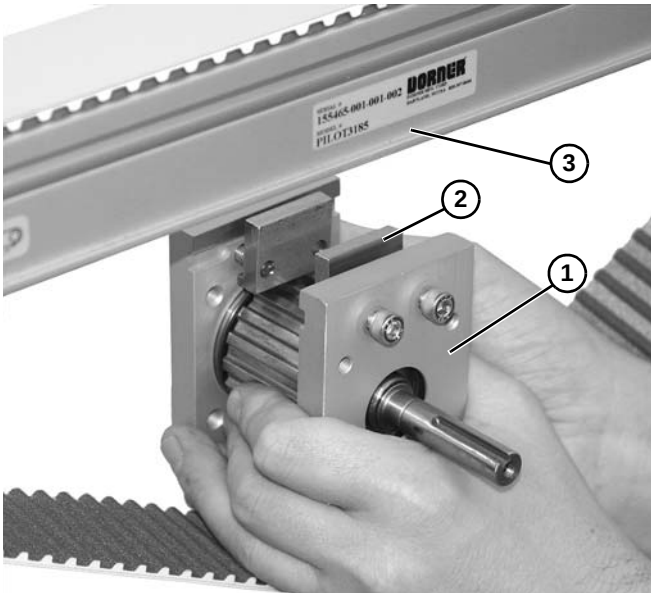


Figure 72

8. Secure center spindle assembly **(Figure 73, item 1)** with two M6x25 socket head screws **(Figure 73, item 2)** on each side of mounting block. Do not tighten.

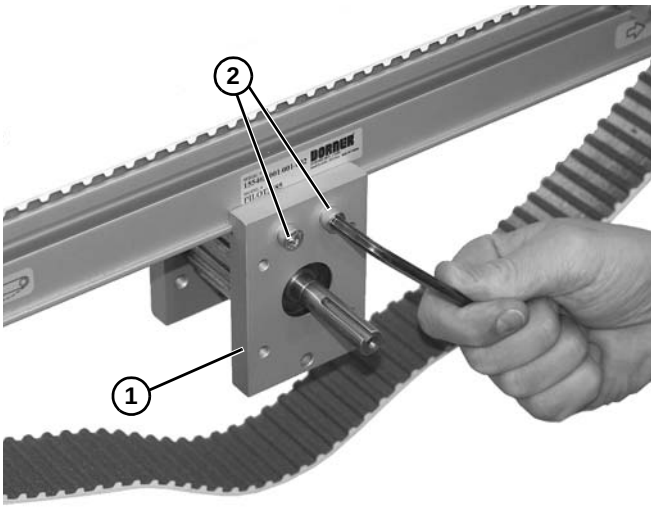


Figure 73

9. Raise mid drive assembly **(Figure 74, item 1)** onto belt **(Figure 74, item 2)**.

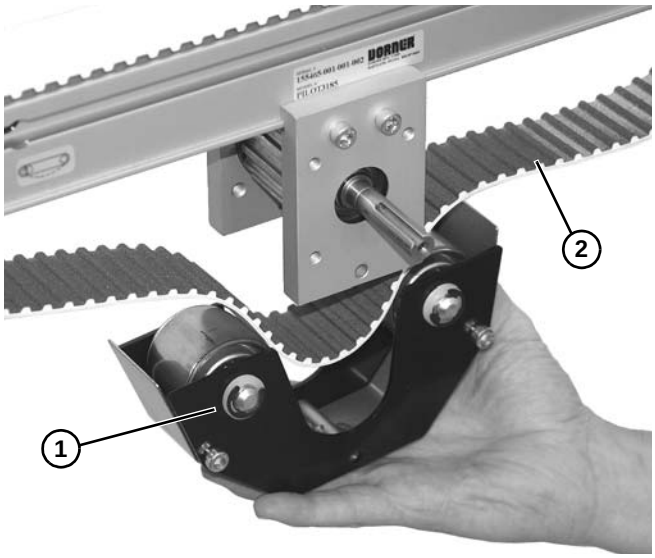


Figure 74

10. Secure mid drive assembly **(Figure 75, item 1)** with M6x25 socket head screw **(Figure 75, item 2)** on each side of assembly. Tighten M6x25 screw to 60 in-lb (7 Nm).

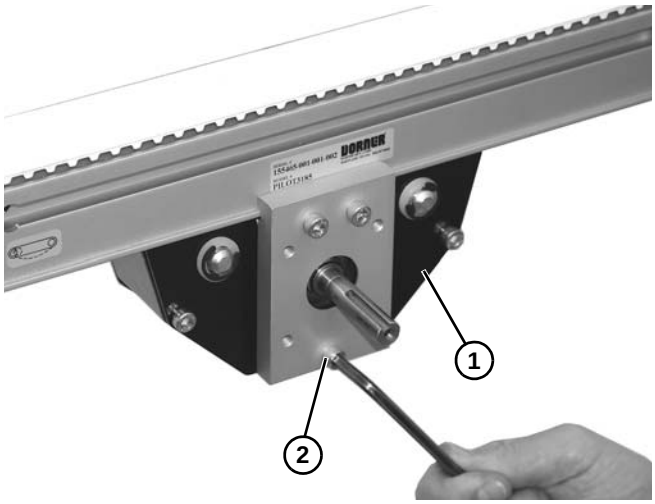


Figure 75

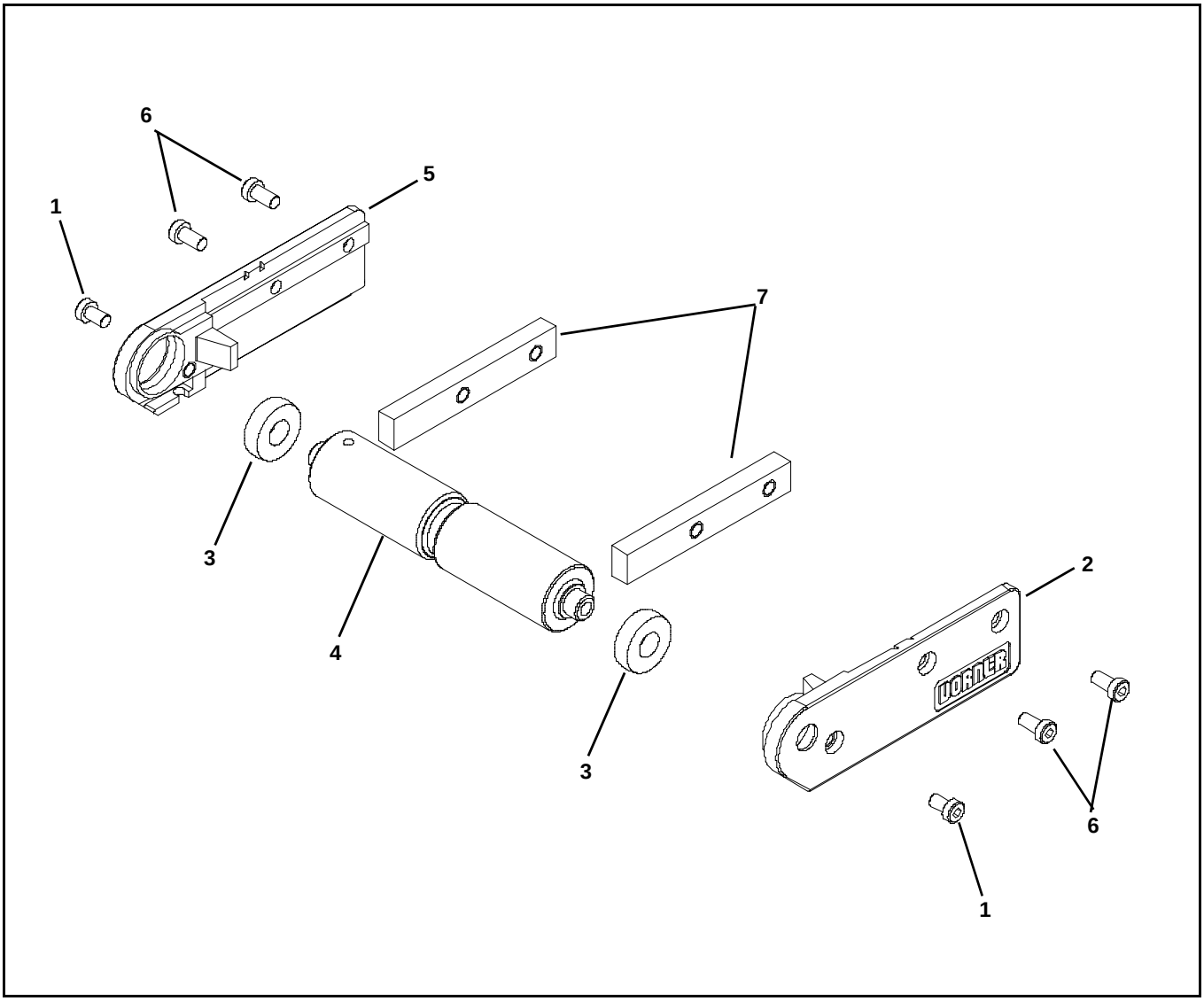
11. Tighten socket head screws **(Figure 73, item 2)** to 60 in-lb (7 Nm).
12. Tension conveyor belt. See “Conveyor Belt Tensioning” on page 19.

Service Parts

NOTE

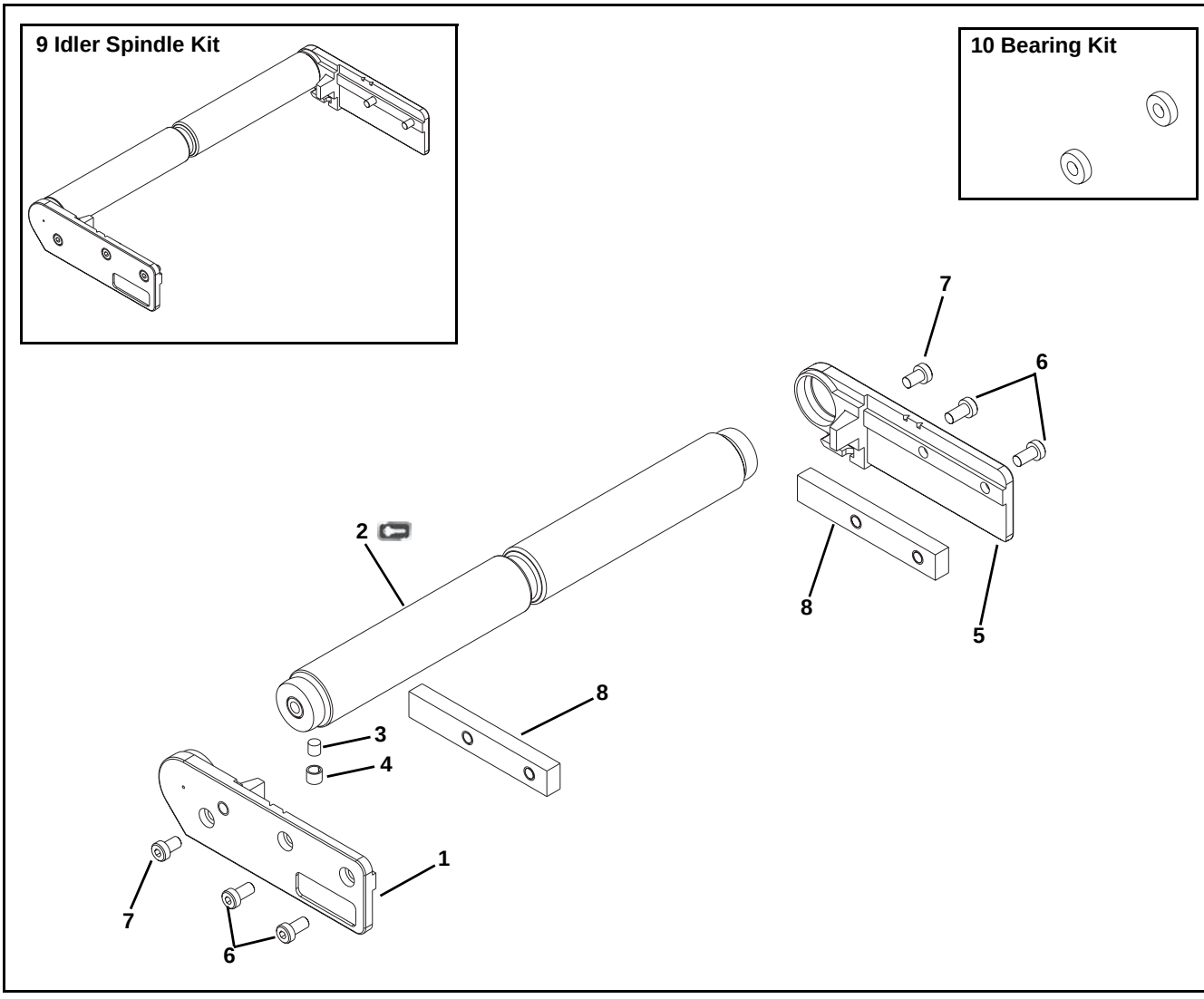
For replacement parts other than those shown in this section, contact an authorized Dorner Service Center or the factory. Key Service Parts and Kits are identified by the Performance Parts Kits logo. Dorner recommends keeping these parts on hand.

Discharge Tail



Item	Part Number	Description
1	950612M	Low Head Cap Screw, M6 x 12 mm
2	240425	Head Plate LH
3	22BK2	Bearing Kit (x2)
	22BK4	Bearing Kit (x4)
4	2473WW	Idler Spindle
5	240426	Head Plate, RH
6	950610M	Low Head Cap Screw, M6 x 10 mm
7	712016	Tension Slide Bar
WW = Conveyor width reference: 03, 04, 05, 06		

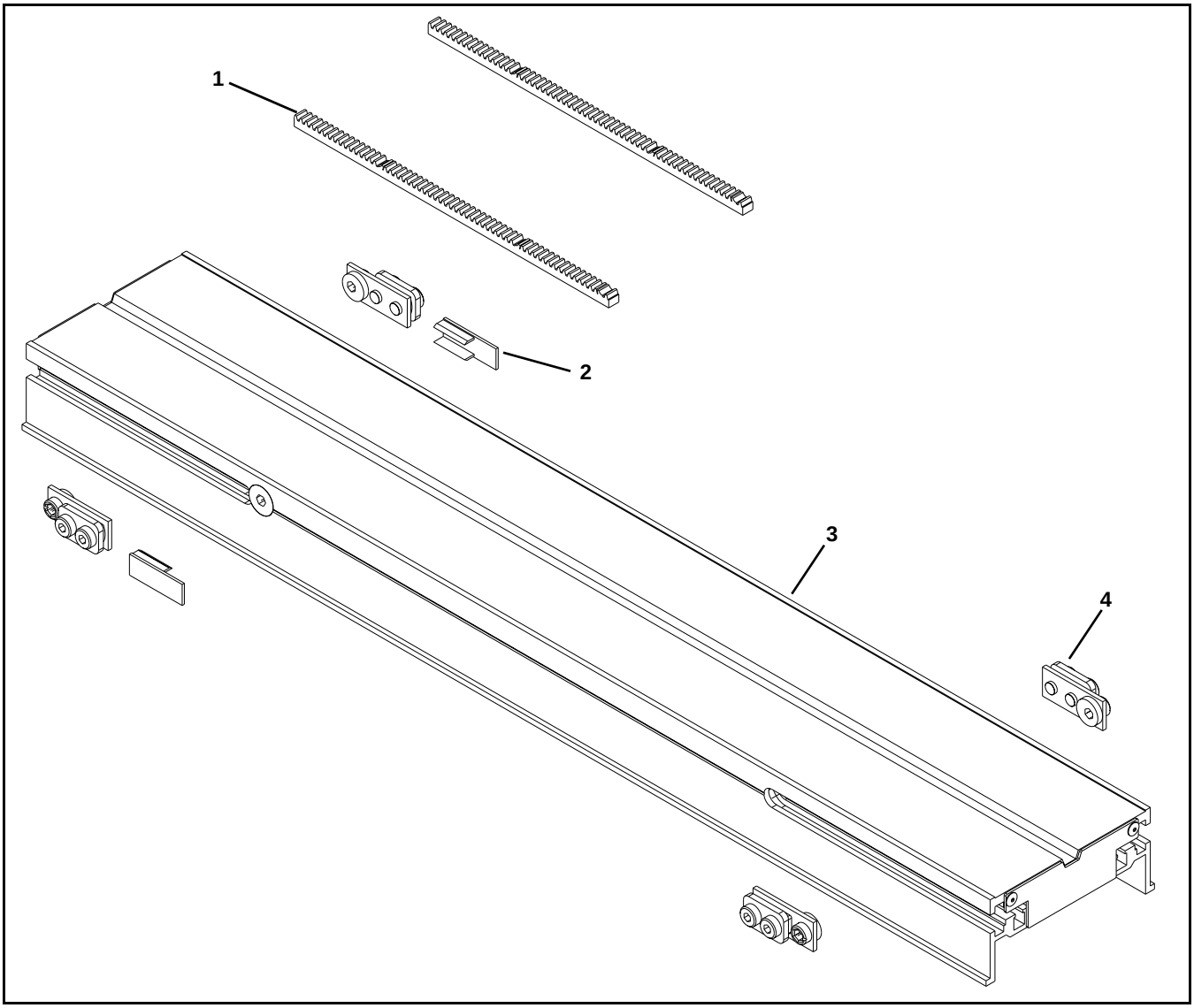
Idler Tail



Item	Part Number	Description
1	240425	Head Plate, Left Hand
2	201273-WW	Spindle Kit with Bearings
3	808-020	Magnet, 0.25" diameter x 0.25" long
4	450226SSP	Sleeve
5	240426	Head Plate, Right Hand
6	950612M	Low Head Cap Screw, M6-1.00 x 12 mm
7	950610M	Low Head Cap Screw, M6-1.00 x 10 mm
8	712016	Tension Slide Bar
9	22T-WW	Idler Spindle Kit, (Includes Items 1 through 7)
10	22BK2	Bearing Kit (2 pack)
	22BK4	Bearing Kit (4 pack)
WW = Conveyor width reference: 02, 04, 06, 08, 12, 18 & 24		

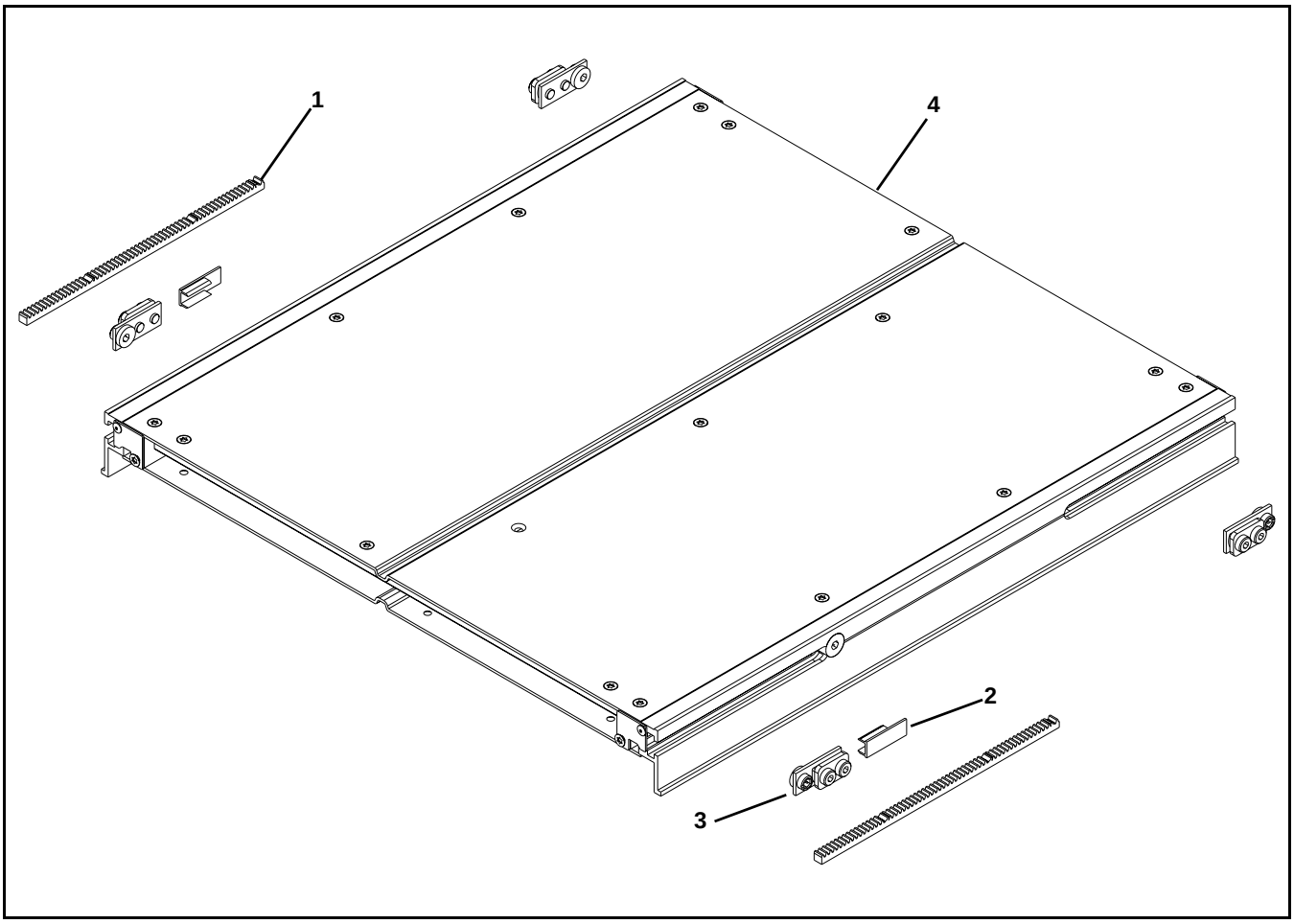
Service Parts

2" (51mm) and 12" (305mm) Wide
Frame Assembly



Item	Part Number	Description
1	240420	Rack Gear, 14.5° PA x 24P
2	712024	T-Slot Cover
3	Consult Factory	Frame Assembly
4	712029	Cam Mounting Assembly for Conveyors with Tracking Cams

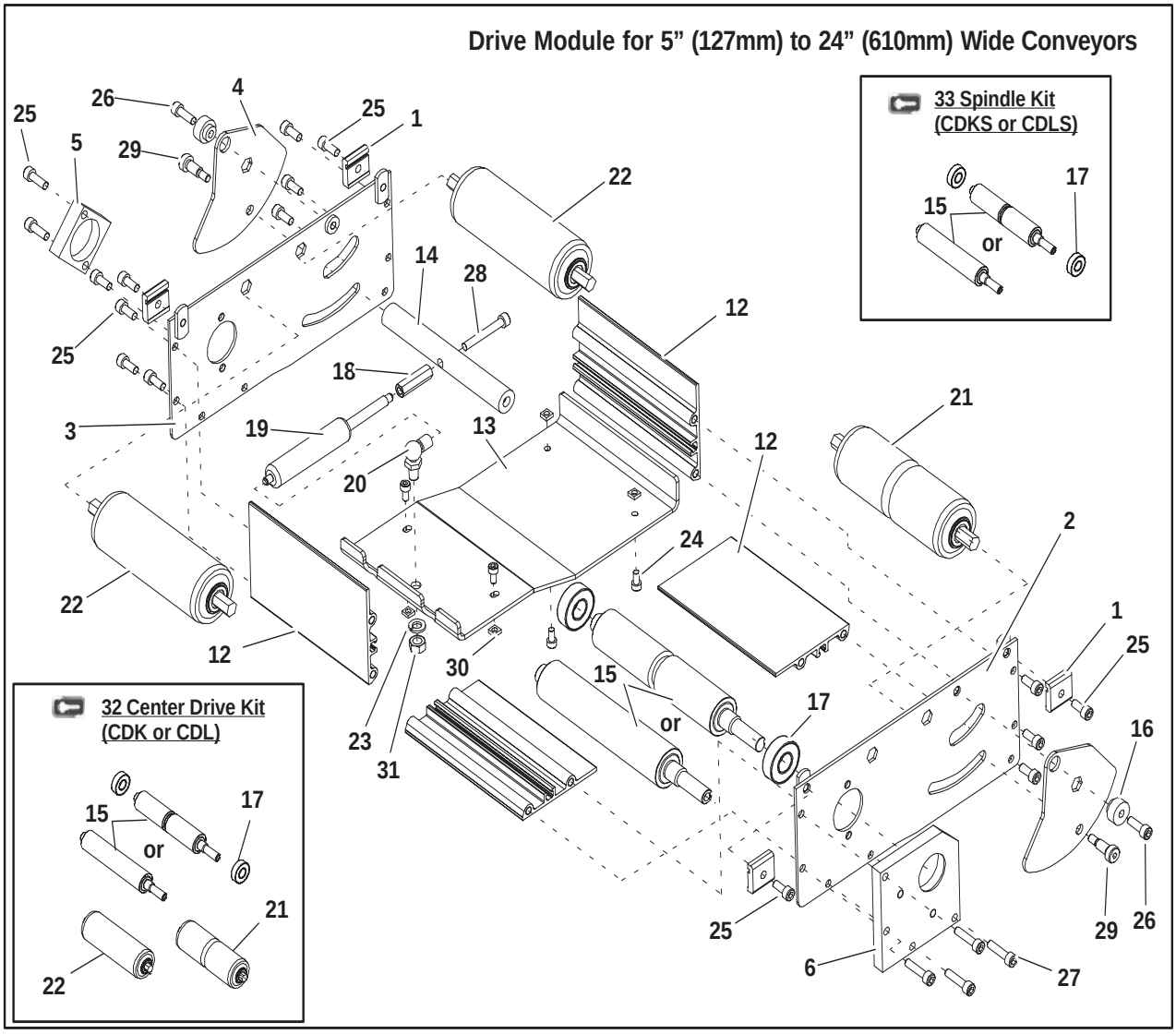
18" (457mm) and 24" (610mm) Wide Frame Assembly

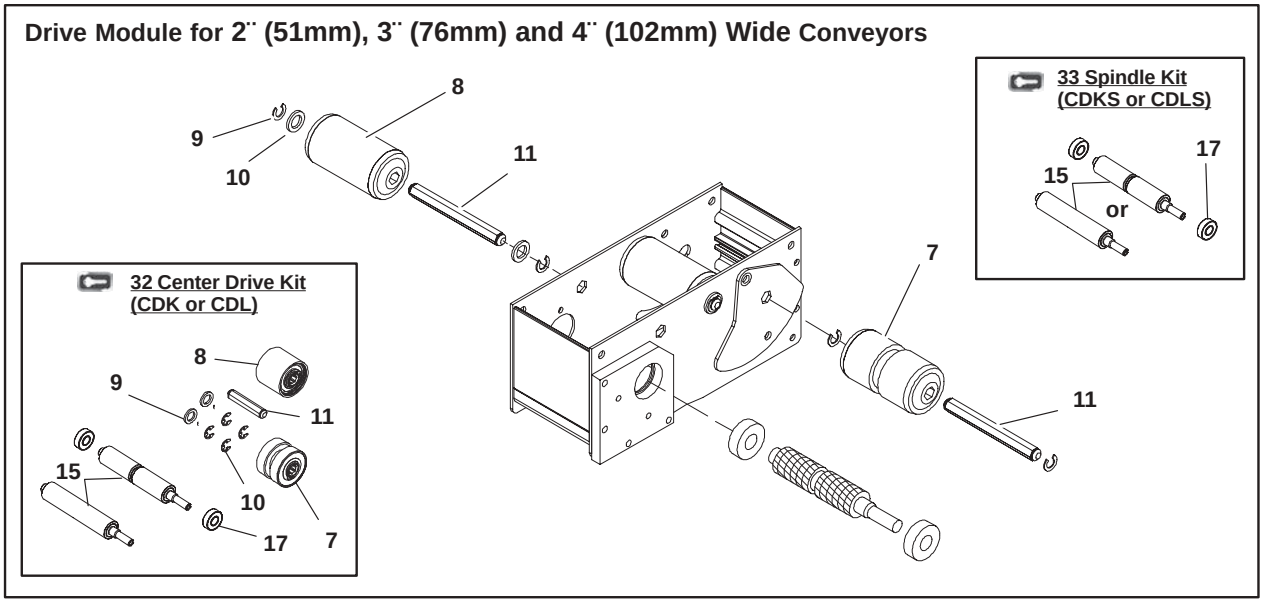


Item	Part Number	Description
1	240420	Rack Gear 14.5° PA x 24P
2	712024	T-Slot Cover
3	712029	Cam Mounting Assembly for Conveyors with Tracking Cams
4	Consult Factory	Frame Assembly

Service Parts

2300 Center Drive Module



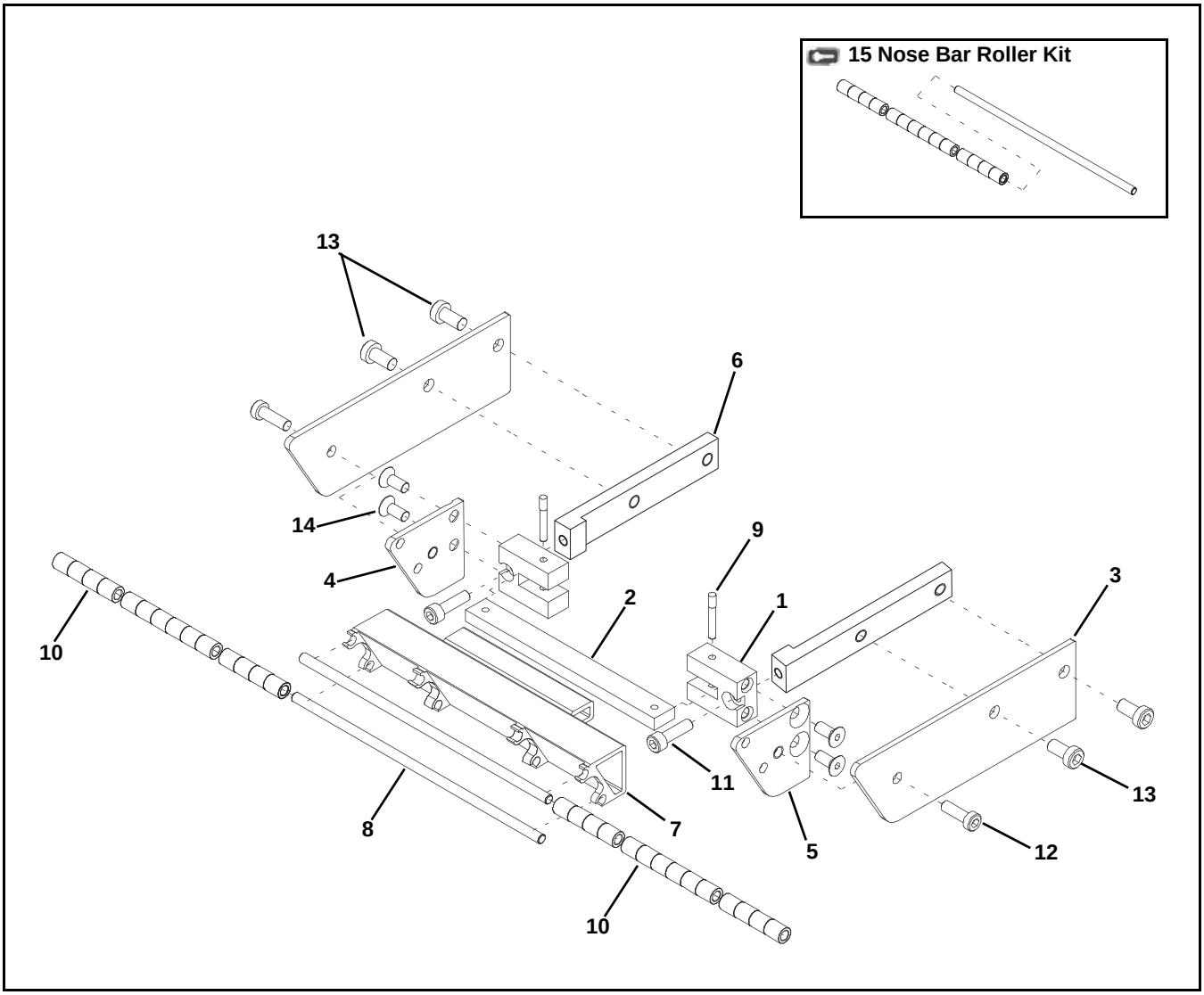


Item	Part Number	Description
1	204566	Module Mounting Clip
2	202633M	Side Plate, LH
3	202634M	Side Plate, RH
4	463026M	Pivot Tension Plate
5	463028M	Bearing Mounting Block
6	463029M	Bearing–Drive Mounting Plate
7	463044	Roller 1.9” 0.44hex Grv 2” (51 mm)
	463045	Roller 1.9” 0.44hex Grv 3” (76 mm)
	807–1001	Roller 1.9” 0.44hex Grv 4” (102 mm)
8	807–2093	Roller 1.9” 0.44hex SS Flat 2” (51 mm)
	807–1007	Roller 1.9” 0.44hex SS Flat 3” (76 mm)
	807–1008	Roller 1.9” 0.44hex SS Flat 4” (102 mm)
9	915-215	E-Ring Clip (0.44 diameter)
10	801-115	Washer
11	4634WW	Pulley Shaft
12	4638WW	Center Drive Rail
13	4632WWM	Center Dr Bottom Cover, 2” (51 mm) through 18” (457 mm)
	463205M	Center Dr Bottom Cover, 21” (533 mm)
	463208M (2x)	
	463212M (2x)	Center Dr Bottom Cover, 24” (610 mm)
14	4633WWM	Center Dr Tensioning Rod
15	4637WWM	Center Drive Spindle – Knurled
	4639WWM	Center Drive Spindle – Lagged
16	801–117	Nylon Bushing
17	802–124	Ball Bearing
18	807–983	Hex Standoff, 13 mm x 35 mm LG M6
19	807–1040	Gas Spring, 2” (5 1mm) w/o Nosebar
	807–1310	Gas Spring, 2” (51 mm) w/Nosebar
	807–986	Gas Spring, 3” (76 mm) w/o Nosebar
	807–1310	Gas Spring, 3” (76 mm) w/Nosebar
	807–985	Gas Spring, 4–6” (102–152 mm)
	807–984	Gas Spring, 8–12” (203–305 mm)
	807–985	Gas Spring, 18–24” (457–610 mm) (2x)
20	807–987	Steel Ball Joint M6 x M8
21	807–1002	Roller 1.9” 0.44 Hex Grv 5” (127 mm)
	807–1003	Roller 1.9” 0.44 Hex Grv 6” (152 mm)
	807–1004	Roller 1.9” 0.44 Hex Grv 8” (203 mm)
	807–1005	Roller 1.9” 0.44 Hex Grv 10” (203 mm)
	807–1006	Roller 1.9” 0.44 Hex Grv 12” (305 mm)
	807–1091	Roller 1.9” 0.44 Hex Grv 18” (457 mm)
	807–1092	Roller 1.9” 0.44 Hex Grv 21” (533 mm)
	807–1093	Roller 1.9” 0.44 Hex Grv 24” (610 mm)
22	807–1009	Roller 1.9” 0.44 Hex Flat 5” (51 mm)
	807–1010	Roller 1.9” 0.44 Hex Flat 6” (152 mm)
	807–1011	Roller 1.9” 0.44 Hex Flat 8” (203 mm)
	807–1012	Roller 1.9” 0.44 Hex Flat 10” (203 mm)
	807–1013	Roller 1.9” 0.44 Hex Flat 12” (305 mm)
	807–1088	Roller 1.9” 0.44 Hex Flat 18” (457 mm)
	807–1089	Roller 1.9” 0.44 Hex Flat 21” (533 mm)
	807–1090	Roller 1.9” 0.44 Hex Flat 24” (610 mm)
23	911–120	Spring Lock Washer
24	920510M	Socket Head Screw, M5 x 10 mm
25	920620M	Socket Head Screw, M6 x 20 mm

Item	Part Number	Description
26	920618M	Socket Head Screw, M6 x 18 mm
27	920630M	Socket Head Screw, M6 x 30 mm
28	920625M	Socket Head Screw, M6 x 25 mm
29	940812M	SHLD Screw, 8 mm DIA x 12 mm
30	990503M	Square Nut, Heavy M5 – 0.8
31	990801M	Hex Nut, Full M8 – 1.25
32	CDK–WW	Center Drive Repair Kit – Knurled (Includes Items 7 through 11, 15, and 17)
	CDKL–WW	Center Drive Repair Kit – Lagged (Includes Items 7 through 11, 15, and 17)
33	CDKS–WW	Spindle Repair Kit – Knurled (Includes Items 15 and 17)
	CDLS–WW	Spindle Repair Kit – Lagged (Includes Items 15 and 17)
WW = Conveyor width ref.: 02, 04, 06, 08, 12, 18, 24		

Service Parts

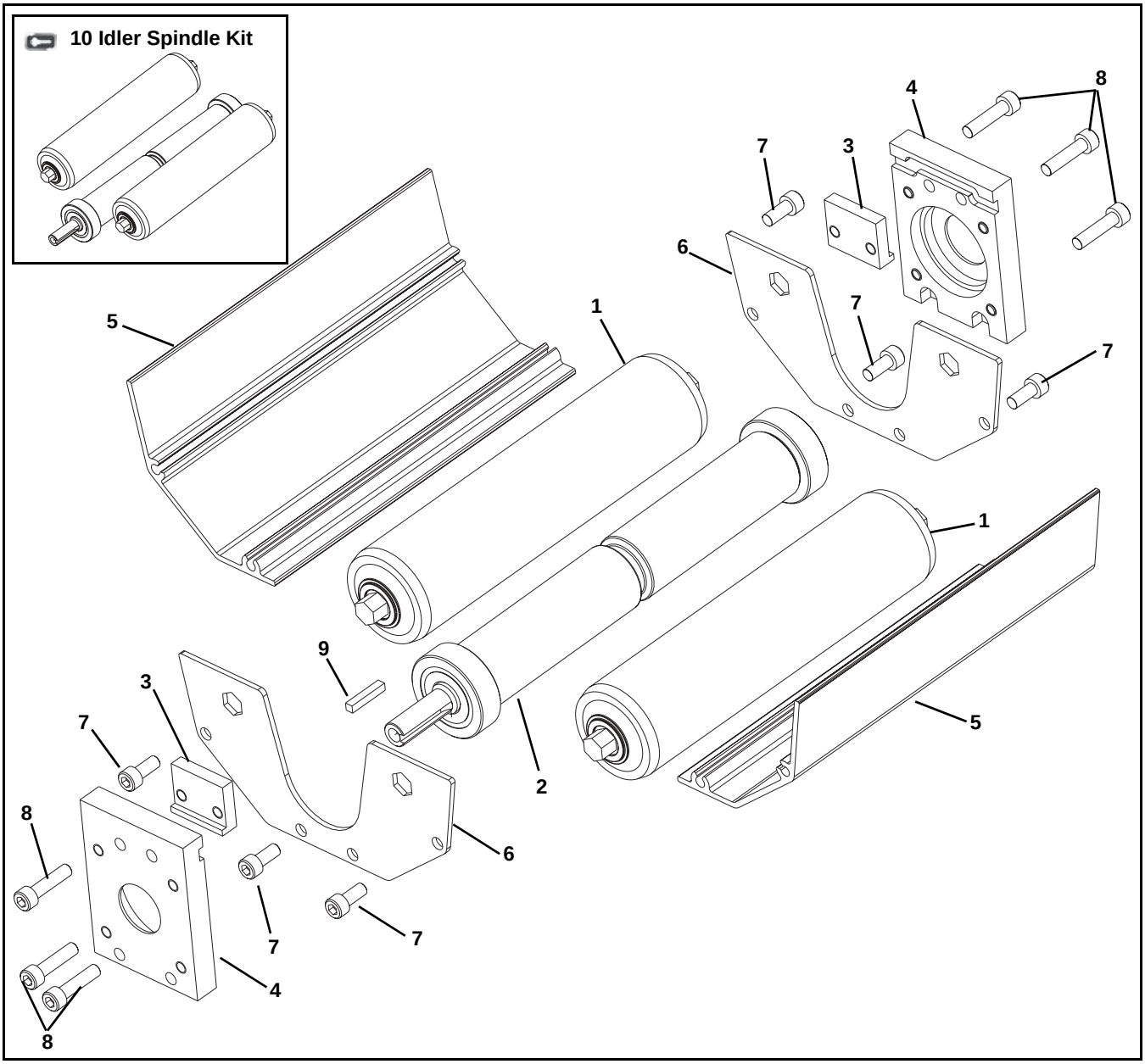
Nose Bar Idler End



Item	Part Number	Description
1	201965	Mounting Block, PLT Spindle
	200659	Mounting Block, for 2” (51mm) wide conveyor
2	2076WW	Flex–Link Bar,
	201472	Flex–Link Bar, for 2” (51mm) wide conveyor
3	241125	Outer Side Plate
4	241126	Inner Side Plate, LH
5	241127	Inner Side Plate, RH
6	712052	Head Plate Bar

Item	Part Number	Description
7	2412WW	Nosebar
8	2413WW	Nosebar Rod
9	200695P	Knurl Pin, 0.125” DIA x 0.937” Lg
10	801–122	Nose Bar Roller
11	920516M	Socket Head Screw, M5 x 16 mm
12	950516M	Low Head Cap Screw, M5-0.80 x 16 mm
13	950612M	Low Head Cap Screw, M6-1.00 x 12 mm
14	930512M	Flat Head Screw, M5 x 12 mm
15	22N–WW	Nosebar Roller Kit (Includes Items 8 and 10)
WW = Conveyor width reference: 02, 04, 06, 08, 12, 18 & 24		

Mid Drive Module



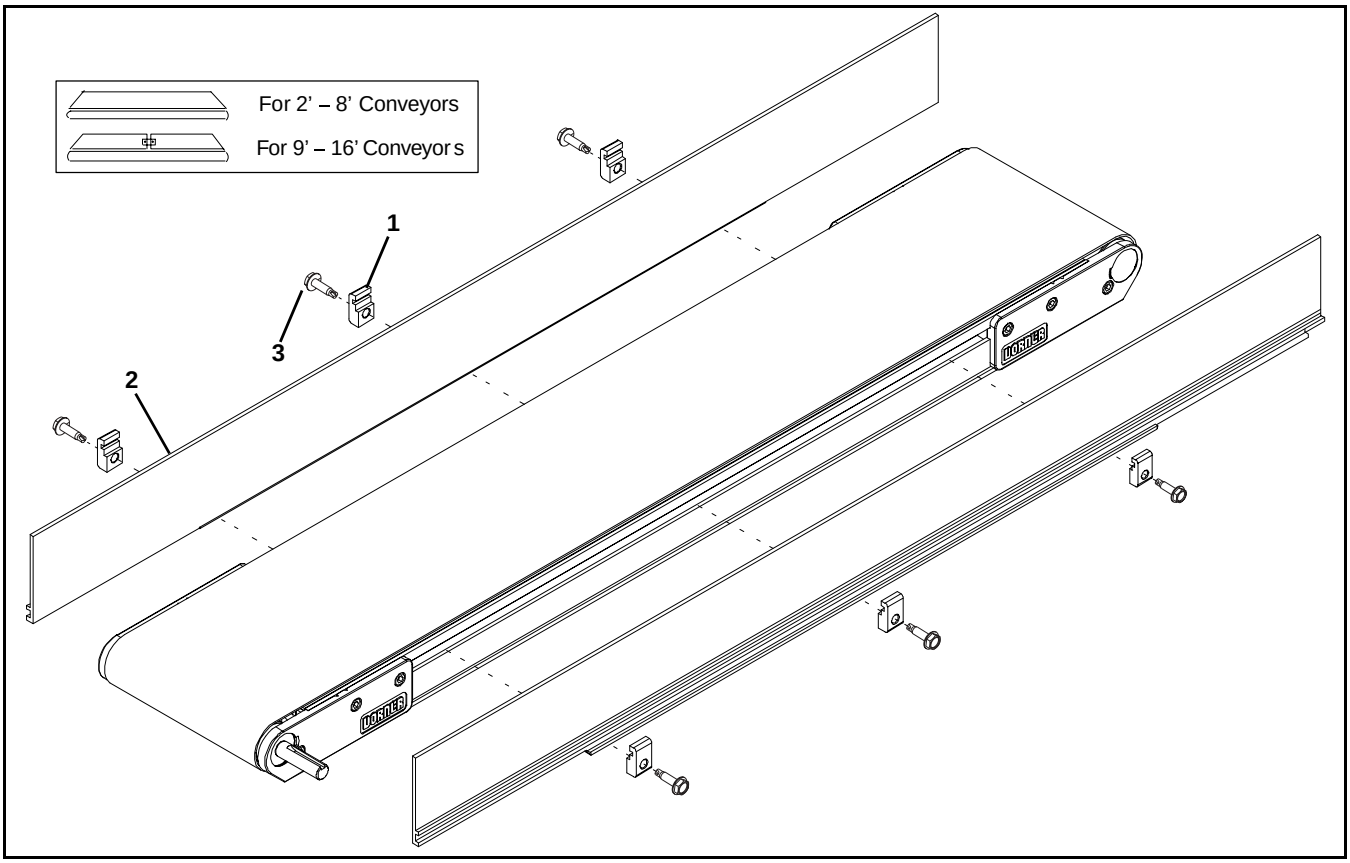
Item	Part Number	Description
1	463040	Idler Roller Assembly for 2" wide Conveyor
	463041	Idler Roller Assembly for 3" wide Conveyor
	463042	Idler Roller Assembly for 4" wide Conveyor
	807-1009	Idler Roller for 5" wide Conveyor
	807-1010	Idler Roller for 6" wide Conveyor
	807-1011	Idler Roller for 8" wide Conveyor
	807-1012	Idler Roller for 10" wide Conveyor
	807-1013	Idler Roller for 12" wide Conveyor
	807-1088	Idler Roller for 18" wide Conveyor
	807-1089	Idler Roller for 21" wide Conveyor
	807-1090	Idler Roller for 24" wide Conveyor
2	202457-WW	Knurled Spindle Assembly
	202458-WW	Lagged Spindle Assembly

Item	Part Number	Description
3	202353	Clamp Block
4	202354	Mounting Block
5	202455-WW	Bottom Guard
6	202456	Side Plate
7	7801180P	Socket Head Screw, M6-1.00 x 14 mm
8	920625M	Socket Head Screw, M6-1.00 x 25 mm
9	980428M	Square Key 4 mm x 28 mm
10	22MD-WW	Spindle Kit (Includes items 1 & 2)

WW = Conveyor Width Reference: 02, 03, 04, 05, 06, 08, 12, 18, 21 & 24

Service Parts

–04 3” (76 mm) Aluminum Side

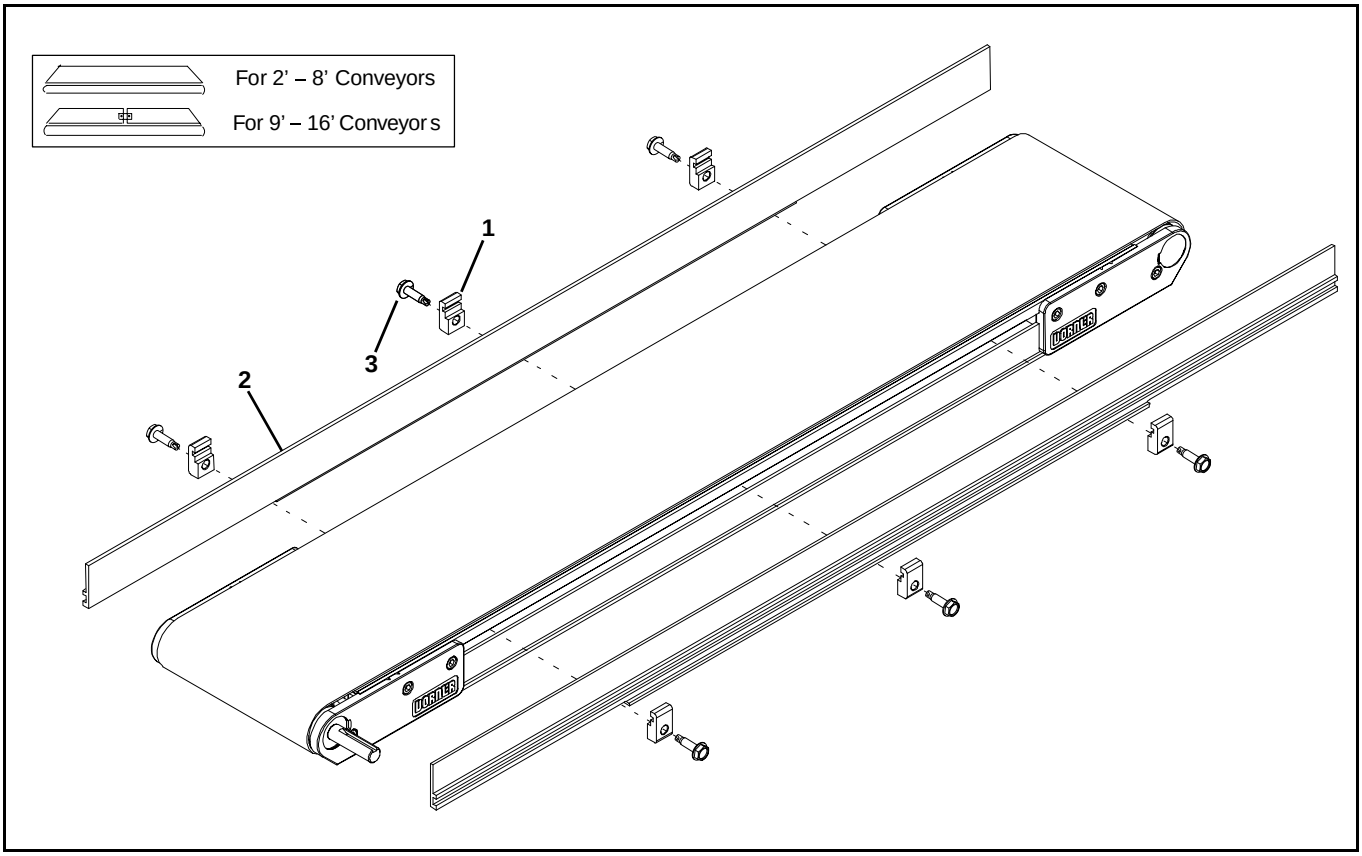


Item	Part Number	Description
1	200121	Guide Retaining Clip
2	See Chart below	2300 Guide 3” (76mm) HS
3	807-1937	Self-Drilling Hex Head Screw, 1/4-20x1”

Item 2: 2300 Guide 3” (76mm) HS		
Length		**End Guide**
2’ (610mm)	Left Hand	280403–02400
	Right Hand	280403–02400
3’ (914mm)	Left Hand	280403–03600
	Right Hand	280403–03600
4’ (1219mm)	Left Hand	280403–04800
	Right Hand	280403–04800
5’ (1524mm)	Left Hand	280403–06000
	Right Hand	280403–06000
6’ (1829mm)	Left Hand	280403–07200
	Right Hand	280403–07200
7’ (2134mm)	Left Hand	280403–08400
	Right Hand	280403–08400
8’ (2438mm)	Left Hand	280403–09600
	Right Hand	280403–09600
9’ (2743mm)	Left Hand	280401–05400 (x2)
	Right Hand	280402–05400 (x2)
10’ (3048mm)	Left Hand	280401–06000 (x2)
	Right Hand	280402–06000 (x2)
11’ (3353mm)	Left Hand	280401–06600 (x2)
	Right Hand	280402–06600 (x2)

Item 2: 2300 Guide 3” (76mm) HS		
Length		**End Guide**
12’ (3658mm)	Left Hand	280401–07200 (x2)
	Right Hand	280402–07200 (x2)
13’ (3962mm)	Left Hand	280401–07800 (x2)
	Right Hand	280402–07800 (x2)
14’ (4267mm)	Left Hand	280401–08400 (x2)
	Right Hand	280402–08400 (x2)
15’ (4572mm)	Left Hand	280401–09000 (x2)
	Right Hand	280402–09000 (x2)
16’ (4877mm)	Left Hand	280401–09600 (x2)
	Right Hand	280402–09600 (x2)
For conveyor lengths between even foot increments or longer than 16’ (4877 mm) consult factory.		

–05 1.5” (38 mm) Aluminum Side



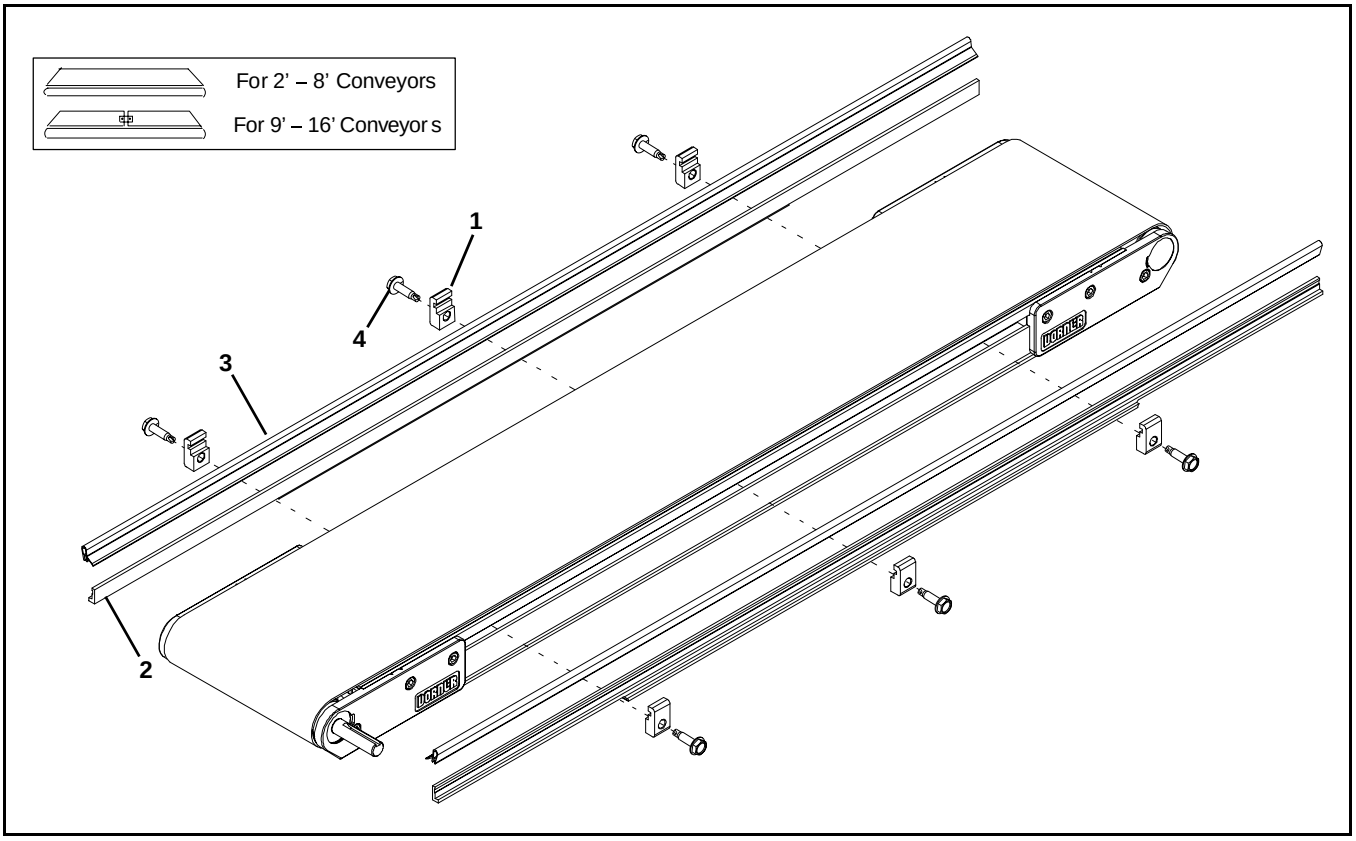
Item	Part Number	Description
1	200121	Guide Retaining Clip
2	See Chart Below	2300 Guide 1.5” (38mm) HS
3	807-1937	Self-Drilling Hex Head Screw, 1/4-20x1”

Item 2: 2300 Guide 0.5” (13mm) HS		
Length		**End Guide**
2’ (610mm)	Left Hand	280503–02400
	Right Hand	280503–02400
3’ (914mm)	Left Hand	280503–03600
	Right Hand	280503–03600
4’ (1219mm)	Left Hand	280503–04800
	Right Hand	280503–04800
5’ (1524mm)	Left Hand	280503–06000
	Right Hand	280503–06000
6’ (1829mm)	Left Hand	280503–07200
	Right Hand	280503–07200
7’ (2134mm)	Left Hand	280503–08400
	Right Hand	280503–08400
8’ (2438mm)	Left Hand	280503–09600
	Right Hand	280503–09600
9’ (2743mm)	Left Hand	280501–05400 (x2)
	Right Hand	280502–05400 (x2)
10’ (3048mm)	Left Hand	280501–06000 (x2)
	Right Hand	280502–06000 (x2)
11’ (3353mm)	Left Hand	280501–06600 (x2)
	Right Hand	280502–06600 (x2)

Item 2: 2300 Guide 0.5” (13mm) HS		
Length		**End Guide**
12’ (3658mm)	Left Hand	280501–07200 (x2)
	Right Hand	280502–07200 (x2)
13’ (3962mm)	Left Hand	280501–07800 (x2)
	Right Hand	280502–07800 (x2)
14’ (4267mm)	Left Hand	280501–08400 (x2)
	Right Hand	280502–08400 (x2)
15’ (4572mm)	Left Hand	280501–09000 (x2)
	Right Hand	280502–09000 (x2)
16’ (4877mm)	Left Hand	280501–09600 (x2)
	Right Hand	280502–09600 (x2)
For conveyor lengths between even foot increments or longer than 16’ (4877 mm) consult factory.		

Service Parts

–07 Low to Side Wiper

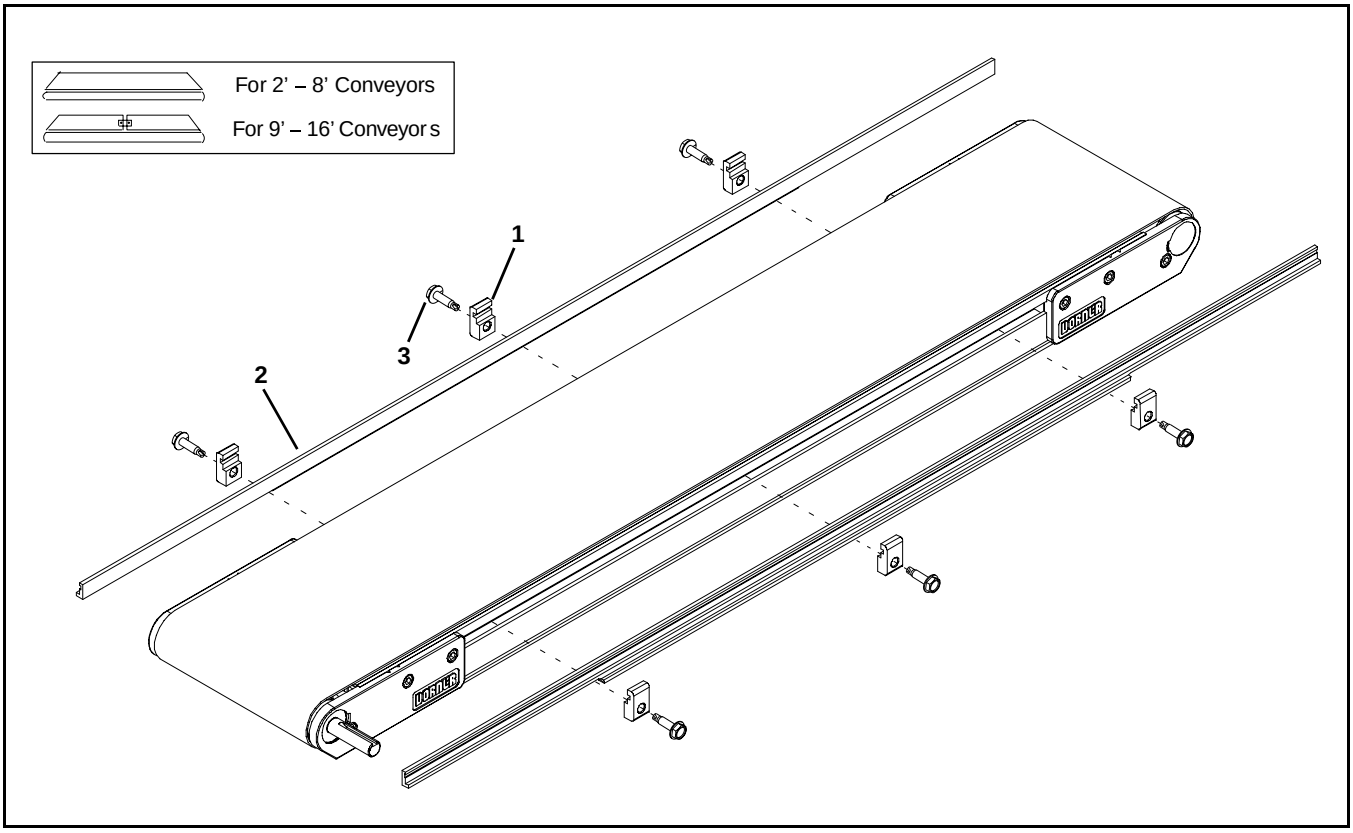


Item	Part Number	Description
1	200121	Guide Retaining Clip
2	See Chart Below	2300 Guide, 0.5” (13 mm) HS
3	41–00–24	Side Wiper Nylatron (per foot)
4	807-1937	Self-Drilling Hex Head Screw, 1/4-20x1”

Item 2: 2300 Guide 0.5” (13mm) HS		
Length		**End Guide**
2’ (610mm)	Left Hand	280903–02400
	Right Hand	280903–02400
3’ (914mm)	Left Hand	280903–03600
	Right Hand	280903–03600
4’ (1219mm)	Left Hand	280903–04800
	Right Hand	280903–04800
5’ (1524mm)	Left Hand	280903–06000
	Right Hand	280903–06000
6’ (1829mm)	Left Hand	280903–07200
	Right Hand	280903–07200
7’ (2134mm)	Left Hand	280903–08400
	Right Hand	280903–08400
8’ (2438mm)	Left Hand	280903–09600
	Right Hand	280903–09600
9’ (2743mm)	Left Hand	280901–05400 (x2)
	Right Hand	280902–05400 (x2)
10’ (3048mm)	Left Hand	280901–06000 (x2)
	Right Hand	280902–06000 (x2)
11’ (3353mm)	Left Hand	280901–06600 (x2)
	Right Hand	280902–06600 (x2)

Item 2: 2300 Guide 0.5” (13mm) HS		
Length		**End Guide**
12’ (3658mm)	Left Hand	280901–07200 (x2)
	Right Hand	280902–07200 (x2)
13’ (3962mm)	Left Hand	280901–07800 (x2)
	Right Hand	280902–07800 (x2)
14’ (4267mm)	Left Hand	280901–08400 (x2)
	Right Hand	280902–08400 (x2)
15’ (4572mm)	Left Hand	280901–09000 (x2)
	Right Hand	280902–09000 (x2)
16’ (4877mm)	Left Hand	280901–09600 (x2)
	Right Hand	280902–09600 (x2)
For conveyor lengths between even foot increments or longer than 16’ (4877 mm) consult factory.		

–09 Low to High Side



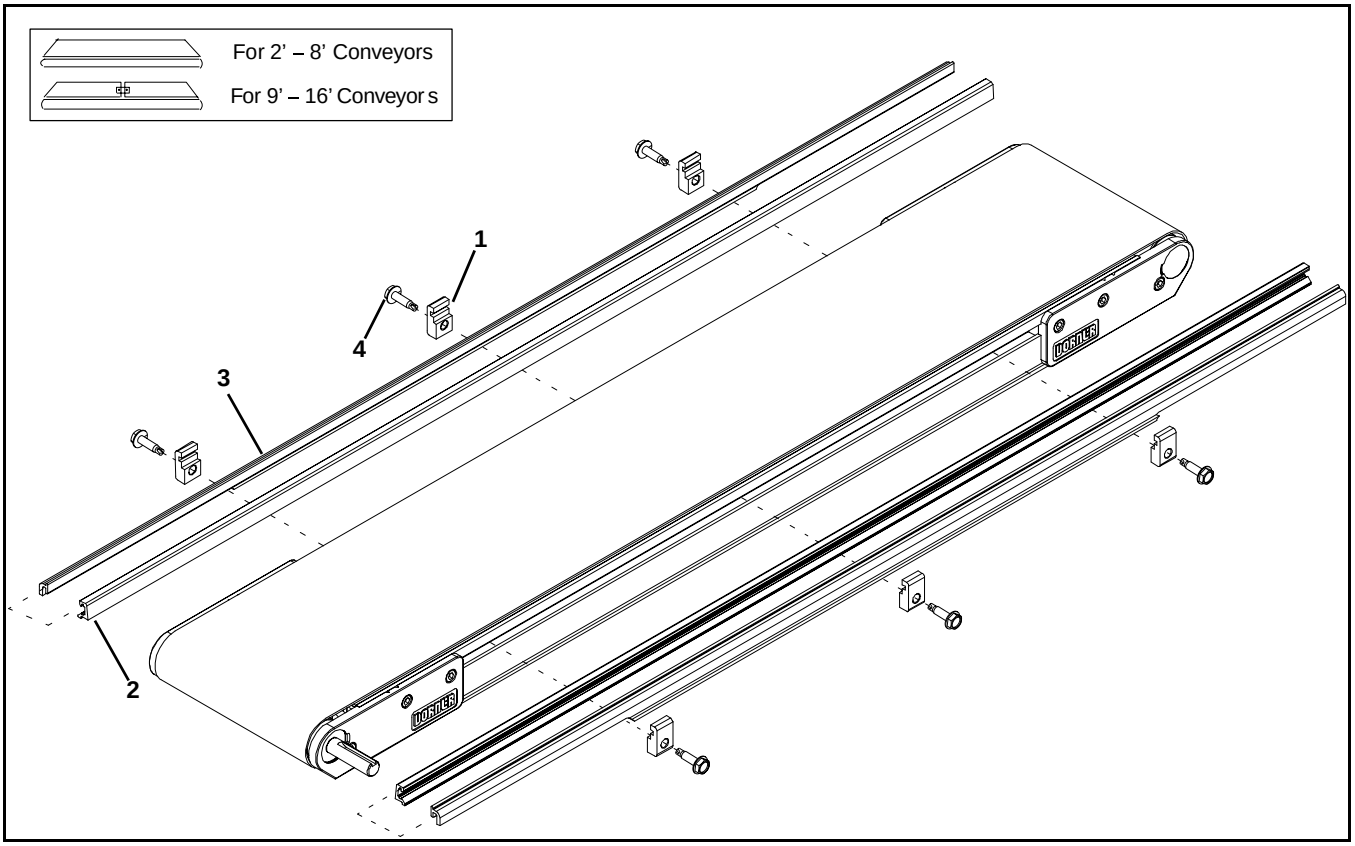
Item	Part Number	Description
1	200121	Guide Retaining Clip
2	See Chart Below	2300 Guide, 0.5” (13 mm) HS
3	807-1937	Self-Drilling Hex Head Screw, 1/4-20x1”

Item 2: 2300 Guide 0.5” (13mm) HS		
Length		**End Guide**
2’ (610mm)	Left Hand	280903–02400
	Right Hand	280903–02400
3’ (914mm)	Left Hand	280903–03600
	Right Hand	280903–03600
4’ (1219mm)	Left Hand	280903–04800
	Right Hand	280903–04800
5’ (1524mm)	Left Hand	280903–06000
	Right Hand	280903–06000
6’ (1829mm)	Left Hand	280903–07200
	Right Hand	280903–07200
7’ (2134mm)	Left Hand	280903–08400
	Right Hand	280903–08400
8’ (2438mm)	Left Hand	280903–09600
	Right Hand	280903–09600
9’ (2743mm)	Left Hand	280901–05400 (x2)
	Right Hand	280902–05400 (x2)
10’ (3048mm)	Left Hand	280901–06000 (x2)
	Right Hand	280902–06000 (x2)
11’ (3353mm)	Left Hand	280901–06600 (x2)
	Right Hand	280902–06600 (x2)

Item 2: 2300 Guide 0.5” (13mm) HS		
Length		**End Guide**
12’ (3658mm)	Left Hand	280901–07200 (x2)
	Right Hand	280902–07200 (x2)
13’ (3962mm)	Left Hand	280901–07800 (x2)
	Right Hand	280902–07800 (x2)
14’ (4267mm)	Left Hand	280901–08400 (x2)
	Right Hand	280902–08400 (x2)
15’ (4572mm)	Left Hand	280901–09000 (x2)
	Right Hand	280902–09000 (x2)
16’ (4877mm)	Left Hand	280901–09600 (x2)
	Right Hand	280902–09600 (x2)
For conveyor lengths between even foot increments or longer than 16’ (4877 mm) consult factory.		

Service Parts

–10.5” (13 mm) Extruded Plastic

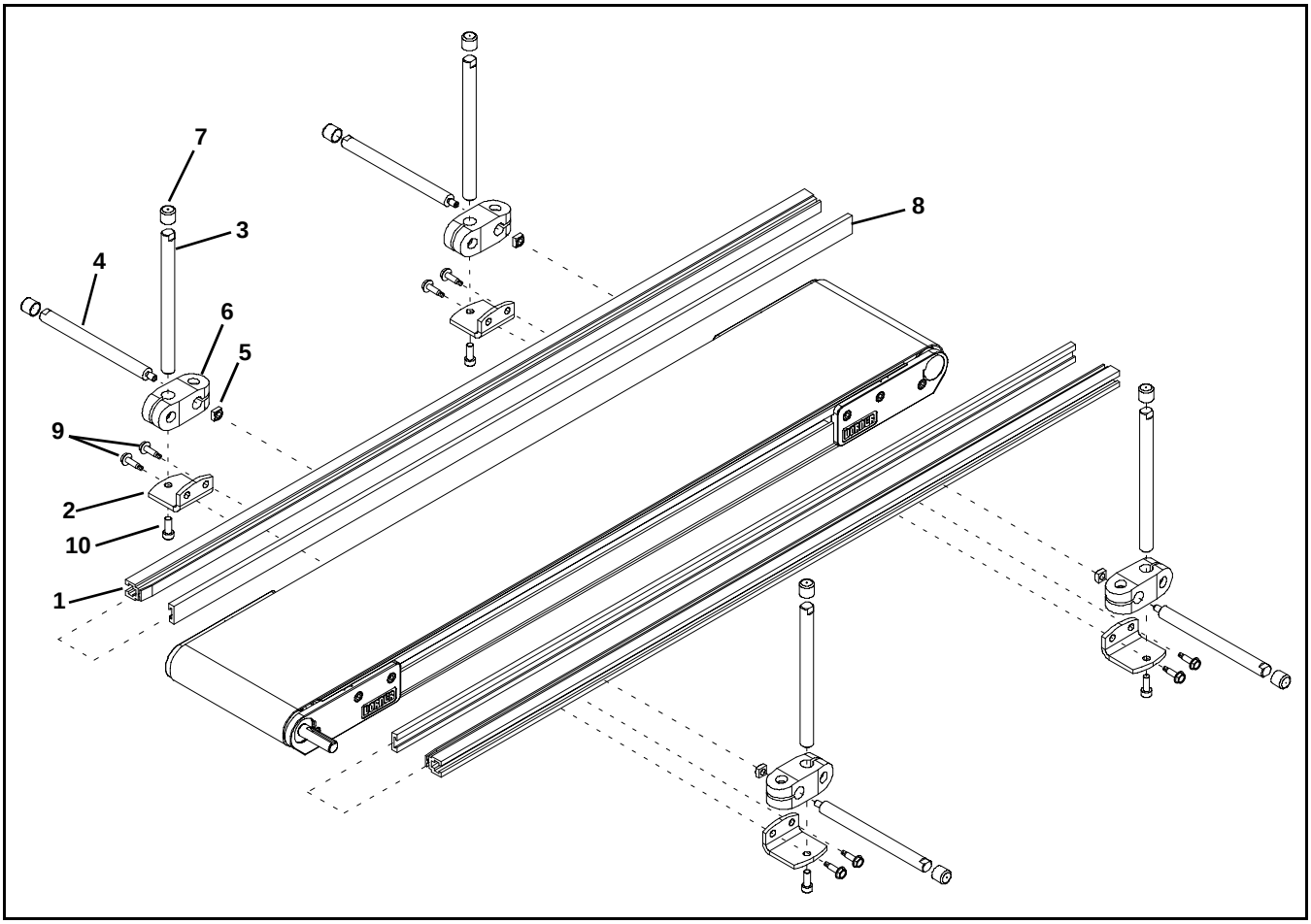


Item	Part Number	Description
1	200121	Guide Retaining Clip
2	200054P	Snap–On Guide (per foot)
3	See Chart Below	2300 Guide
4	807-1937	Self-Drilling Hex Head Screw, 1/4-20x1”

Item 2: 2300 Guide 0.5” (13mm) HS		
Length		**End Guide**
2’ (610mm)	Left Hand	281003–02400
	Right Hand	281003–02400
3’ (914mm)	Left Hand	281003–03600
	Right Hand	281003–03600
4’ (1219mm)	Left Hand	281003–04800
	Right Hand	281003–04800
5’ (1524mm)	Left Hand	281003–06000
	Right Hand	281003–06000
6’ (1829mm)	Left Hand	281003–07200
	Right Hand	281003–07200
7’ (2134mm)	Left Hand	281003–08400
	Right Hand	281003–08400
8’ (2438mm)	Left Hand	281003–09600
	Right Hand	281003–09600
9’ (2743mm)	Left Hand	281001–05400 (x2)
	Right Hand	281002–05400 (x2)
10’ (3048mm)	Left Hand	281001–06000 (x2)
	Right Hand	281002–06000 (x2)
11’ (3353mm)	Left Hand	281001–06600 (x2)
	Right Hand	281002–06600 (x2)

Item 2: 2300 Guide 0.5” (13mm) HS		
Length		**End Guide**
12’ (3658mm)	Left Hand	281001–07200 (x2)
	Right Hand	281002–07200 (x2)
13’ (3962mm)	Left Hand	281001–07800 (x2)
	Right Hand	281002–07800 (x2)
14’ (4267mm)	Left Hand	281001–08400 (x2)
	Right Hand	281002–08400 (x2)
15’ (4572mm)	Left Hand	281001–09000 (x2)
	Right Hand	281002–09000 (x2)
16’ (4877mm)	Left Hand	281001–09600 (x2)
	Right Hand	281002–09600 (x2)
For conveyor lengths between even foot increments or longer than 16’ (4877 mm) consult factory.		

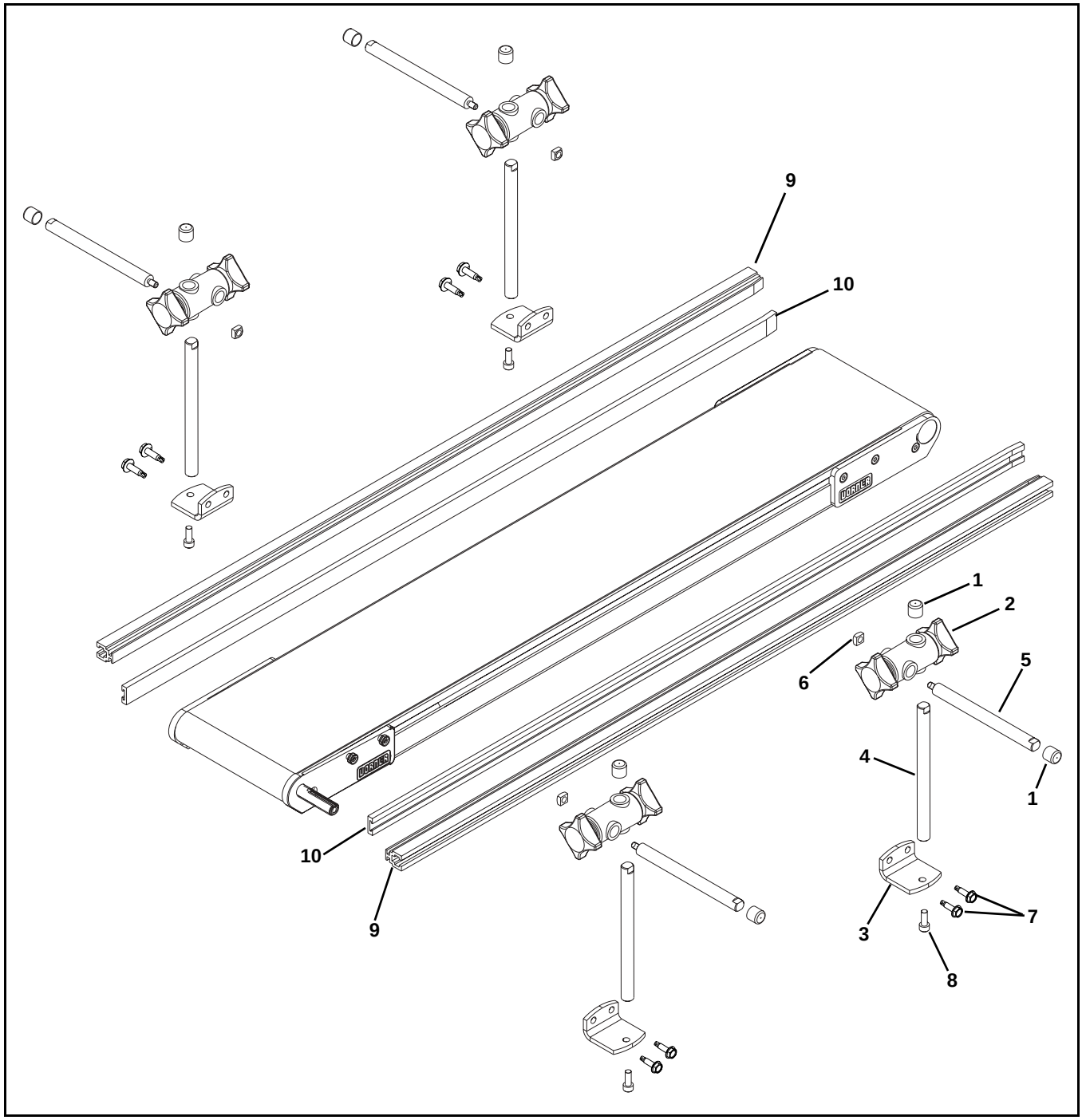
–13 Adjustable Guiding



Item	Part Number	Description
1	202983	Aluminum Profile Guide 2’ (610mm)
	202984	Aluminum Profile Guide 3’ (914mm)
	202985	Aluminum Profile Guide 4’ (1219mm)
	202986	Aluminum Profile Guide 5’ (1524mm)
	202987	Aluminum Profile Guide 6’ (1829mm)
	202988	Aluminum Profile Guide 7’ (2134mm)
	202989	Aluminum Profile Guide 8’ (2438mm)
	202990	Aluminum Profile Guide 9’ (2743mm)
	202991	Aluminum Profile Guide 10’ (3048mm)
	202992	Aluminum Profile Guide 11’ (3353mm)
	202993	Aluminum Profile Guide 12’ (3658mm)
	202994	Aluminum Profile Guide 13’ (3962mm)
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	614068P	Flat Extruded Guide (per foot)
9	807-1937	Self-Drilling Hex Head Screw, 1/4-20x1”
10	920616M	Socket Head Screw M6 x 16mm

Service Parts

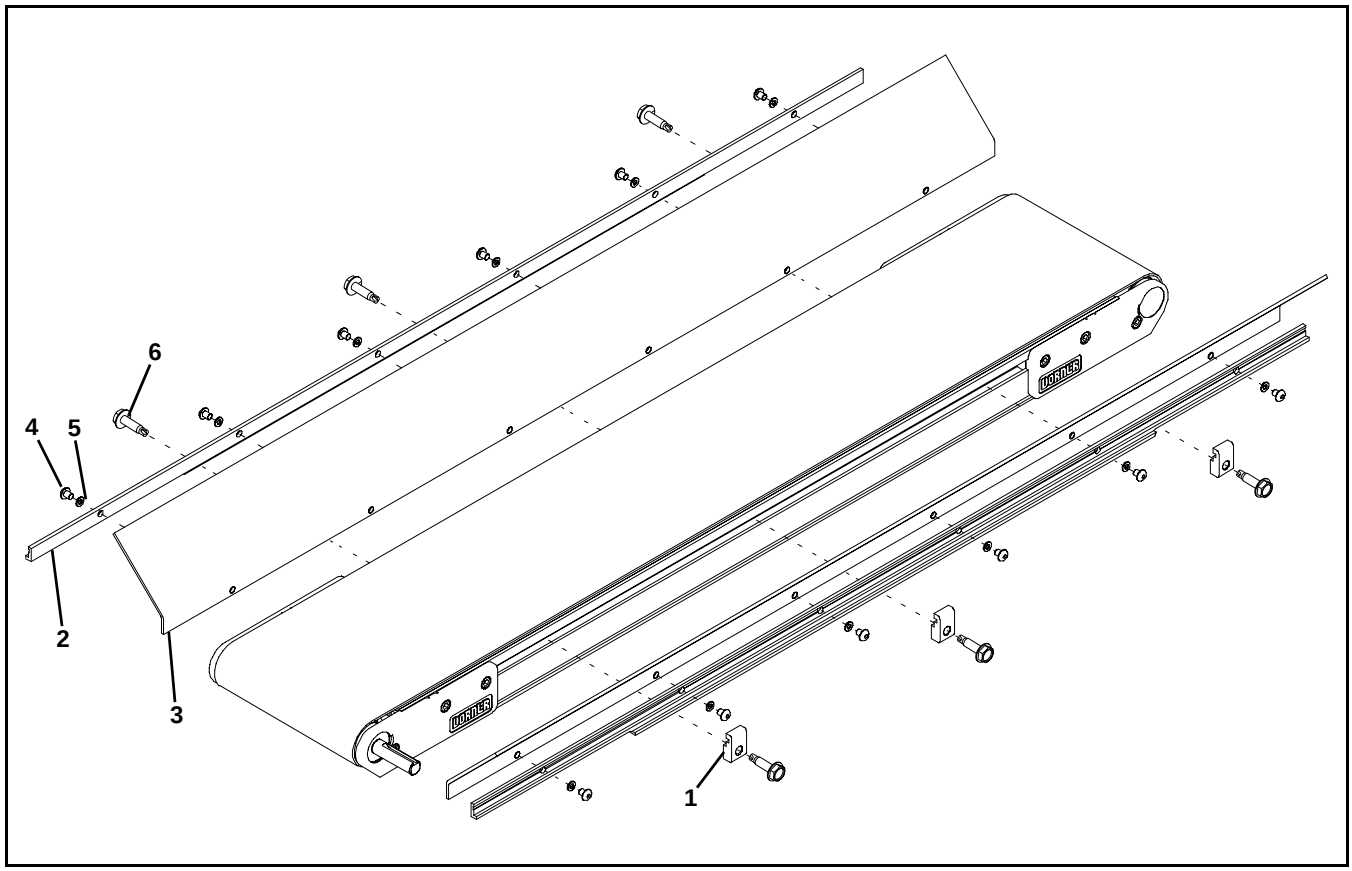
–14 Tool-Less Adjustable Guiding



Item	Part Number	Description
1	807-948	Shaft Cap
2	807-1470	Cross Block
3	202004M	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, 1/4-20x1”
8	920616M	Socket Head Screw, M6-1.00 x 16 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		

Flared Side Guiding

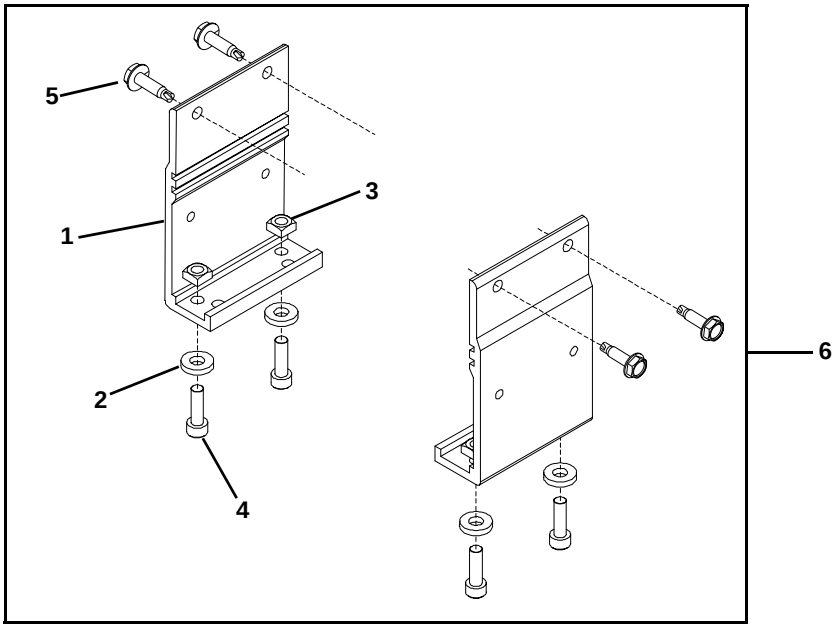


Item	Part Number	Description
1	200121	Guide Retaining Clip
2	202212	Side–Flare Mounting Guide 2’ (610mm)
	202213	Side–Flare Mounting Guide 3’ (914mm)
	202214	Side–Flare Mounting Guide 4’ (1219mm)
	202215	Side–Flare Mounting Guide 5’ (1524mm)
	202216	Side–Flare Mounting Guide 6’ (1829mm)

Item	Part Number	Description
3	202522M	Flared Guide 45° 2’ (610mm)
	202523M	Flared Guide 45° 3’ (914mm)
	202523M	Flared Guide 45° 4’ (1219mm)
	202523M	Flared Guide 45° 5’ (1524mm)
	202523M	Flared Guide 45° 6’ (1829mm)
4	910506M	Button Head Screw M5 x 6mm
5	911–512	Washer
6	807-1937	Self-Drilling Hex Head Screw, 1/4-20x1”

Service Parts

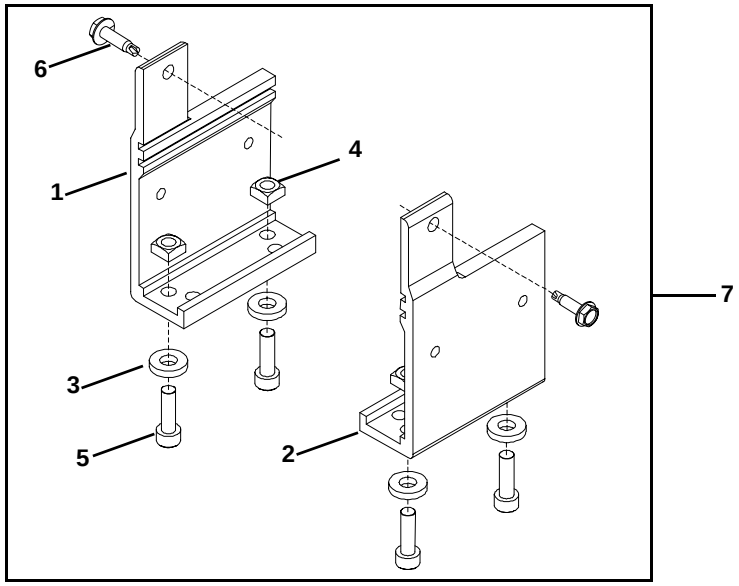
Flat Belt Stand Mount Assembly



Item	Part Number	Description
1	240831	Stand Mount
2	605279P	Washer
3	807–920	Square Nut M6

Item	Part Number	Description
4	920620M	Socket Head Screw M6 x 20mm
5	807-1937	Self-Drilling Hex Head Screw, 1/4-20x1”
6	715642	Flat Belt Stand Mount Assembly

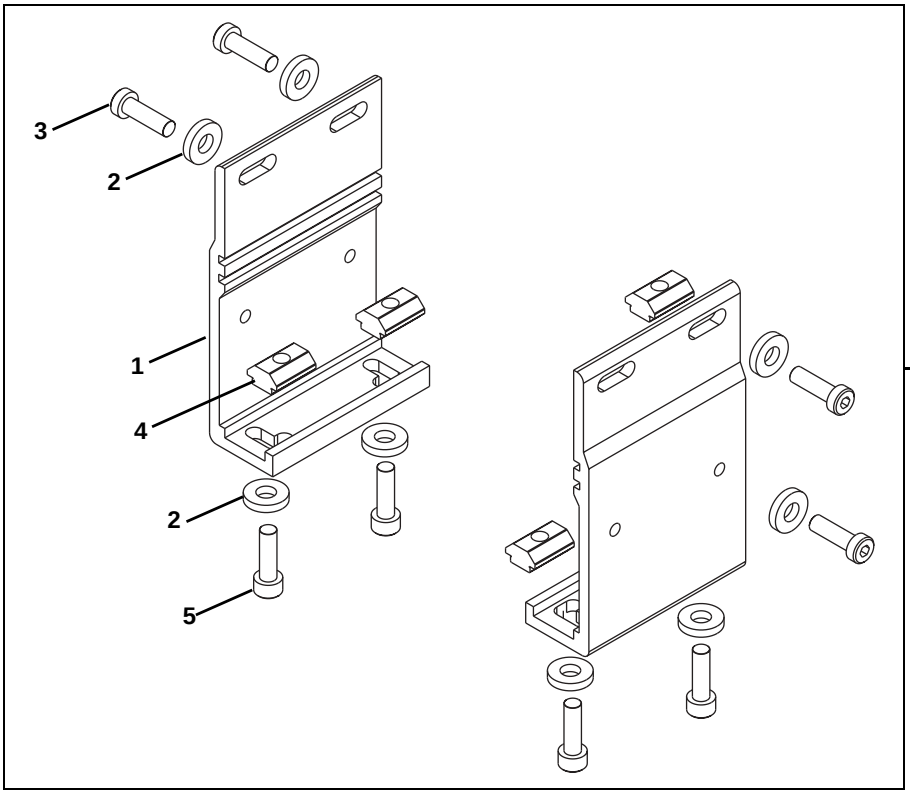
Flat Belt Stand Mount Assembly for 2’ (610 mm) Conveyors



Item	Part Number	Description
1	240833	Stand Mount, LH 2’ (610mm)
2	240834	Stand Mount, RH 2’ (610mm)
3	605279P	Washer
4	807–920	Square Nut M6
5	920620M	Socket Head Screw M6 x 20mm

Item	Part Number	Description
6	807-1937	Self-Drilling Hex Head Screw, 1/4-20x1”
7	240847	Flat Belt Stand Mount Assembly, for Idler End up to 2’ (610mm) Conveyors
	715644-DR	Flat Belt Stand Mount Assembly, for Drive End up to 2’ (610mm) Conveyors

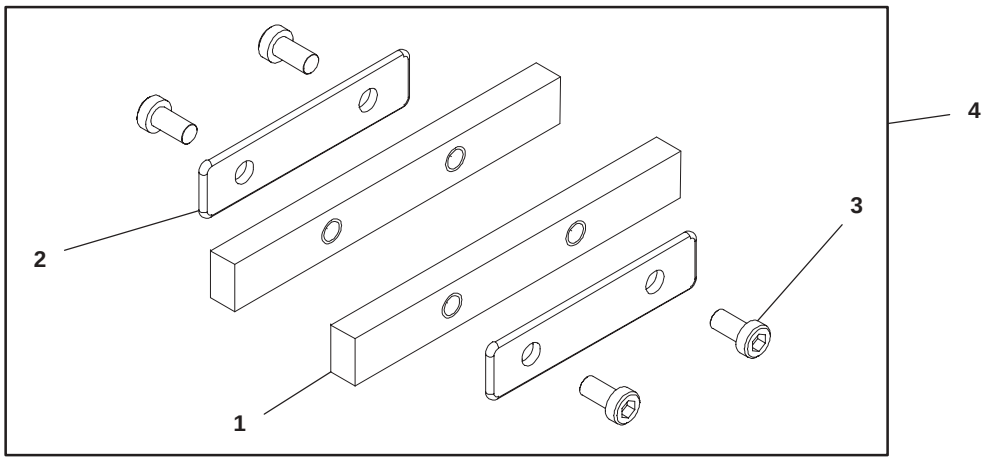
Flat Belt Stand Mounts Assembled to the Tail



Item	Part Number	Description
1	240850	Stand Mount
2	605279P	Washer
3	950625M	Low Head Cap Screw M6 x 25 mm

Item	Part Number	Description
4	639971MK10	Drop–In Tee Bar (x10)
5	920620M	Socket Head Screw M6 x 20 mm
6	240854	Flat Belt Stand Mount Assembly for Tail Mounts

Connecting Assembly without Stand Mount

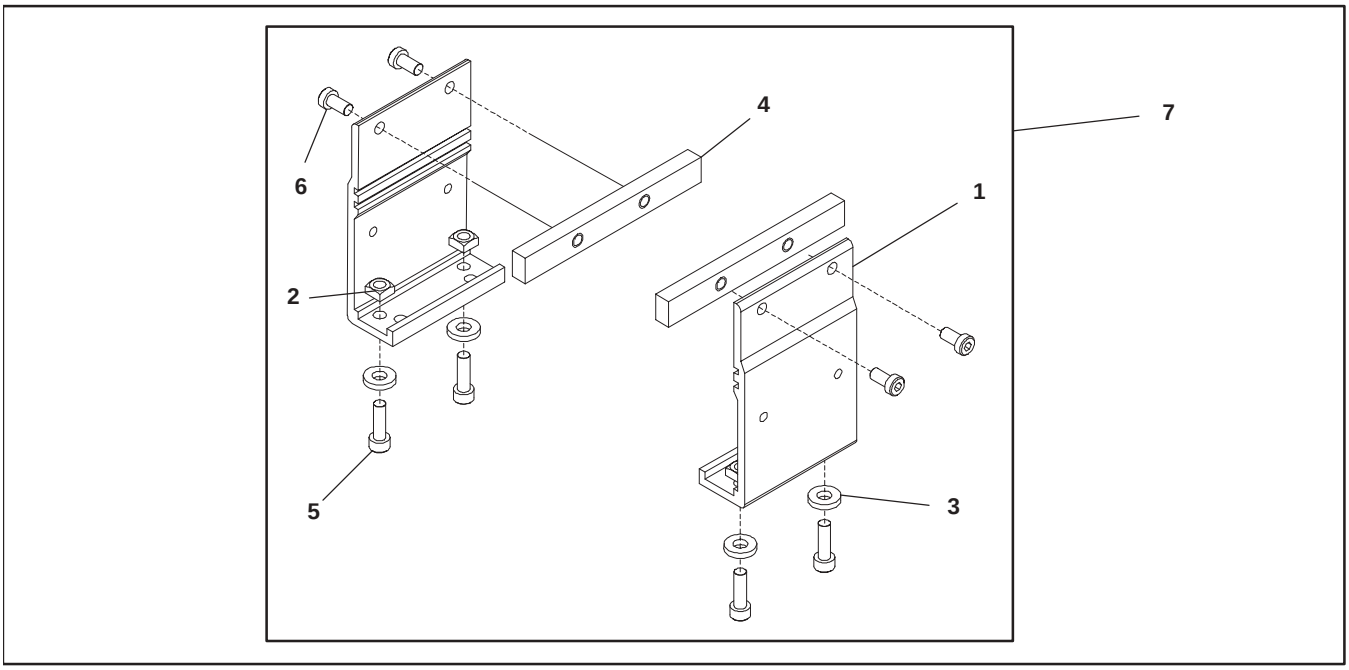


Item	Part Number	Description
1	712033	Frame Connector Bar
2	240859	Frame Connector Plate

Item	Part Number	Description
3	950612M	Low Head Cap Screw M6 x 12 mm
4	715641	Connecting Assembly without Stand Mounts

Service Parts

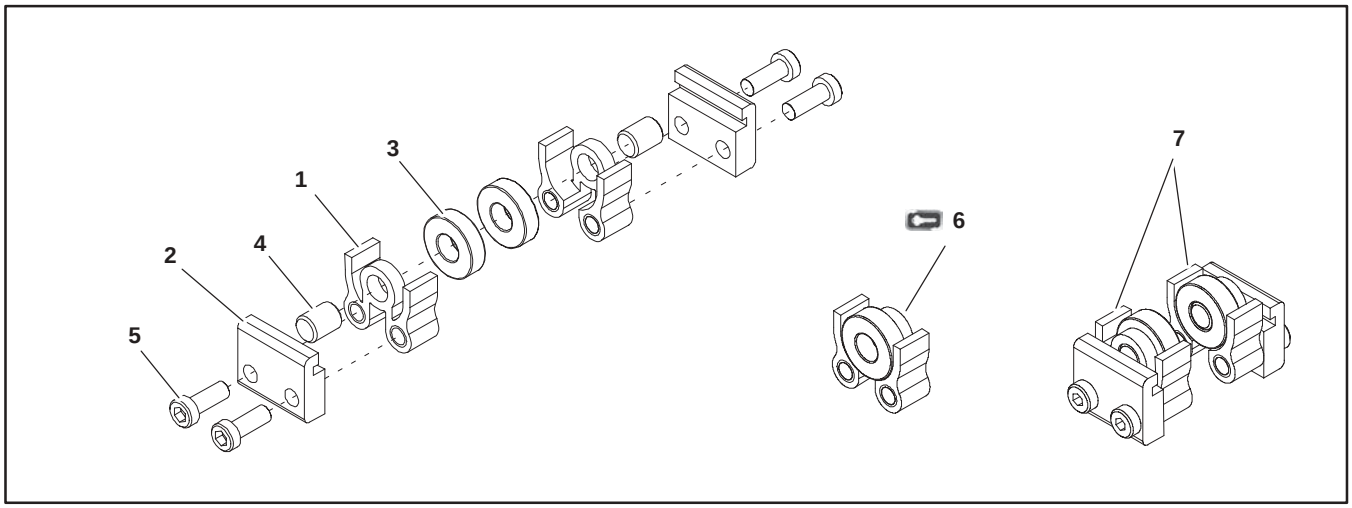
Flat Belt Connecting Assembly with Stand Mount



Item	Part Number	Description
1	240831	Stand Mount
2	807–920	Square Nut M6 5 mm x 10 mm
3	605279P	Washer
4	712033	Frame Connector Bar

Item	Part Number	Description
5	920620M	Socket Head Screw M6 x 20 mm
6	950612M	Low Head Cap Screw M6 x 12 mm
7	715643	Flat Belt Connecting Assembly with Stand Mounts

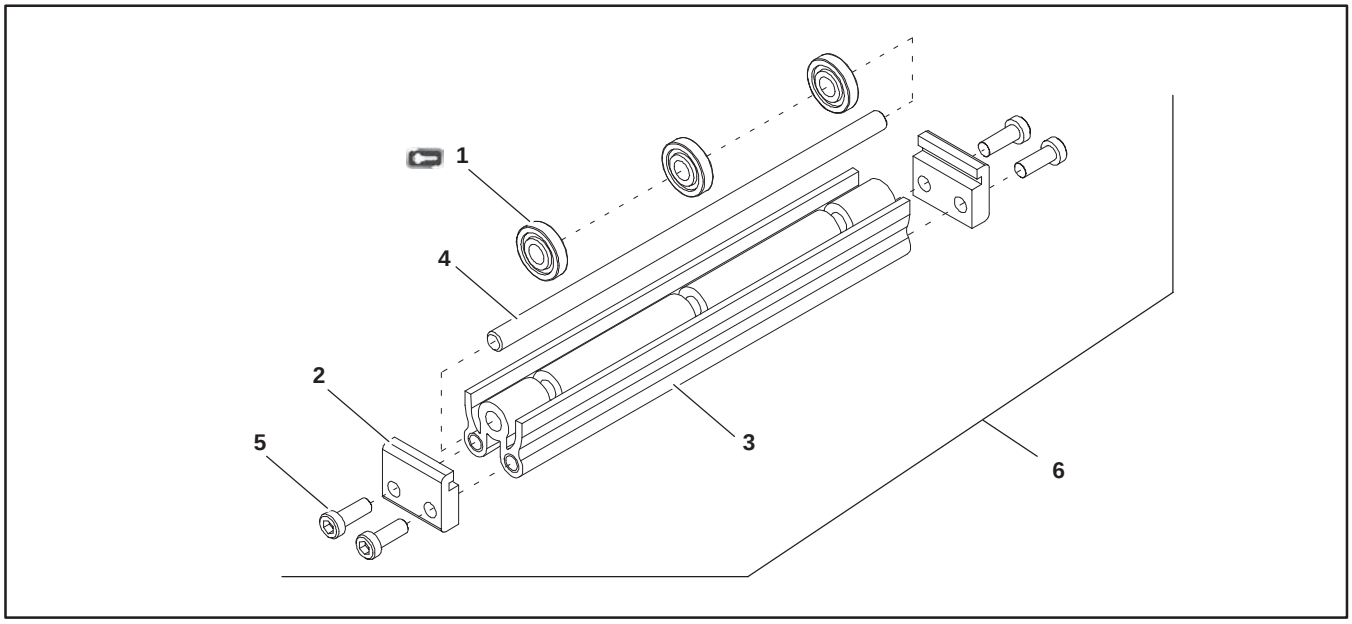
2” (51 mm) to 6” (152 mm) Flat Belt Return Roller



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	950616M	Low Head Cap Screw M6 x 16mm
6	240840	Roller Assembly (Includes Items 1, 3 and 4)
7	240830	2” (51mm) to 6” (152mm) Flat Belt Return Roller Assembly

8” (203 mm) to 24” (610 mm) Flat Belt Return Roller



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

Item	Part Number	Description
5	950616M	Low Head Cap Screw M6 x 16mm
6	2408WW	8” (203mm) to 24” (610mm) Flat Belt Return Roller Assembly
WW= Conveyor width ref.: 02, 03, 04, 05, 06, 08, 10, 12, 18, 21, 24		

Conveyor Belt Part Number Configuration

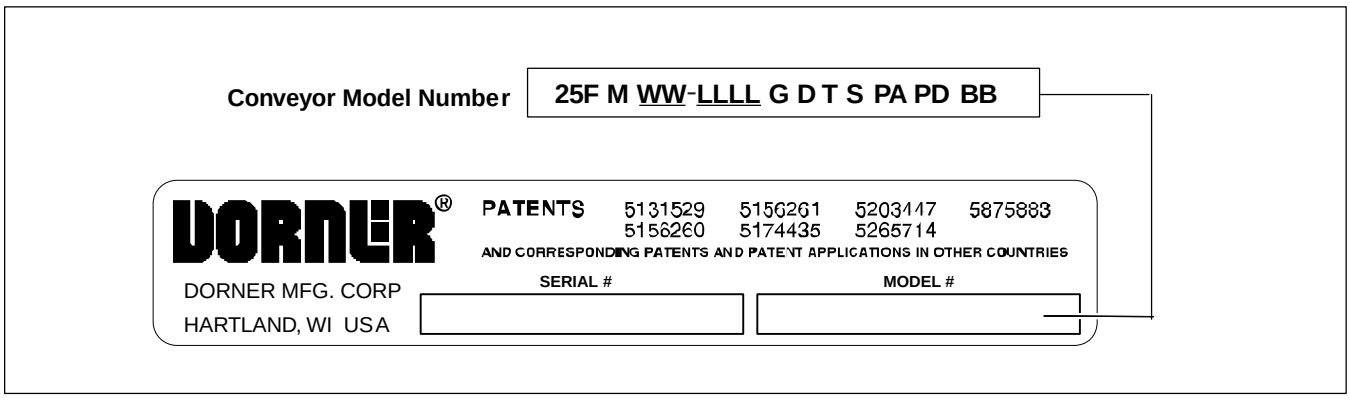


Figure 76

Refer to Dorner patent plate **(Figure 76)**. From the model number, determine conveyor width (“WW”), length (“LLLL”) and belt type (“BB”). Use data to configure belt part number as indicated below. *Add “V” for V-guided belts.

25 - WW LLLL / BB V*

25 – __ __ __ __ __ __ / __ __ V*

(Fill In)

Return Policy

Returns must have prior written factory authorization or they will not be accepted. Items that are returned to Dorner without authorization will not be credited nor returned to the original sender. When calling for authorization, please have the following information ready for the Dorner factory representative or your local distributor:

1. Name and address of customer.
2. Dorner part number(s) of item(s) being returned.
3. Reason for return.
4. Customer's original order number used when ordering the item(s).
5. Dorner or distributor invoice number (if available, part serial number).

A representative will discuss action to be taken on the returned items and provide a Returned Goods Authorization (RMA) number for reference. RMA will automatically close 30 days after being issued. To get credit, items must be new and undamaged. There will be a return charge on all items returned for credit, where Dorner was not at fault. It is the customer's responsibility to prevent damage during return shipping. Damaged or modified items will not be accepted. The customer is responsible for return freight.

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

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

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

For a copy of Dorner's Warranty, contact factory, distributor, service center or visit our website at www.dorner.com.

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

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

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

851-701 Rev. C

Printed in U.S.A.