7300 Series Sanitary End Drive Conveyors

Installation, Maintenance & Parts Manual

Featuring: Wedge-Lok® Technology

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851-568 Rev. E

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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 7300 Series conveyors are covered by Patent Nos. 5174435, 6109427, 6685009 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 .

⚠ 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.

A	Conveyor
B	Gearmotor
C	Belt (Flat Belt Shown)
D	Mounting Plates
E	Return Roller
F	Support Stands
G	Motor Controller
H	Drive End
I	Tensioning End

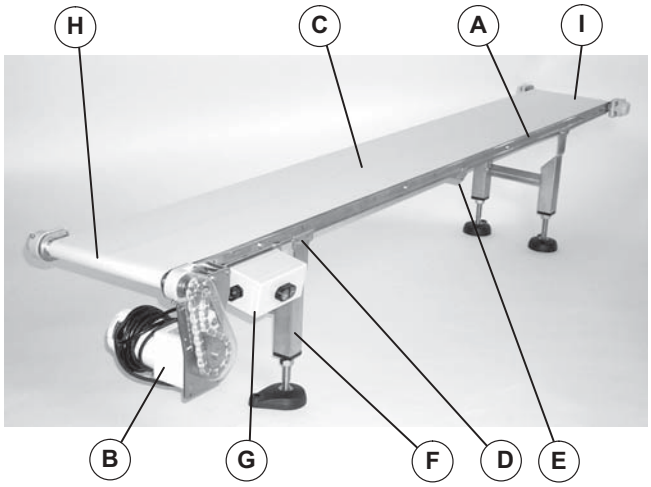


Figure 1

Specifications

Flat Belt 7300 Series Sanitary Conveyor

7 D B M WW LLLL P GG BB

- **BB** — Belt Type*
- **GG** — Conveyor Profile*
- **P** — Output Shaft Position*
- **LLLL** — Conveyor Length Reference
- **WW** — Conveyor Width Reference
- **M** — Document Language, M = USA English
- **B** — 1= No Wiper – with Mounting Brackets; 2 = No Wiper – without Mounting Brackets; 3 = End Wiper – with Mounting Brackets; 4 = End Wiper – without Mounting Brackets; 5 = Dual Wiper – with Mounting Brackets; 6 = Dual Wiper – without Mounting Brackets
- **D** — 3 = End Drive Conveyor

Conveyor Supports:

Maximum Distances:

J = 18" (457 mm)**

K= 6 ft (1829 mm)***

L= 18" (457 mm)

** For Heavy Load Bottom Mount Package, mount support under gearmotor.

*** For conveyors longer than 12 ft (3658 mm), install support at frame joint.

Cleated Belt 7300 Series Sanitary Conveyor

7 D B M WW LLLL P SSSS

- **SSSS** — Cleat Spacing*
- **P** — Output Shaft Position*
- **LLLL** — Conveyor Length Reference
- **WW** — Conveyor Width Reference
- **M** — Document Language, M = USA English
- **B** — Cleat Type (A–J)*
- **D** — 6 = Cleated Belt with Mounting Brackets; 7 = Cleated Belt without Mounting Brackets; 0 = Low Friction Cleated Belt with Mounting Brackets; 1 = Low Friction Cleated Belt without Mounting Brackets

* See “Ordering and Specifications” Catalog for details.

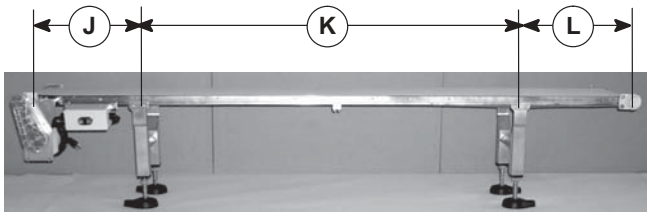


Figure 2

Specifications:

Conveyor Width Reference (WW)	02	03	04	05	06	08	10	12	18
Conveyor Belt Width	1.75" (44 mm)	2.75" (70 mm)	3.75" (95mm)	5" (127 mm)	6" (152mm)	8" (203mm)	10" (254mm)	12" (305mm)	18" (457mm)
Maximum Conveyor Load* (See NOTE Below)	30 lb (14 kg)	35 lb (16 kg)	42 lb (19 kg)	50 lb (23 kg)	60 lb (27 kg)	70 lb (32 kg)	80 lb (36 kg)	80 lb (36 kg)	80 lb (36 kg)
Conveyor Start-up Torque*	4 in-lb (0.5 Nm)	5 in-lb (0.6 Nm)	6 in-lb (0.7 Nm)	7 in-lb (0.8 Nm)	8 in-lb (0.9 Nm)	10 in-lb (1.1 Nm)	12 in-lb (1.4 Nm)	14 in-lb (1.5 Nm)	15 in-lb (1.7 Nm)
Belt Travel	4.3" (109 mm) per revolution of pulley								
Maximum Belt Speed*	235 feet/minute (72 meters/minute)								
Belt Take-up	0.38" (10 mm) of stroke = 0.75" (19 mm) of belt take-up								

Conveyor Length Reference (LL)	02	03	04	05	06	07	08	09	10	11	12	13**	14**	15**	16**	17**	18**
Conveyor Length	2-ft (610 mm)	3-ft (914 mm)	4-ft (1219 mm)	5-ft (1524 mm)	6-ft (1829 mm)	7-ft (2134 mm)	8-ft (2438 mm)	9-ft (2743 mm)	10-ft (3048 mm)	11-ft (3353 mm)	12-ft (3658 mm)	13-ft (3962 mm)**	14-ft (4267 mm)**	15-ft (4572 mm)**	16-ft (4877 mm)**	17-ft (5182 mm)**	18-ft (5486 mm)**

* See "Ordering and Specifications" Catalog for details. ** Lengths available only in 6" (152 mm) & wider conveyors.

NOTE

Maximum conveyor loads are based on:

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

Installation

NOTE

7300 Series sanitary conveyors are shipped with a "belt travel direction" sticker (Figure 3, item M) installed. After drive is installed and tested, remove sticker.

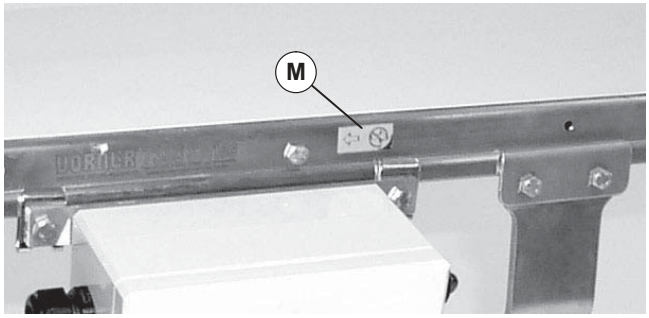


Figure 3

NOTE

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

NOTE

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

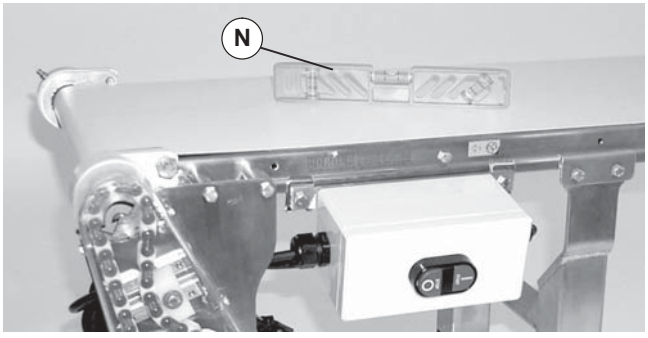


Figure 4

Required Tools

- 10 mm wrench (for hexagon head fasteners)
- Level
- Torque wrench

Recommended Installation Sequence

- Assemble conveyor (if required)
- Install stands (see accessory instructions)
- Attach stands/mounting brackets to conveyor (see page 7)
- Mount gearmotor mounting package (see accessory instructions)
- Attach return rollers (see page 8)
- Attach guides/accessories (see "Service Parts" section starting on page 20)

Conveyors Up to 12 ft (3658 mm)

No assembly is required. Install stands/mounting brackets and return rollers. Refer to "Attaching Conveyor to Stands or Mounting Brackets" on page 7 and "Return Rollers" on page 8.

Conveyors Longer Than 12 ft (3658 mm)

1. Typical components (Figure 5).

O	Conveyor frame extension
P	M6 x 10 mm Hex Head Cap Screws (12x)
Q	Connector Strips (2x)
R	Conveyor frame

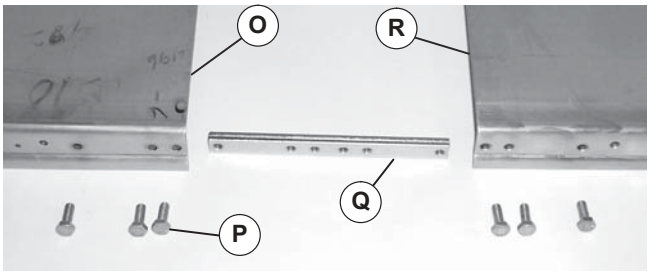


Figure 5

2. Compress tension end (Figure 6). Refer to steps 4 and 5 under the "Belt Removal for Conveyor Without Gearmotor Mounting Package or Stands" on page 11.

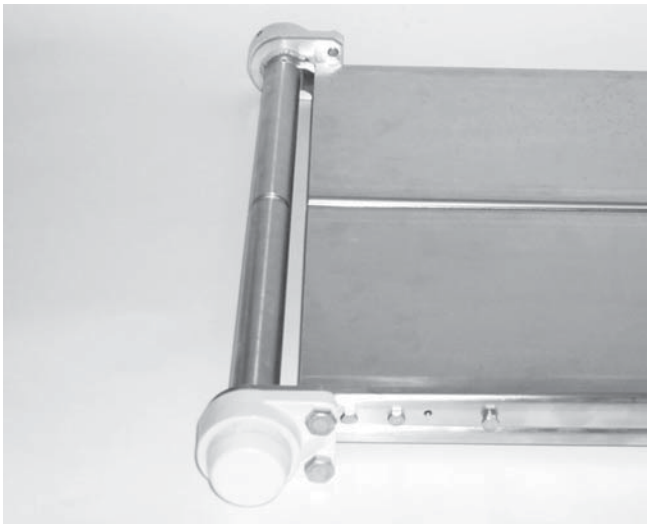


Figure 6

3. Install frame connecting bar (Figure 7, item Q) on conveyor frame (R) with three screws (P). Do not tighten screws.

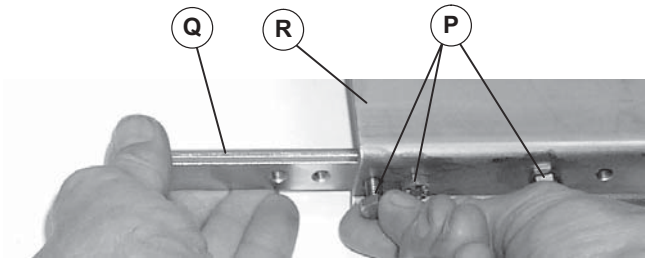


Figure 7

4. Repeat step 3 for other side of conveyor frame.
5. Install conveyor frame extension (Figure 8, item O) on frame connecting bar (Q) with three screws (P). Install three screws (P) on opposite side. Tighten all screws to 92 in-lb (10.4 Nm).

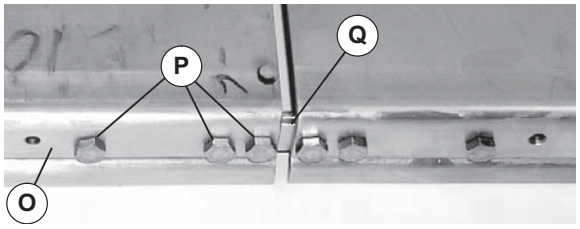


Figure 8

6. Install conveyor belt. Refer to steps 1 through 3 under "Belt Installation for Conveyor without Gearmotor Mounting Package or Stands" on page 13.
7. Tension conveyor belt. Refer to "Conveyor Belt Tensioning" on page 14.

Attaching Conveyor to Stands or Mounting Brackets

NOTE

Conveyor may be mounted using mounting brackets as shown in Figure 9 and Figure 10 or directly to support stands. For direct support stand mounting, see stand manual.

1. Typical mounting bracket components (Figure 9).

S	M6 x 10 mm Hex Head Cap Screw (4x)
T	M6 x 12 mm Hex Head Cap Screw (4x)
U	Stand/Conveyor Ear Mount Bracket (2x)
V	Clamp Plate, Flat Belt (2x)
	or
W	Clamp Plate, Cleated Belt (2x)

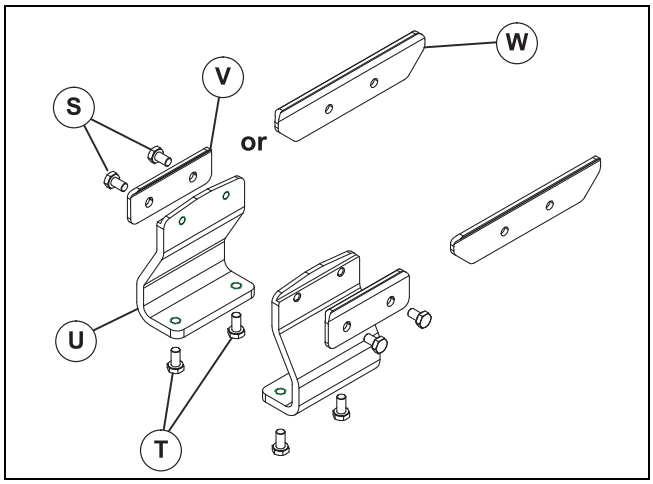


Figure 9

2. Attach clamp plate (Figure 9, item V or W) to stand/ conveyor ear mount bracket (U) with two screws (S). Do not tighten screws.

3. Attach stand/conveyor ear mount bracket (Figure 10, item U) to bottom of conveyor (Z). Make sure notch (AA) on bracket straddles conveyor edge as shown. Snug–up two screws (S).

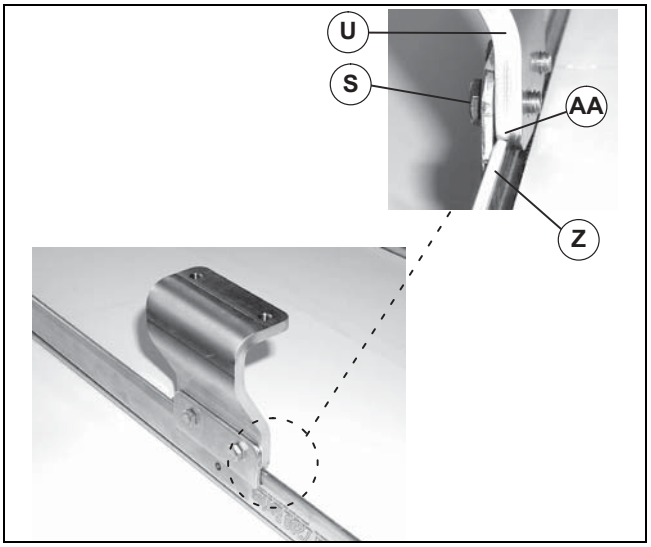


Figure 10

4. Repeat steps 2 and 3 for other mounting bracket(s). Tighten all screws (S) to 80 in-lb (9 Nm).

Return Rollers

2" (51 mm) Through 6" (152 mm) Wide Flat Belt and All Cleated Belt Conveyors

NOTE

No return rollers are required on conveyor lengths up to 7 ft (2134 mm). Use one pair of rollers centered between the tensioning and drive spindles on 8–15 ft (2438–4572 mm) conveyors. Use two pairs of rollers at one third distances between the tensioning and drive spindles on 16–18 ft (4877–5486 mm) conveyors.

1. Return roller components (Figure 11).

AB	Mounting Block
AC	Clamp Plate
AD	Hex Head Cap Screw M6–1.0 x 12mm (2x)

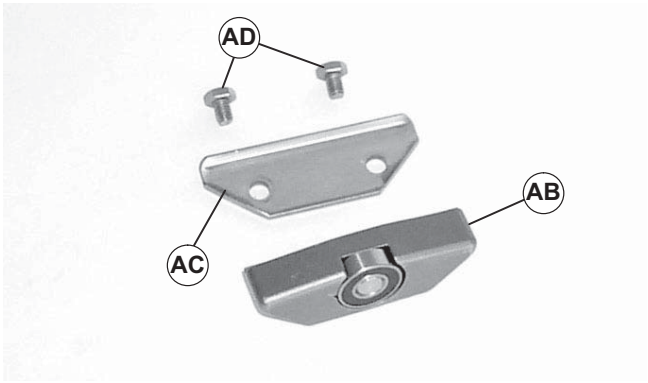


Figure 11

2. Loosely attach clamp plate (Figure 12, item AC) on mounting block (AB) with two screws (AD). Do not tighten screws.

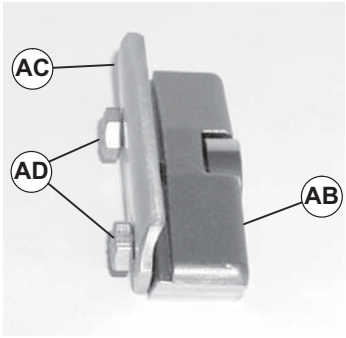


Figure 12

3. Attach return roller assembly (Figure 13, item AE) on each side of conveyor (Z). Tighten screws (AD) to 80 in-lb (9 Nm).

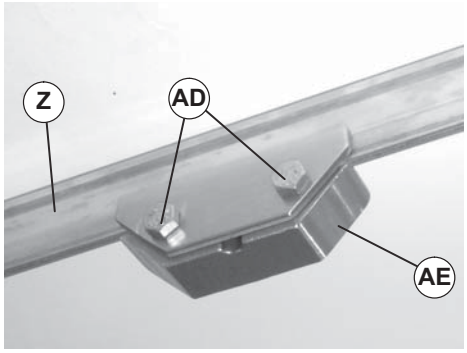


Figure 13

4. On 8–18 ft (2338–5486 mm) conveyor, repeat step 3 as necessary for other return rollers.

8" (203 mm) Through 18" (457 mm) Wide Flat Belt Conveyors

NOTE

No return rollers are required on conveyor lengths up to 7 ft (2134 mm). Use one roller centered between the idler and drive spindles on 8–15 ft (2438–4572 mm) conveyors. Use two rollers at one third distances between the idler and drive spindles on 16–18 ft (4877–5486 mm) conveyors.

1. Typical return roller components (Figure 14)

AF	Return Roller and Guard Assembly
AG	Return Roller Clamp Plate (2x)
AH	Hex Head Cap Screw M6–1.0 x 12mm (4x)

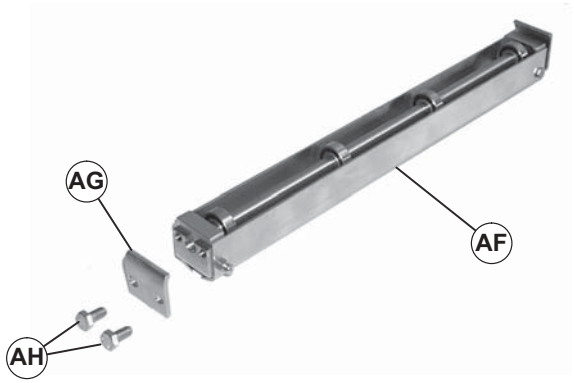


Figure 14

2. Loosely attach two clamp plates (Figure 15, item AG) on roller and guard assembly (AF) with four screws (AH). Do not tighten screws.

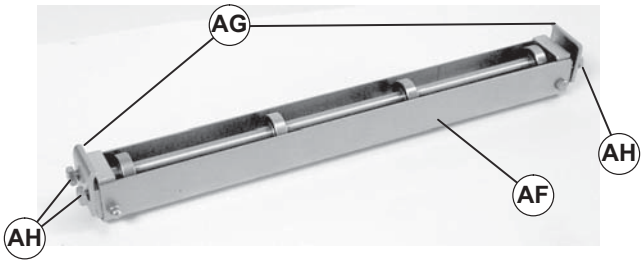


Figure 15

3. Attach return roller assembly (Figure 16, item AI) on conveyor (Z). Make sure return roller assembly is perpendicular with conveyor frame as shown. Tighten screws (Figure 15, item AH) to 80 in-lb (9 Nm).

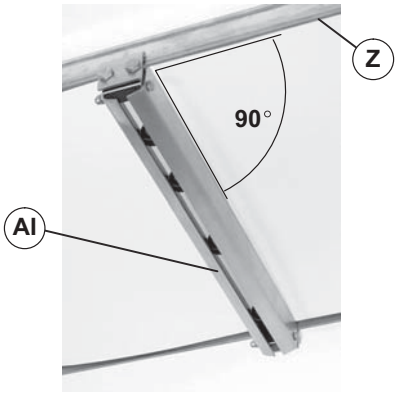


Figure 16

4. On 16–18 ft (4877–5486 mm) conveyor, repeat steps 2 and 3 for other return roller.

Preventive Maintenance and Adjustment

Required Tools

- Wrenches: 8 mm, 10 mm, 17 mm, 3/8” (or an adjustable wrench)
- Hex key wrench: 3 mm

Checklist

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

Lubrication

Conveyor Bearings

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

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
- Damage to V-guide

Surface cuts and wear indicate:

- Sharp or heavy parts impacting belt
- Jammed parts
- Improperly installed bottom wiper(s)
- Accumulated dirt in wiper(s)
- 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

Damage to V-guide indicates:

- Twisted or damaged conveyor frame
- Dirt impacted on pulleys
- Excessive or improper side loading

Cleaning

NOTE

Dorner recommends cleaning all the “food zones” prior to placing conveyor into service. Insure adequate access is provided for cleaning and servicing equipment so that the required level of hygiene can be maintained.

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 (see Table of Contents for page number)

- Remove old conveyor belt

A - Conveyor without Gearmotor Mounting Package or Stands

B - Conveyor with Stands and/or Gearmotor Mounting Package

- Install new conveyor belt

A - Conveyor without Gearmotor Mounting Package or Stands

B - Conveyor with Stands and/or Gearmotor Mounting Package

- Tension conveyor belt

A – Belt Removal for Conveyor Without Gearmotor Mounting Package or Stands

1. If installed, remove and retain two M5 hex head screws (Figure 17, item AJ), bottom wiper (AK) and two sleeves (AL).

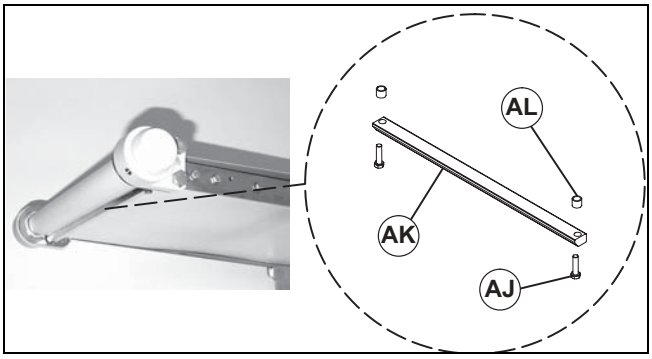


Figure 17

2. If installed, repeat step 1 for other wiper.
3. If conveyor is equipped with guiding and accessories or return rollers, remove and retain them as necessary.
4. Loosen four M6 hex head cap screws (Figure 18, item AM) and (Figure 19, item AM).

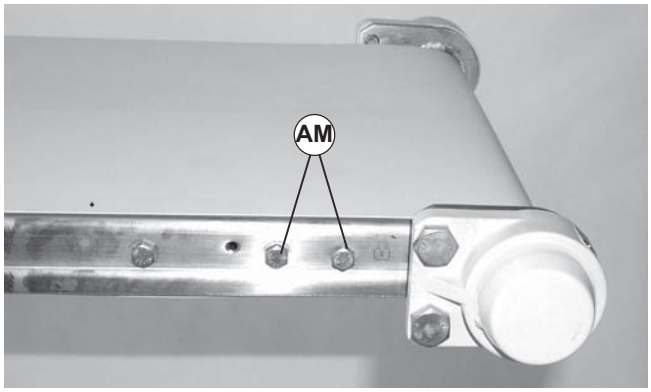


Figure 18

5. Retract idler spindle assembly (Figure 19, item AN) by pushing in on it or by turning M6 hex head pinion screw (AO) clockwise.

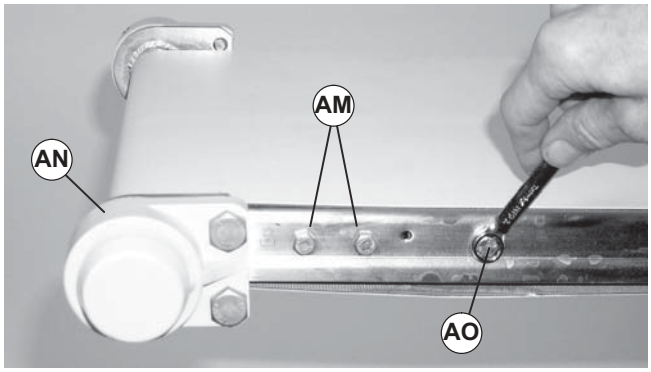


Figure 19

6. Remove bearing cover (Figure 20, item AP) from drive end of conveyor.

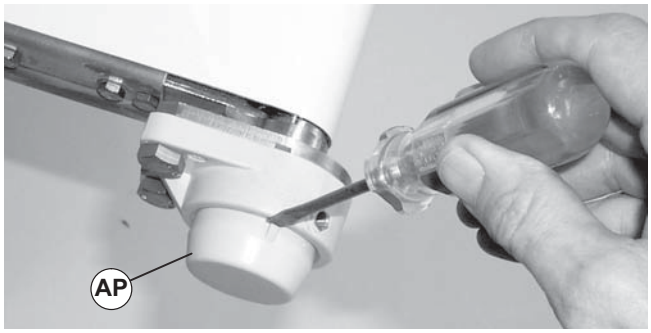


Figure 20

7. Using a 3mm hex key wrench (Figure 21, item AQ), loosen two set screws (AR) on bearing and head plate assembly (AS).

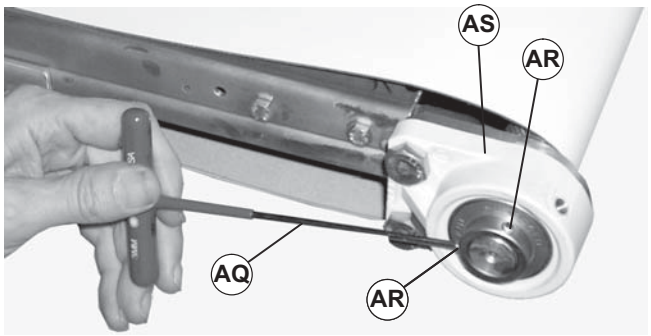


Figure 21

8. Remove three hex head screws (Figure 22, item AT and AU) from bearing and head plate assembly (AS), cross support post (Figure 23, item AV) and conveyor (Z).

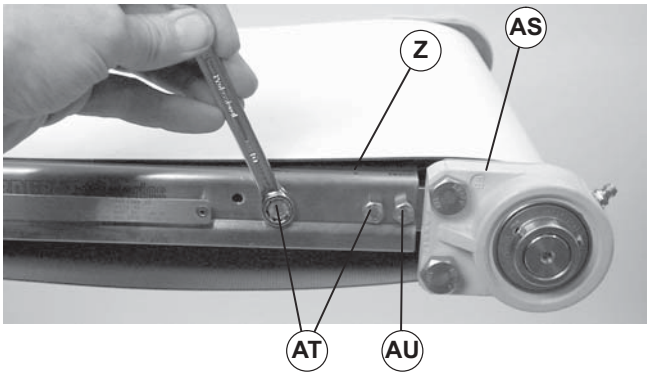


Figure 22

9. Rotate bearing and head plate assembly (Figure 23, item AS) down and then off of cross support post (AV) and drive spindle (AW).

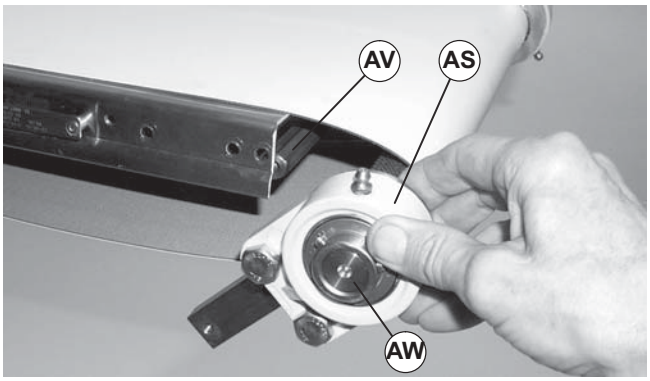


Figure 23

10. Remove conveyor belt (Figure 24, item AX).

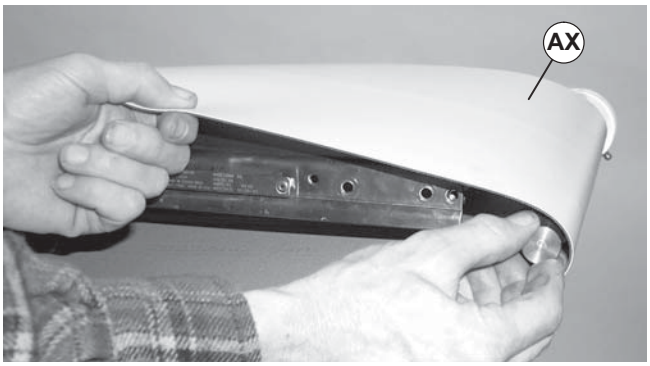


Figure 24

B – Belt Removal for Conveyor With Stands and/or Gearmotor Mounting Package

NOTE

For conveyor with a Heavy Load Bottom or Top Gearmotor Mounting Package, bracket (Figure 25, item AY) must be removed.

- *Remove two M6x30 mm hex head cap screws and spacers (AZ).*
- *Remove two M6x16 mm hex head cap screws (BA).*
- *Remove bracket (AY).*

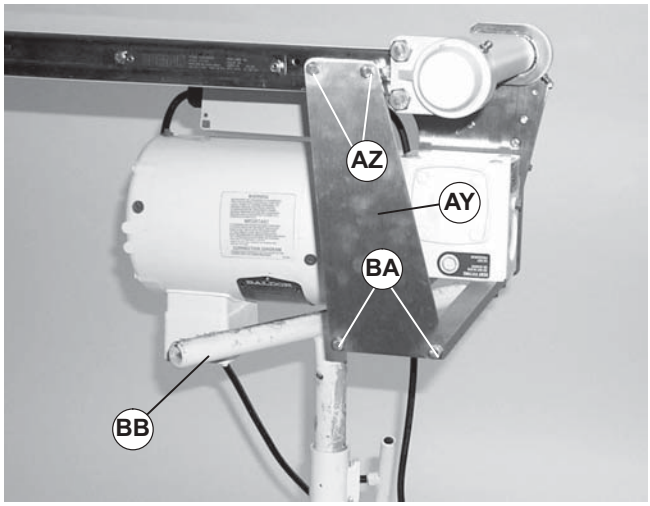


Figure 25

1. Perform steps 1 through 9 under “Belt Removal for Conveyor Without Gearmotor Mounting Package or Stands”.

⚠ WARNING

The weight of the gearmotor is all on one end of the conveyor which could cause it to tip off the stands when the mounting clamp plates are loosened. Be sure to provide support (Figure 25, item BB) and (Figure 26, item BB) underneath the gearmotor while changing the be

2. Place a temporary support (Figure 25, item BB) and (Figure 26, item BB) under gearmotor mounting package.

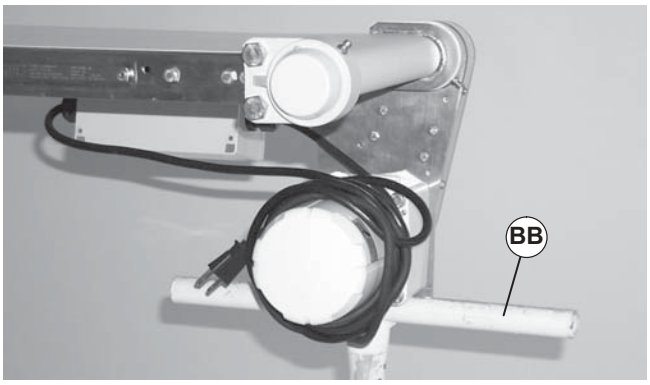


Figure 26

3. Loosen two clamp plate screws (Figure 27, item S) on side of conveyor opposite drive motor.

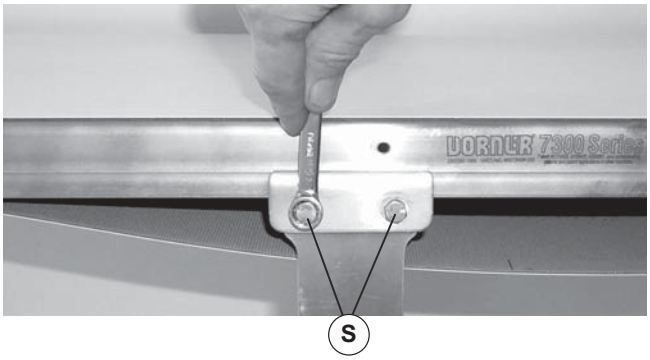


Figure 27

4. Repeat step 3 for remaining stand/conveyor ear mount brackets or stand assemblies on same side of conveyor.
5. Raise conveyor and remove conveyor belt (Figure 28, item AX).

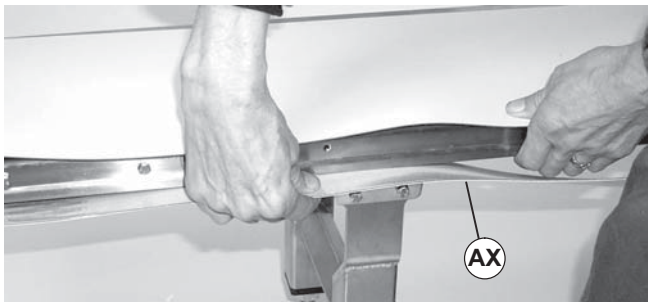


Figure 28

6. If a new belt will not be installed immediately, secure conveyor with stand/conveyor ear mount brackets or stand assemblies.

A – Belt Installation for Conveyor without Gearmotor Mounting Package or Stands

1. Orient conveyor belt so the splice leading fingers (Figure 29, item BD) point in the direction of belt travel (BE).

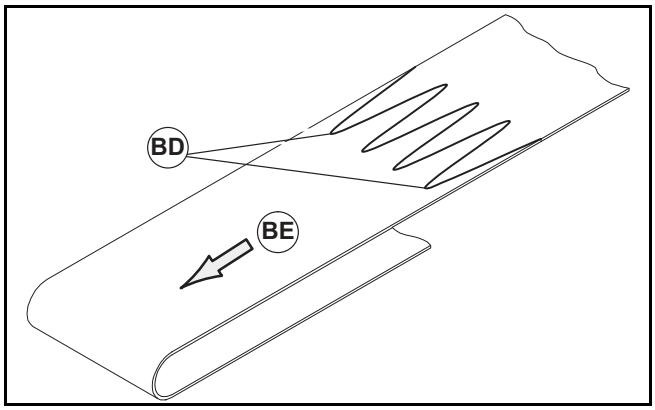


Figure 29

2. Slide belt (Figure 24, item AX) onto the conveyor frame assembly.
3. Install bearing and head plate assembly (Figure 30, item AS) onto drive spindle (AW). Tighten two set screws to 34 in-lb (3.8 Nm). Check after 24 hrs. of conveyor usage.

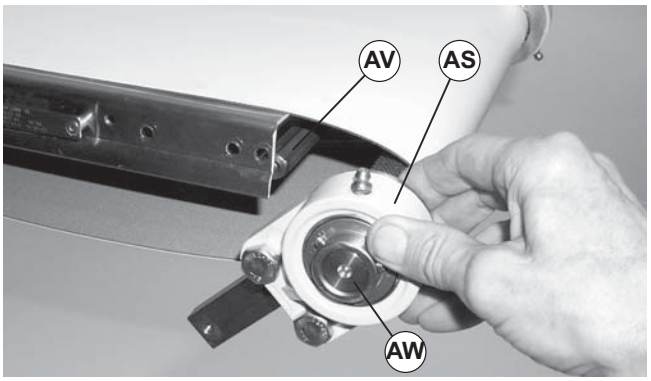


Figure 30

4. Rotate bearing and head plate assembly (Figure 31, item AS) up between inside of conveyor (Z) and cross support post (AV). Make sure cross support post engages slot (BF) in head plate.

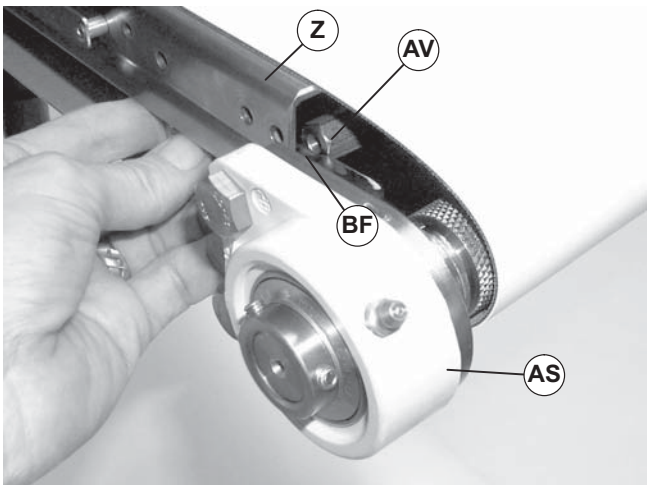


Figure 31

5. Install three hex head screws (Figure 22, item AT and AU) to secure bearing and head plate assembly (Figure 31, item AS) to cross support post (AV) and conveyor (Z).
6. Using a 3mm hex key wrench (Figure 21, item AQ), tighten two set screws (AR) on bearing (AS).
7. Install bearing cover (Figure 20, item AP) on drive end of conveyor.
8. If removed, install sleeves (Figure 17, item AL), bottom wiper(s) (AK) and M5 hex head screws (AJ). Tighten screws to 33 in-lb (3.7 Nm).
9. Tension belt. Refer to "Conveyor Belt Tensioning" on page 14.
10. If removed, install return rollers, guiding and accessories.

B – Belt Installation for Conveyor with Gearmotor Mounting Package and/or Stands

IMPORTANT

On a flat belt conveyor, the wiper is installed on discharge end. Belt travel direction is identified by an arrow decal on the drive cover (Figure 32, item BC).

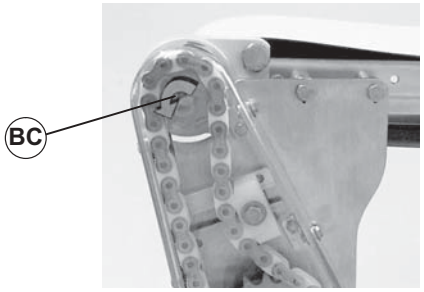


Figure 32

1. Orient conveyor belt so that the splice leading fingers (Figure 29, item BD) point in the direction of belt travel (BE) as identified by the label (Figure 32, item BC).
2. Slide belt (Figure 28, item AX) onto conveyor frame assembly.
3. Tighten two clamp plate screws (Figure 27, item S)
4. Repeat step 3 for remaining stand/conveyor ear mount brackets or stand assemblies.
5. Install bearing and head plate assembly following steps steps 3 through 7 under "Belt Installation for Conveyor Without Gearmotor Mounting Package or Stands" on page 13.
6. If removed, install sleeves (Figure 17, item AL), bottom wiper(s) (AK) and M5 hex head screws (AJ). Tighten screws to 33 in-lb (3.7 Nm).
7. For a conveyor with a Heavy Load Bottom or Top Mounting package, install bracket (Figure 25, item AZ).
8. Tension belt. Refer to "Conveyor Belt Tensioning" on page 14.
9. If removed, install return rollers, guiding and accessories.

Conveyor Belt Tensioning

⚠ WARNING

Exposed moving parts can cause severe injury.

LOCK OUT POWER before removing guards or performing maintenance.

1. On tension end of the conveyor, loosen two M6 hex head cap screws (Figure 33, item AM) on each side of conveyor.

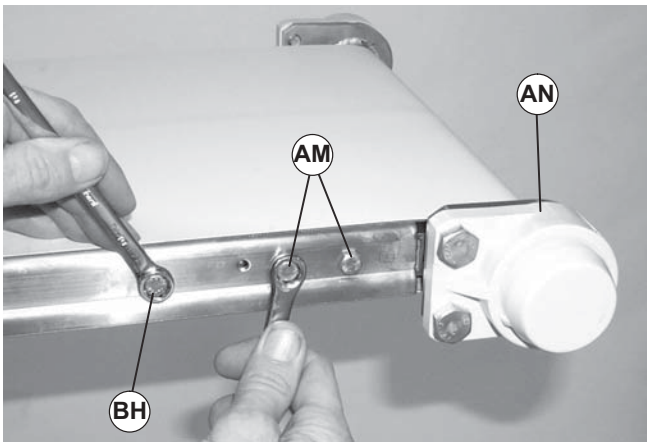


Figure 33

NOTE

Do not exceed a torque of 25 in-lb (2.8 Nm) for 2" to 12" (44 mm to 305 mm) wide conveyors or 40 in-lb (4.5 Nm) for an 18" (457 mm) wide conveyor on tensioning screw (BH). Over-tensioning the conveyor belt could cause excessive pulley bearing load and early failure.

2. Extend idler spindle assembly (AN) by turning M6 hex head screw (BH) clockwise to sufficiently tension belt to handle conveyor load.
3. Tighten four M6 hex head screws (AM) to 40 in-lb (4.5 Nm) to secure idler spindle assembly (AN).

NOTE

If the maximum take-up stroke is achieved, replace the conveyor belt.

Pulley Removal

⚠ WARNING

Exposed moving parts can cause severe injury.

LOCK OUT POWER before removing guards or performing maintenance.

Remove conveyor belt to access pulley(s). See "Conveyor Belt Replacement" on page 10. Remove the desired pulley following instructions:

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

A – Drive Pulley Removal

⚠ WARNING

Drive shaft keyway may be sharp.

HANDLE WITH CARE.

1. Remove the gearmotor mounting package. See accessory instructions.

NOTE

Two screws (Figure 34, item BI) were removed in step 1.

If conveyor is in the upright position, cross support post (AV) will not be secure and may drop when screws (Figure 34, item BJ) and (Figure 35, item AU) are removed.

2. Remove screw (BJ) from conveyor (Z) and cross support post (AV).

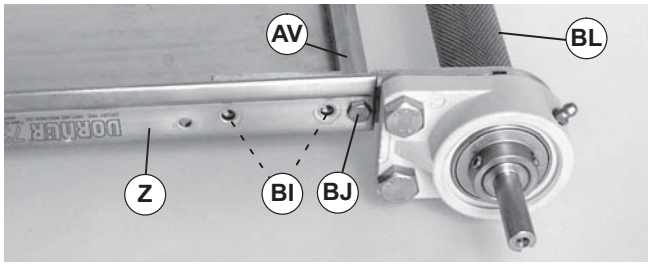


Figure 34

3. Remove screw (Figure 35, item AU) and cross support post (AV) from conveyor (Z) and drive spindle assembly (BL).

NOTE

For a conveyor with a Heavy Load Bottom or Top Gearmotor Mounting Package, the two screws (Figure 35, item BK) were removed in step 1.

If conveyor is in the upright position, drive spindle assembly (Figure 35, item BL) will not be secure and may drop when screws (Figure 34, item AU, BJ and BK) and (Figure 35, item AU, BJ and BK) are removed.

4. Remove two screws (Figure 35, item BK) and drive spindle assembly (BL) from conveyor (Z).

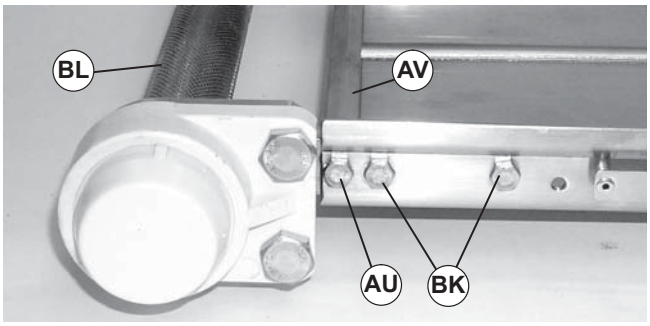


Figure 35

5. On closed end of drive spindle assembly (Figure 36, item BL), use a screwdriver to pry off bearing cover (AP).

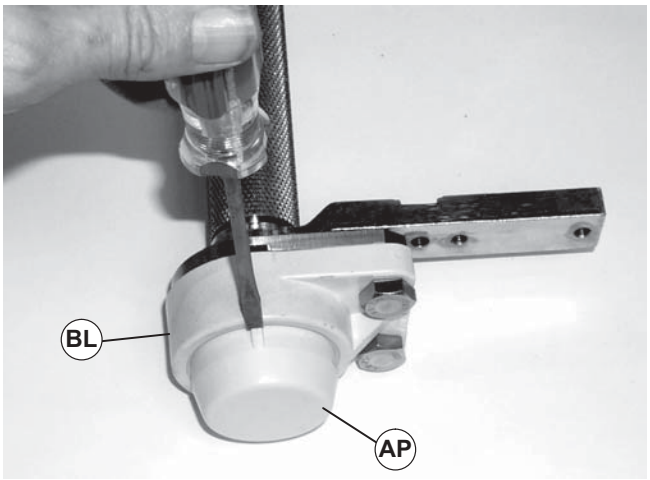


Figure 36

6. Using a 3mm hex key wrench (Figure 37, item AQ), loosen two set screws (AR) on bearing and head plate assembly (AS).

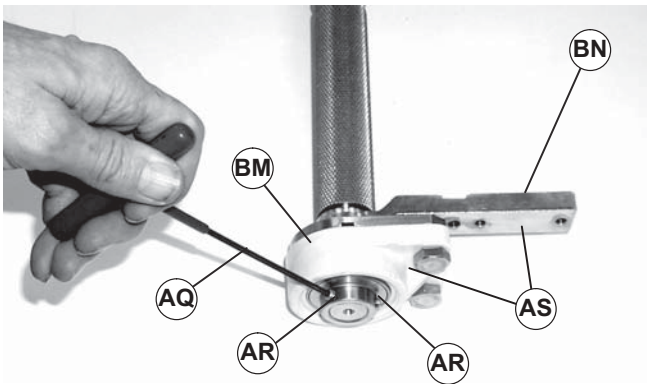


Figure 37

7. Remove bearing and head plate assembly (AS of Figure 38) from drive spindle (AW).

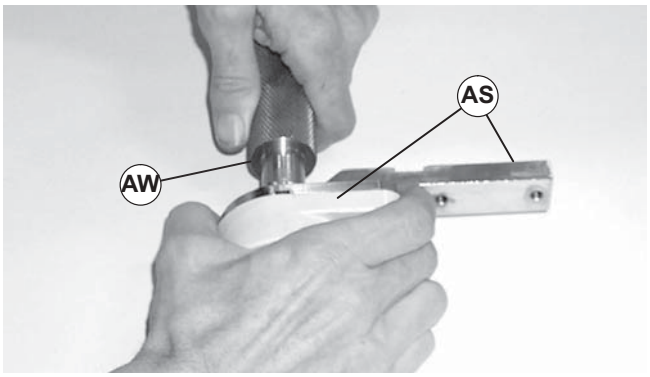


Figure 38

8. Repeat steps 6 and 7 for opposite side of drive spindle.

NOTE

If bearings (Figure 37, item BM) require removal from head plates (BN), see "Bearing Removal" on page 17.

B – Idler Pulley Removal

1. While holding hex pinion (Figure 39, item BO) with a 3/8" open–end wrench, loosen M6 hex head cap screw (AO).

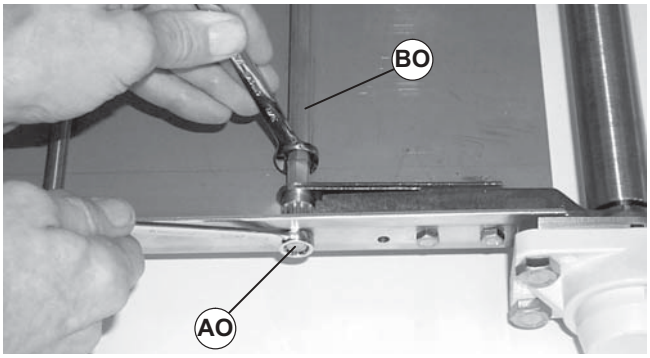


Figure 39

2. Remove M6 hex head cap screw (Figure 40, item AO) and sleeve (BP) from conveyor (Z) and hex pinion (BO).

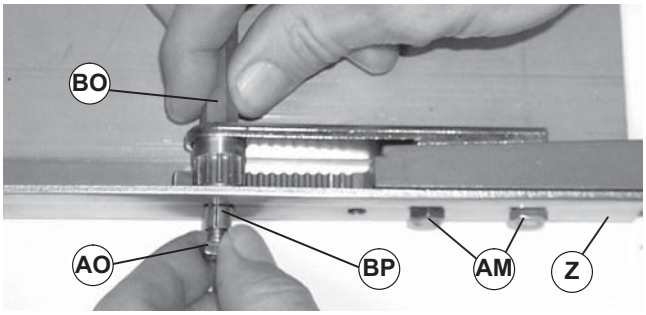


Figure 40

3. Repeat steps 1 and 2 for screw (Figure 41, item BH) on opposite side of conveyor.
4. Remove two M6 hex head cap screws (AM) from each side of conveyor.
5. Remove two pinion ends (BQ), Wedge-Lok® clamp blocks (BR), hex pinion (BO), two spacers (BS) and tail assembly (AN) from conveyor (Z).

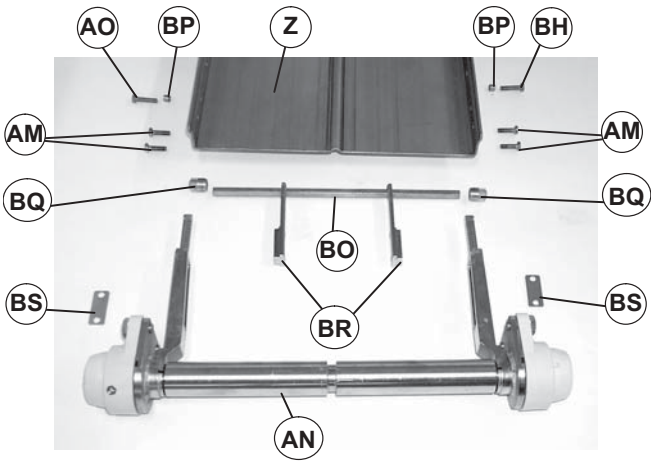


Figure 41

6. Use a screwdriver to remove bearing cover (Figure 42, item BT) from tail assembly (AN).

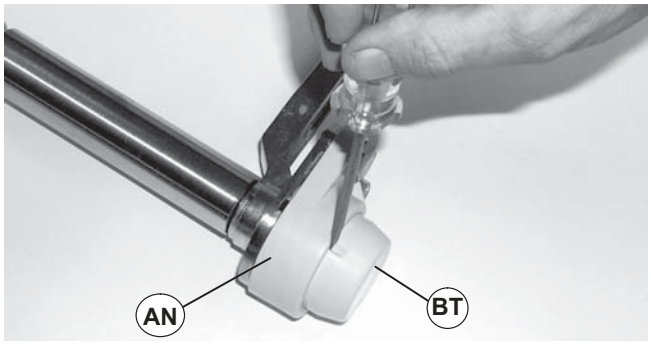


Figure 42

7. Using a 3mm hex key wrench (Figure 43, item AQ), loosen two set screws (BU) on bearing and head plate aseembly (BV) .

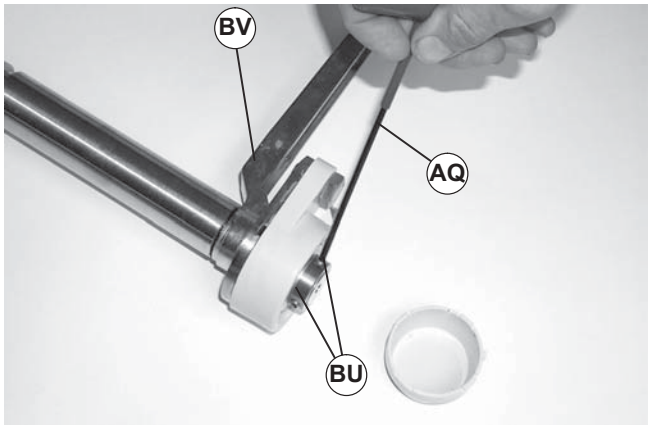


Figure 43

8. Remove bearing and head plate assembly (Figure 44, item BV) from idler spindle (BW).

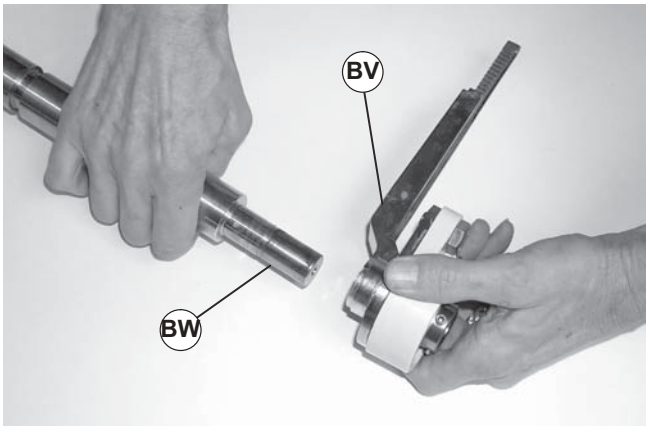


Figure 44

9. Repeat steps 6, 7 and 8 for opposite side of idler spindle.

Bearing Replacement for Drive or Idler Pulley

Bearing Removal

1. Using a 17 mm wrench, remove two hex head screws (Figure 45, item BX) from bearing (BY) and head plate (BZ).

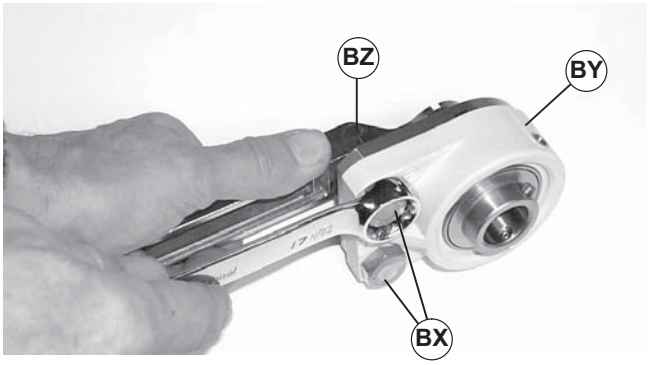


Figure 45

Bearing Installation

1. Install bearing (Figure 45, item BY) on head plate (BZ) with two hex head screws (BX). Tighten screws to 36 ft–lb (49 Nm). Check after 24 hrs. of conveyor usage.

Pulley Installation

A – Drive Pulley Installation

1. Make sure bearing surfaces on drive spindle are free of nicks and burrs. Slide bearing and head plate assembly (Figure 38, item AS) on drive spindle (AW).
2. Repeat step 1 for opposite side of drive spindle.
3. Position drive spindle assembly (Figure 35, item BL) on conveyor (Z) and loosely secure with two screws (BK).
4. Install cross support post (Figure 35, item AV) and secure with two screws (Figure 34, item BJ) and (Figure 35, item AU). Tighten screws to 33 in–lb (3.7 Nm).

IMPORTANT

Before tightening set screws on bearing and head plate assemblies, make sure that center of groove (Figure 46, item CA) on spindle (AW) is in line with center of groove (CB) on conveyor (Z).

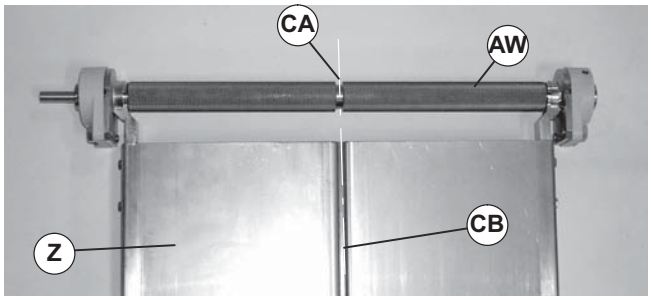


Figure 46

5. Make sure center of groove (Figure 46, item CA) on spindle (AW) is aligned with center of groove (CB) on conveyor (Z).
6. Using a 3mm hex key wrench (Figure 37, item AQ), tighten two set screws (AR) on each bearing and head plate assembly (AS).
7. On closed end of drive spindle assembly (Figure 36, item BL), install bearing cover (AP).
8. Install gearmotor mounting package. See accessory instructions.

B – Idler Pulley Installation

1. Make sure bearing surfaces on idler spindle are free of nicks and burrs. Slide bearing and head plate assembly (Figure 44, item BV) on idler spindle (BW).
2. Repeat step 1 for opposite side of idler spindle.

IMPORTANT

Loosely install a spacer (Figure 41, item BS) and (Figure 47, item BS) on each side of tail assembly (AN) prior to installing tail assembly on conveyor.

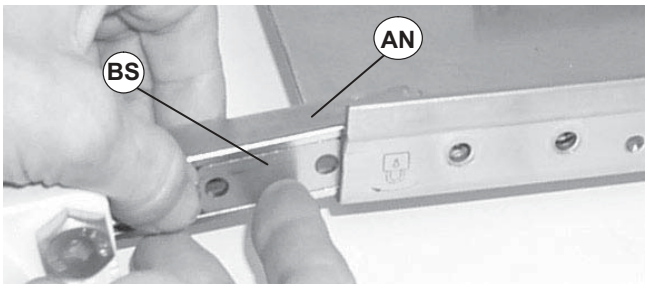


Figure 47

3. Position tail assembly (AN) and two spacers (BS) on conveyor (Z).

IMPORTANT

During idler pulley installation, orient both pinion ends (Figure 48, item BQ) so they engage the same tooth positions on their respective racks.

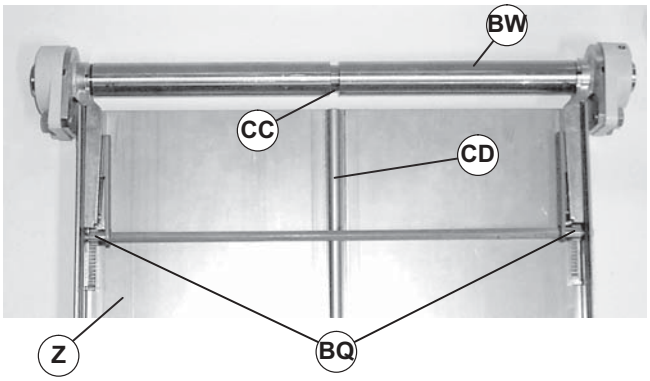


Figure 48

4. Loosely install two pinion ends (Figure 41, item BQ) and (Figure 48, item BQ), hex pinion (BO) and clamp blocks (BR) on tail assembly (AN) and conveyor (Z) with four M6x20mm hex head cap screws (Figure 40, item AM), two sleeves (BP) and two M6x25mm hex head cap screws (AO).
5. While holding hex pinion (Figure 39, item BO) with a 3/8" open–end wrench, tighten two screws (Figure 39, item AO) and (Figure 41, item BH) to 33 in–lb (3.7 Nm).
6. Tighten four screws (Figure 40, item AM) to 33 in–lb (3.7 Nm).

IMPORTANT

Before tightening set screws on bearing and head plate assemblies, make sure that center of groove (Figure 48, item CC) on spindle (BW) is in line with center of groove (CD) on conveyor (Z).

7. Make sure center of groove (Figure 48, item CC) on spindle (BW) is aligned with center of groove (CD) on conveyor (Z).
8. Using a 3mm hex key wrench (Figure 43, item AQ), tighten two set screws (BU) on each bearing and head plate assembly (BV).
9. Install two bearing covers (Figure 42, item BT) on tail assembly (AN).
10. Install gearmotor mounting package. See accessory instructions.

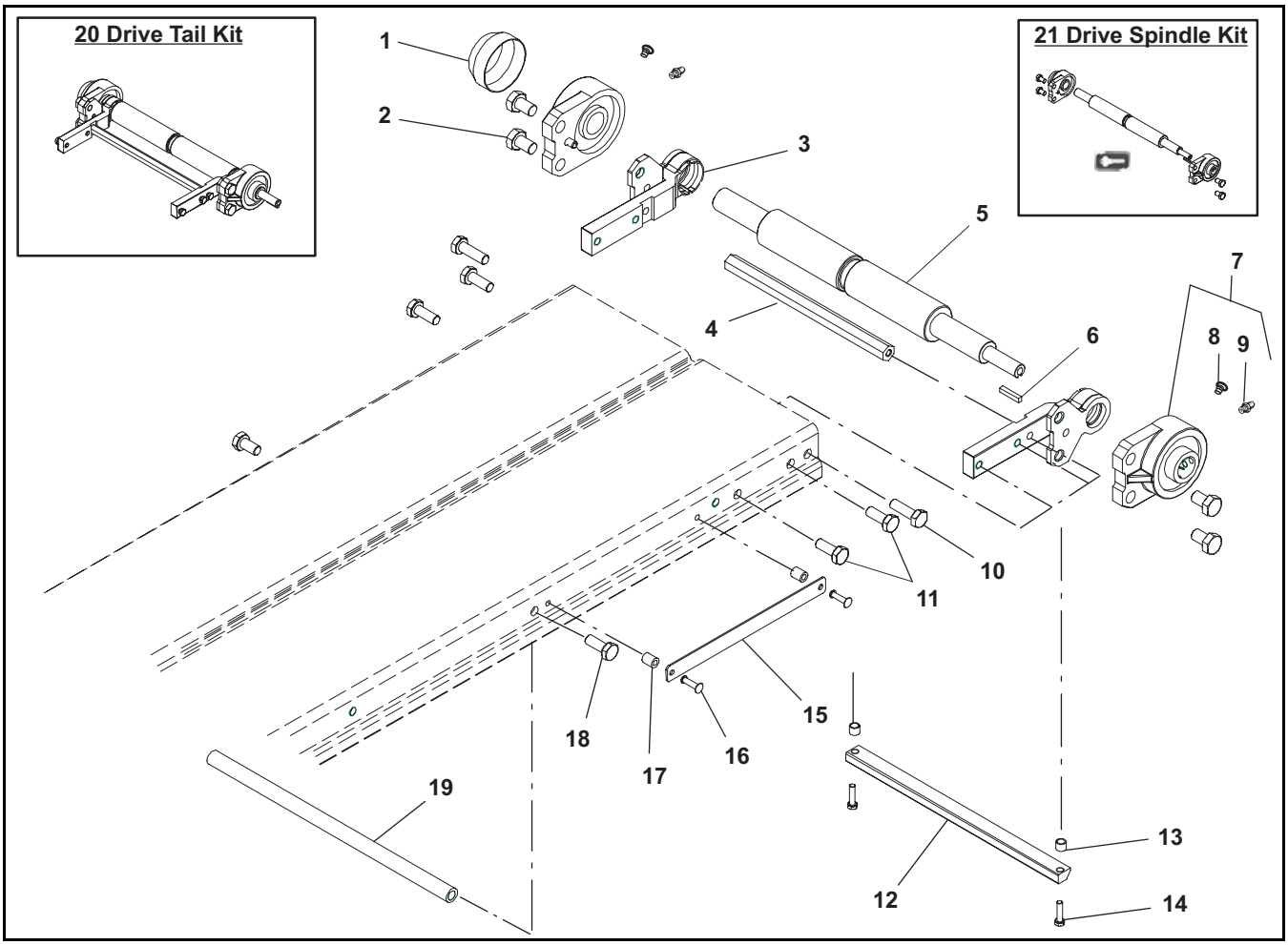
NOTES

Service Parts

NOTE

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

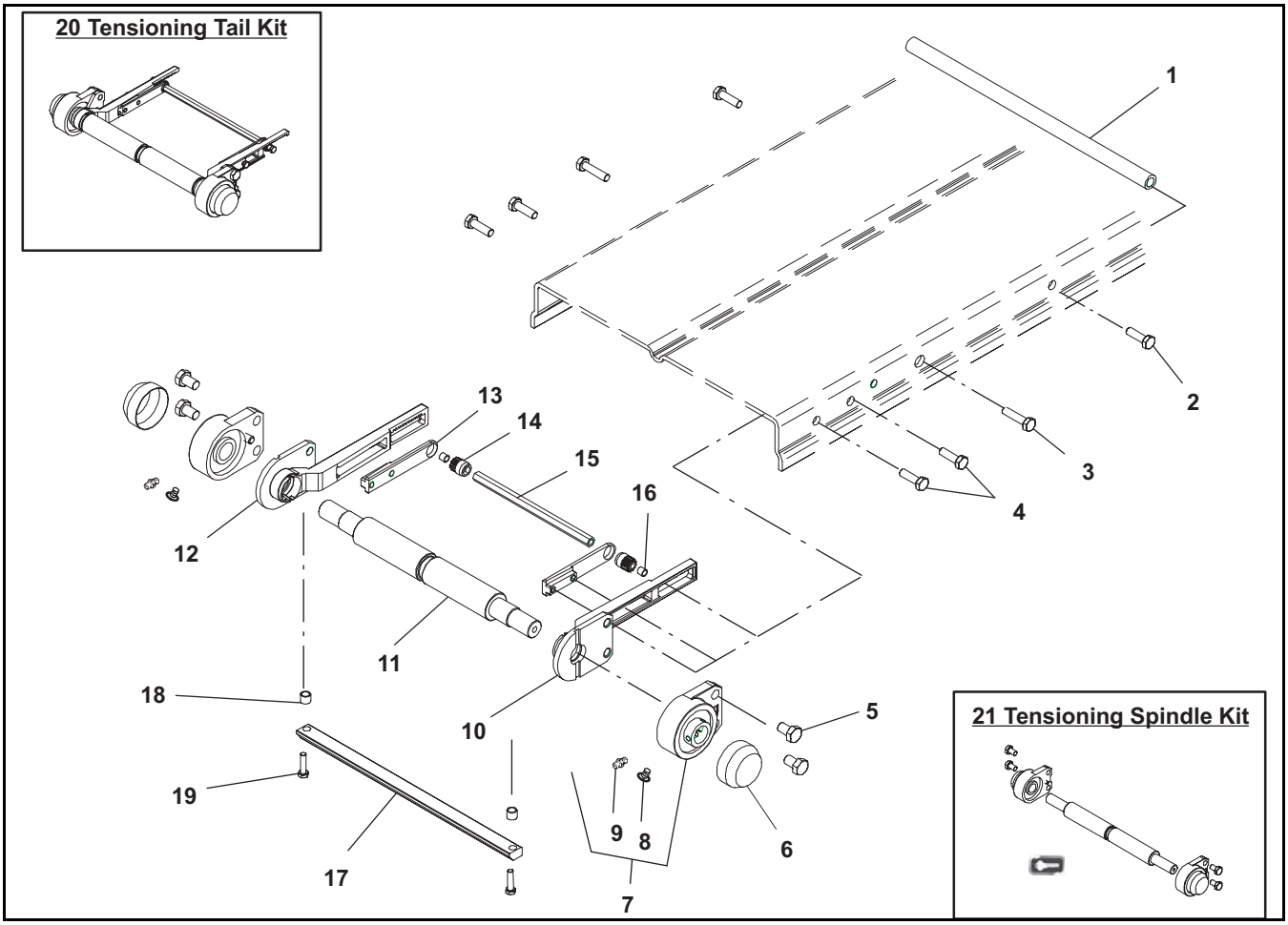
Drive End Components



Item	Part Number	Description
1	802–133	Bearing Cover
2	961016MSS	Hex Head Cap Screw M10–1.5x16mm
3	456055	Head Plate, Fixed, Welded
4	4588WW	Cross Support Post
5	4575WW	Drive Spindle, SS
6	980422MSS	Square Key 4mm x 22mm
7	456080	Flange Bearing Assembly (Includes Items 8 and 9)
8	807–1336	Plastic Plug
9	810–187	Grease Fitting, SS 1/4–28
10	960620MSS	Hex Head Cap Screw M6–1.0x20mm
11	960616MSS	Hex Head Cap Screw M6–1.0x16mm
12	4557WW	Washdown Wiper Option
13	456049	Sleeve
14	960520MSS	Hex Head Cap Screw M5–0.80 x 20mm

Item	Part Number	Description
15	456034	Name Tag
16	914–008	Rivet
17	807–1301	Spacer
18	960612MSS	Hex Head Cap Screw M6–1.0x12mm
19	4525WWMSS	Frame Support Post
20	73DT–WW	Drive Tail Kit w/o Wiper (Includes Items 1 through 11)
	73DTWA–WW	Drive Tail Kit w/Wiper – Shaft Position A or B (Includes Items 1 through 14)
	73DTWD–WW	Drive Tail Kit w/Wiper – Shaft Position C or D (Includes Items 1 through 14)
21	73DS–WW	Drive Spindle Kit (Includes Items 1, 2, and 5 through 9)
WW = Conveyor width ref.: 02, 03, 04, 05, 06, 08, 10, 12, 18		

Tension End Components

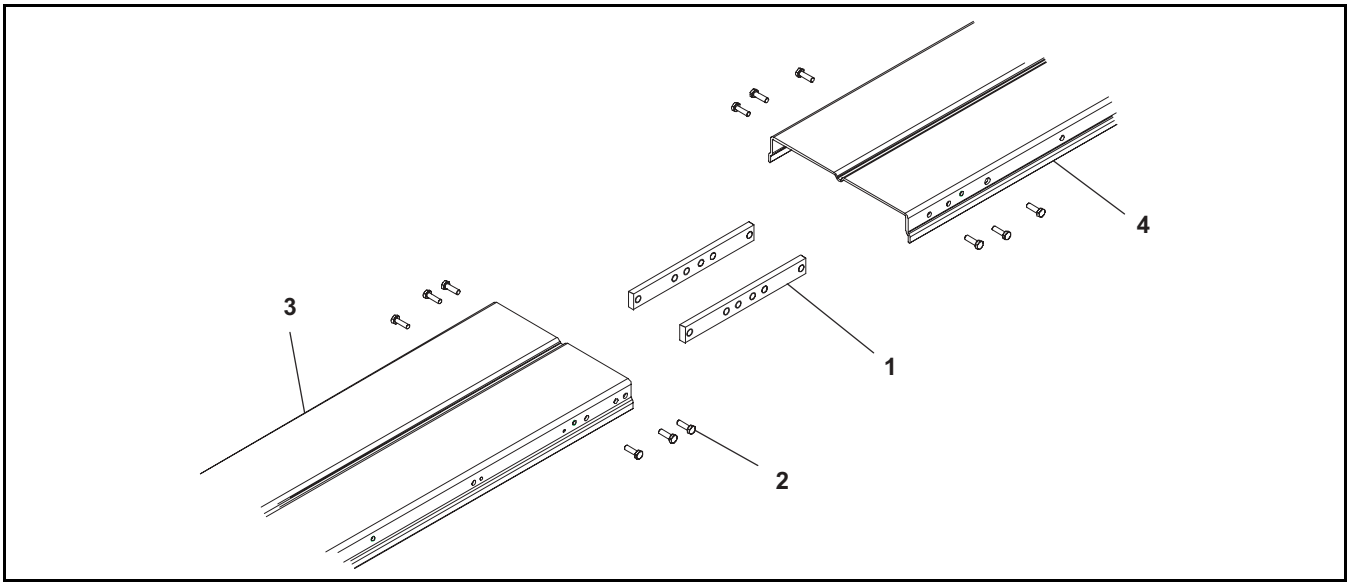


Item	Part Number	Description
1	4525WWSS	Frame Support Post
2	960612MSS	Hex Head Cap Screw M6–1.0x12mm
3	960625MSS	Hex Head Cap Screw M6–1.0x25mm
4	960620MSS	Hex Head Cap Screw M6–1.0x20mm
5	961016MSS	Hex Head Cap Screw M10–1.5 x 16mm
6	802–133	Bearing Cover
7	456080	Flange Bearing Assembly (Includes Items 8 and 9)
8	807–1336	Plastic Plug
9	810–187	Grease Fitting, SS 1/4–28
10	456057	Head Plate Tension RH
11	4576WW	Idler Spindle SS
12	456058	Head Plate Tension LH
13	456041	Wedge-Lok® Clamp Block

Item	Part Number	Description
14	456045	Pinion End
15	4563WW	Hex Pinion
16	456049	Sleeve .312 OD x .035 Wall
17	4557WW	Washdown Wiper Option
18	456049	Sleeve
19	960520MSS	Hex Head Cap Screw M5–0.80 x 20mm
20	73TT–WW	Tension Tail Kit w/o Wiper (Includes Items 3 through 16)
	73TTW–WW	Tension Tail Kit w/Wiper (Includes Items 3 through 19)
21	73TS–WW	Tension Spindle Kit (Includes Items 5, 6, 7, 8, 9, and 11)
WW = Conveyor width ref.: 02, 03, 04, 05, 06, 08, 10, 12, 18		

Service Parts

Conveyor Frame and Extension



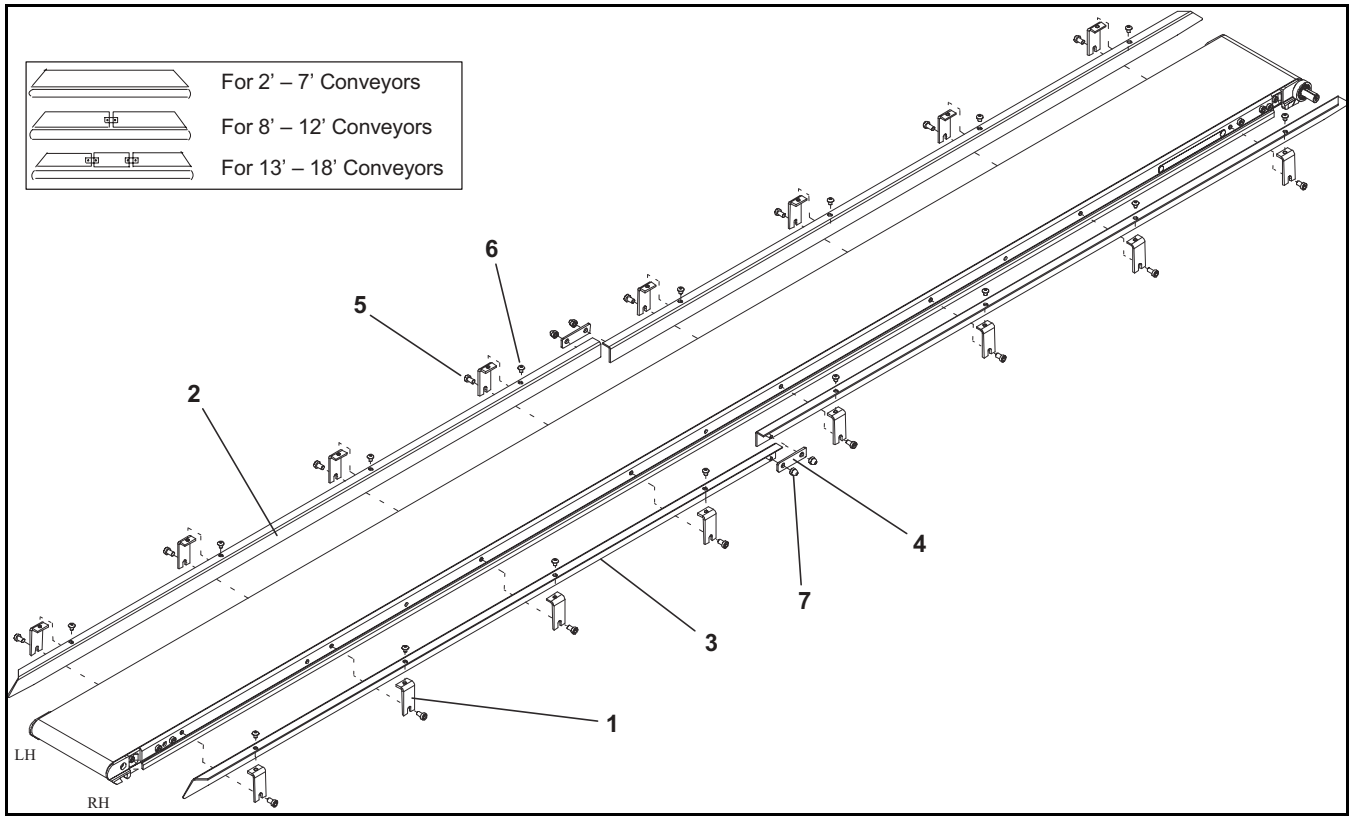
Item	Part Number	Description
1	456046	Frame Connecting Bar
2	960610MSS	Hex Head Cap Screw M6–1.0x10mm

Item	Part Number	Description
3	See Conveyor Frame chart	Conveyor Frame
4	See Conveyor Frame chart	Conveyor Frame Extension

Items 3 and 4: Conveyor Frame		
Length	**Frame Part Number**	**Frame Extension Part Number**
2’ (610mm)	4730WW–01860	n/a
3’ (914mm)	4730WW–03060	n/a
4’ (1219mm)	4730WW–04260	n/a
5’ (1524mm)	4730WW–05460	n/a
6’ (1829mm)	4730WW–06660	n/a
7’ (2134mm)	4730WW–07860	n/a
8’ (2438mm)	4730WW–09060	n/a
9’ (2743mm)	4730WW–10260	n/a

Items 3 and 4: Conveyor Frame		
Length	**Frame Part Number**	**Frame Extension Part Number**
10’ (3048mm)	4730WW–11460	n/a
11’ (3353mm)	4730WW–12660	n/a
12’ (3658mm)	4730WW–13860	n/a
13’ (3962mm)	4730WW–07860	4750WW
14’ (4267mm)	4730WW–09060	4750WW
15’ (4572mm)	4730WW–10260	4750WW
16’ (4877mm)	4730WW–11460	4750WW
17’ (5182mm)	4730WW–12660	4750WW
18’ (5486mm)	4730WW–13860	4750WW
WW = Conveyor width ref.: 02, 03, 04, 05, 06, 08, 10, 12, 18		

–21 1” (25mm) Sanitary Bolt–On High Sides



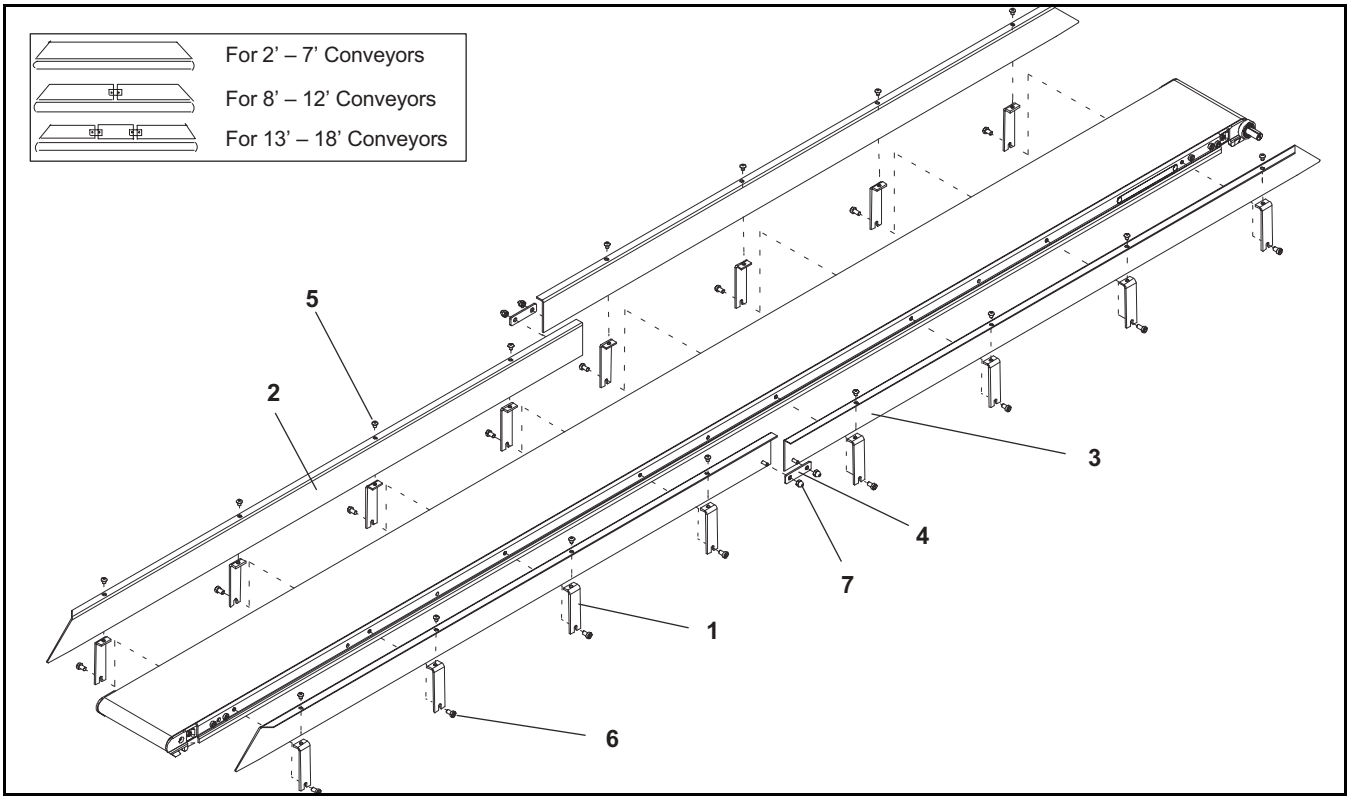
Item	Part Number	Description
1	462150MSS	1” Guide Mounting Bracket Guide
2	See chart below	1” Guide LH
3	See chart below	1” Guide RH
4	450188SS	Tie Plate
5	960608MSS	M6–1.0 x 8mm Hex Head Screw
6	960506MSS	M5–0.8 x 6mm Hex Head Screw
7	990508MSS	M5 Acorn Nut

Conveyor Length		Tail End Guide	Center Guide	Drive End Guide
2’ (610mm)	Right Hand	462132SSP	N/A	N/A
	Left Hand	462132SSP	N/A	N/A
3’ (914mm)	Right Hand	462133SSP	N/A	N/A
	Left Hand	462133SSP	N/A	N/A
4’ (1219mm)	Right Hand	462134SSP	N/A	N/A
	Left Hand	462134SSP	N/A	N/A
5’ (1524mm)	Right Hand	462135SSP	N/A	N/A
	Left Hand	462135SSP	N/A	N/A
6’ (1829mm)	Right Hand	462136SSP	N/A	N/A
	Left Hand	462136SSP	N/A	N/A
7’ (2134mm)	Right Hand	462137SSP	N/A	N/A
	Left Hand	462137SSP	N/A	N/A
8’ (2438mm)	Right Hand	462154SSP	N/A	462144SSP
	Left Hand	462144SSP	N/A	462154SSP
9’ (2743mm)	Right Hand	462155SSP	N/A	462144SSP
	Left Hand	462145SSP	N/A	462154SSP

Conveyor Length		Tail End Guide	Center Guide	Drive End Guide
10’ (3048mm)	Right Hand	462155SSP	N/A	462145SSP
	Left Hand	462145SSP	N/A	462155SSP
11’ (3353mm)	Right Hand	462156SSP	N/A	462145SSP
	Left Hand	462146SSP	N/A	462155SSP
12’ (3658mm)	Right Hand	462156SSP	N/A	462146SSP
	Left Hand	462146SSP	N/A	462156SSP
13’ (3962mm)	Right Hand	462156SSP	462163SSP	462144SSP
	Left Hand	462146SSP	462163SSP	462154SSP
14’ (4267mm)	Right Hand	462156SSP	462163SSP	462145SSP
	Left Hand	462146SSP	462163SSP	462155SSP
15’ (4572mm)	Right Hand	462156SSP	462163SSP	462146SSP
	Left Hand	462146SSP	462163SSP	462156SSP
16’ (4877mm)	Right Hand	462156SSP	462166SSP	462144SSP
	Left Hand	462146SSP	462166SSP	462154SSP
17’ (5182mm)	Right Hand	462156SSP	462166SSP	462145SSP
	Left Hand	462146SSP	462166SSP	462155SSP
18’ (5486mm)	Right Hand	462156SSP	462166SSP	462146SSP
	Left Hand	462146SSP	462166SSP	462156SSP

Service Parts

–22 2” (51mm) Sanitary Bolt – On High Sides

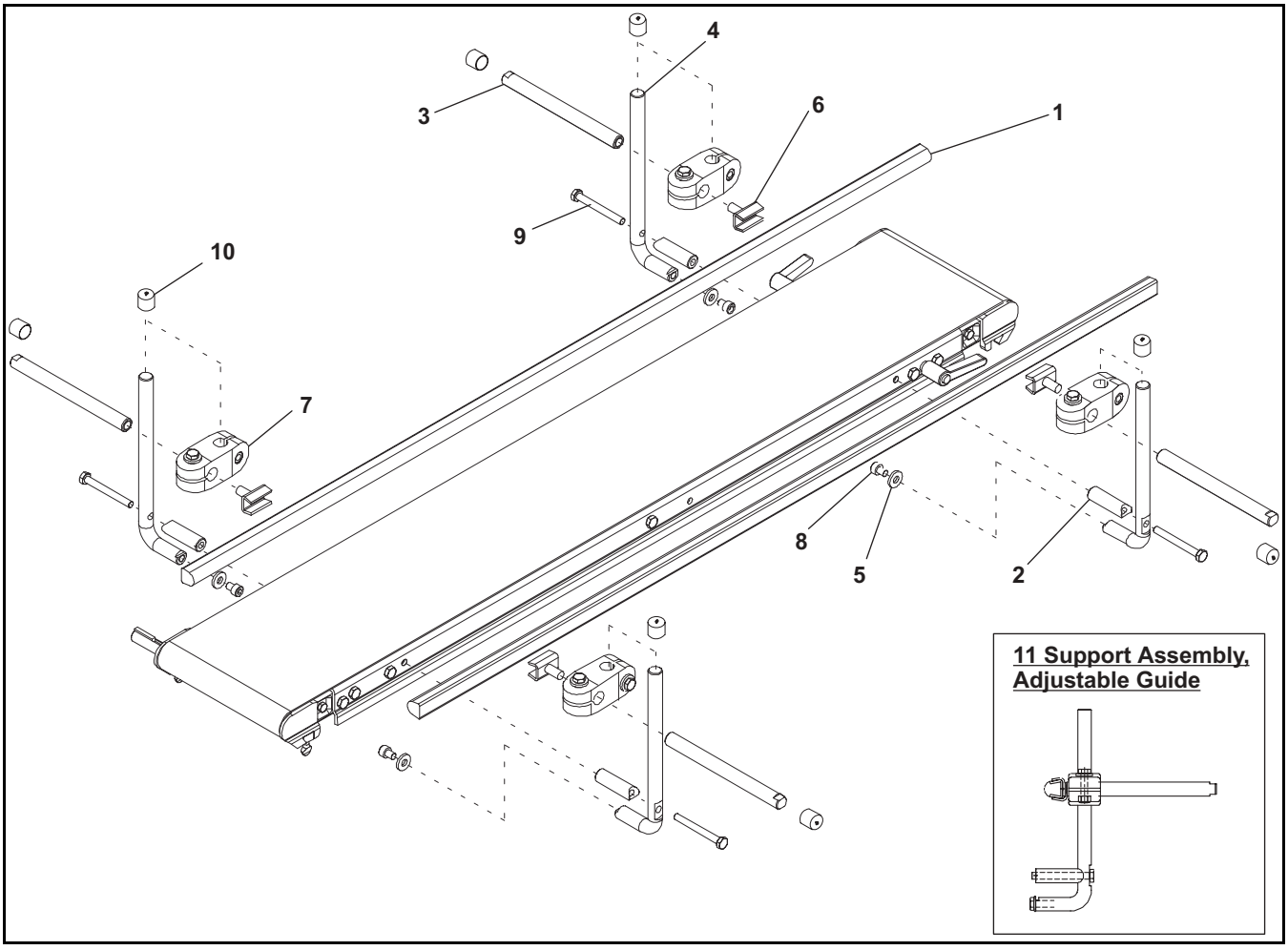


Item	Part Number	Description
1	462250MSS	2” Guide Mounting Bracket Guide
2	See chart below	2” Guide LH
3	See chart below	2” Guide RH
4	450188SS	Guide Tie Plate
5	960608MSS	M6–1.0 x 10mm Hex Head Screw
6	960506MSS	M5–0.8 x 6mm Hex Head Screw
7	990508MSS	M5 Acorn Nut

Conveyor Length		End Guide	Center Guide	End Guide
2’ (610mm)	Right Hand	462232SSP	N/A	N/A
	Left Hand	462232SSP	N/A	N/A
3’ (914mm)	Right Hand	462233SSP	N/A	N/A
	Left Hand	462233SSP	N/A	N/A
4’ (1219mm)	Right Hand	462234SSP	N/A	N/A
	Left Hand	462234SSP	N/A	N/A
5’ (1524mm)	Right Hand	462235SSP	N/A	N/A
	Left Hand	462235SSP	N/A	N/A
6’ (1829mm)	Right Hand	462236SSP	N/A	N/A
	Left Hand	462236SSP	N/A	N/A
7’ (2134mm)	Right Hand	462237SSP	N/A	N/A
	Left Hand	462237SSP	N/A	N/A
8’ (2438mm)	Right Hand	462254SSP	N/A	462244SSP
	Left Hand	462244SSP	N/A	462254SSP
9’ (2743mm)	Right Hand	462255SSP	N/A	462244SSP
	Left Hand	462245SSP	N/A	462254SSP
10’ (3048mm)	Right Hand	462255SSP	N/A	462245SSP
	Left Hand	462245SSP	N/A	462255SSP

Conveyor Length		End Guide	Center Guide	End Guide
11’ (3353mm)	Right Hand	462256SSP	N/A	462245SSP
	Left Hand	462246SSP	N/A	462255SSP
12’ (3658mm)	Right Hand	462256SSP	N/A	462246SSP
	Left Hand	462246SSP	N/A	462256SSP
13’ (3962mm)	Right Hand	462256SSP	462263SSP	462244SSP
	Left Hand	462246SSP	462263SSP	462254SSP
14’ (4267mm)	Right Hand	462256SSP	462263SSP	462245SSP
	Left Hand	462246SSP	462263SSP	462255SSP
15’ (4572mm)	Right Hand	462256SSP	462263SSP	462246SSP
	Left Hand	462246SSP	462263SSP	462256SSP
16’ (4877mm)	Right Hand	462256SSP	462266SSP	462244SSP
	Left Hand	462246SSP	462266SSP	462254SSP
17’ (5182mm)	Right Hand	462256SSP	462266SSP	462245SSP
	Left Hand	462246SSP	462266SSP	462255SSP
18’ (5486mm)	Right Hand	462256SSP	462266SSP	462246SSP
	Left Hand	462246SSP	462266SSP	462256SSP

–23 Sanitary Fully Adjustable UHMW Guide

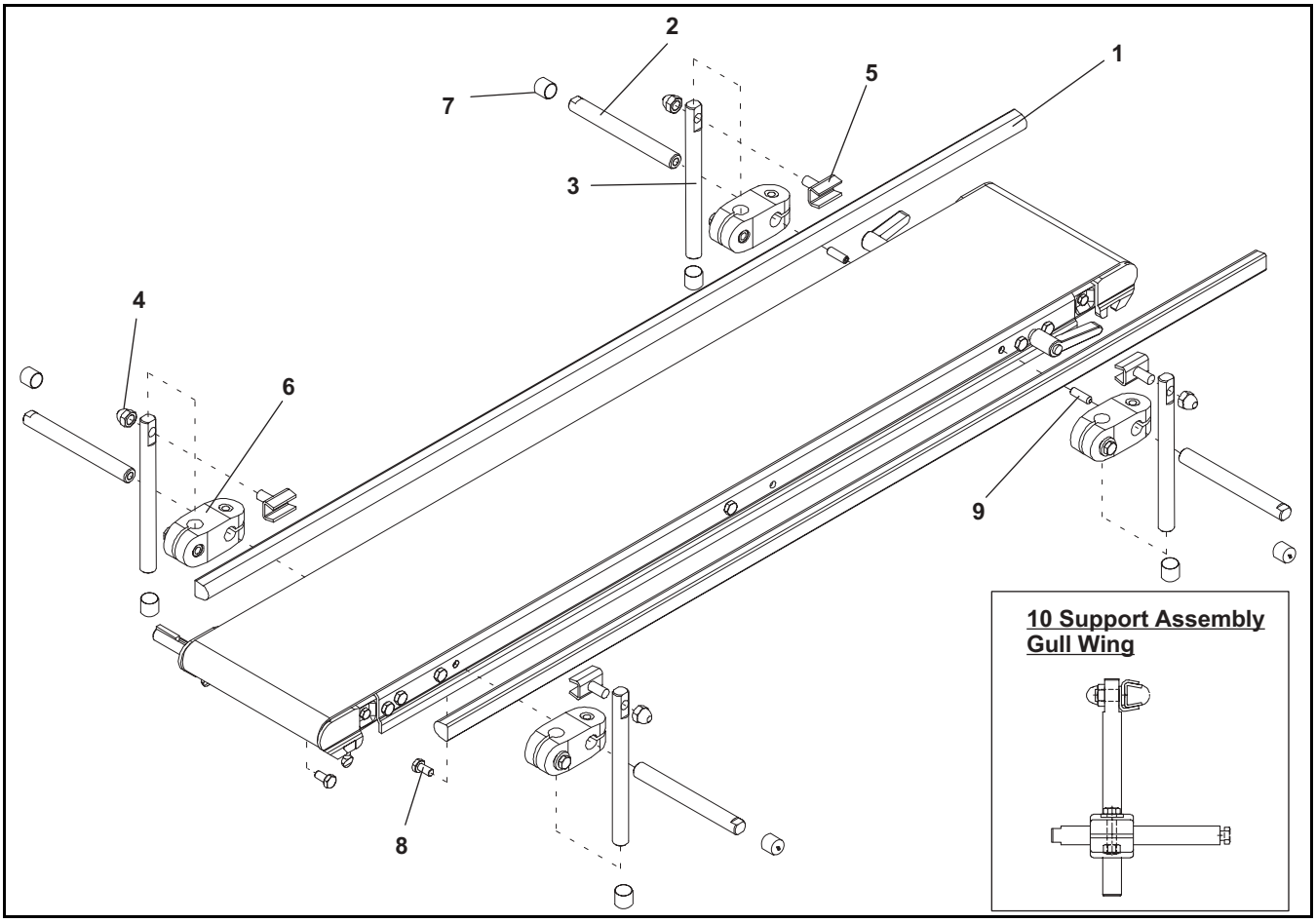


Item	Part Number(s)	Description
1	462332	Guide Mounting Rail 2’ (610mm)
	462333	Guide Mounting Rail 3’ (914mm)
	462334	Guide Mounting Rail 4’ (1219mm)
	462335	Guide Mounting Rail 5’ (1524mm)
	462336	Guide Mounting Rail 6’ (1829mm)
	462337	Guide Mounting Rail 7’ (2134mm)
	462338	Guide Mounting Rail 8’ (2438mm)
	462339	Guide Mounting Rail 9’ (2743mm)
	462340	Guide Mounting Rail 10’ (3053mm)
	462341	Guide Mounting Rail 11’ (3353mm)
	462342	Guide Mounting Rail 12’ (3658mm)
	462337 462336	Guide Mounting Rail 13’ (3962mm)
	462337 462337	Guide Mounting Rail 14’ (4267mm)
	462338 462337	Guide Mounting Rail 15’ (4572mm)
	462338 462338	Guide Mounting Rail 16’ (4877mm)
	462339 462338	Guide Mounting Rail 17’ (5182mm)
	462339 462339	Guide Mounting Rail 18’ (5486mm)

Item	Part Number(s)	Description
2	462351MSS	Shaft Brace
3	462352SS	Horizontal Shaft Mounting Guide
4	462350MSS	Vertical Shaft Adjustable Guide
5	911–201	Flat Washer
6	807–978	Guide Clamp
7	450187MSS	Cross Block
8	960608MSS	Hex Head Screw (Metric) M6–1.0 x 8mm
9	960650MSS	Hex Head Screw (Metric) M6–1.0 x 50mm
10	807–948	Cap, Vinyl
11	462300MSS	Support Assembly, Adjustable Guide (Includes Items: 2 through 10)

Service Parts

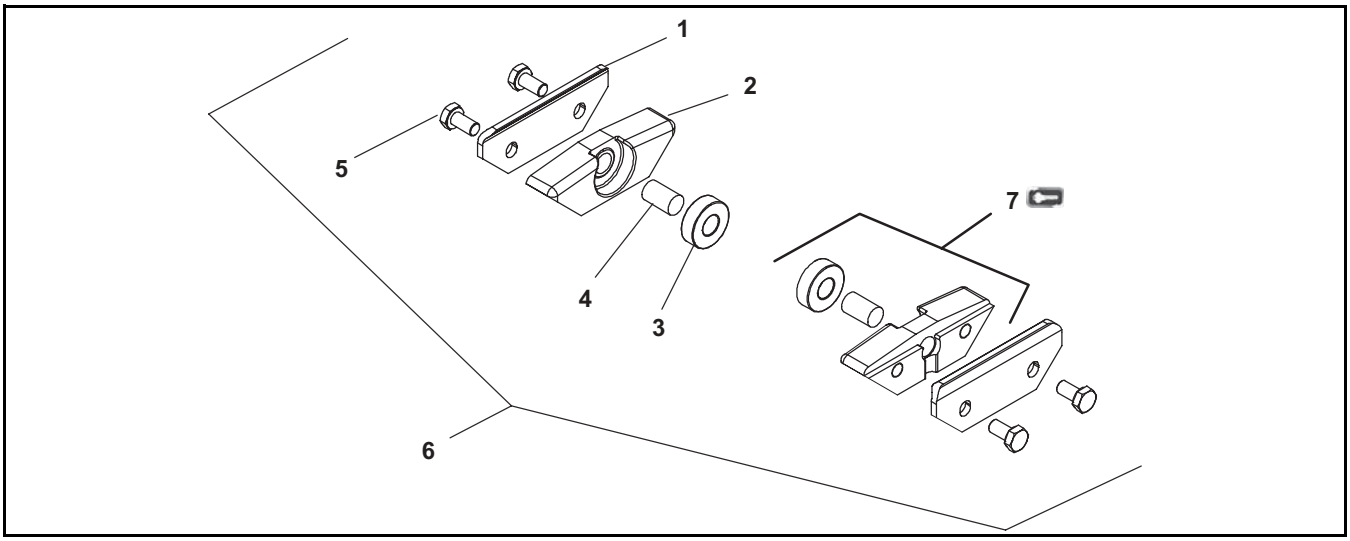
–24 Sanitary Adjustable Width UHMW Guides



Item	Part Number(s)	Description
1	462332	Guide Mounting Rail 2’ (610mm)
	462333	Guide Mounting Rail 3’ (914mm)
	462334	Guide Mounting Rail 4’ (1219mm)
	462335	Guide Mounting Rail 5’ (1524mm)
	462336	Guide Mounting Rail 6’ (1829mm)
	462337	Guide Mounting Rail 7’ (2134mm)
	462338	Guide Mounting Rail 8’ (2438mm)
	462339	Guide Mounting Rail 9’ (2743mm)
	462340	Guide Mounting Rail 10’ (3053mm)
	462341	Guide Mounting Rail 11’ (3353mm)
	462342	Guide Mounting Rail 12’ (3658mm)
	462337 462336	Guide Mounting Rail 13’ (3962mm)
	462337 462337	Guide Mounting Rail 14’ (4267mm)
	462338 462337	Guide Mounting Rail 15’ (4572mm)
	462338 462338	Guide Mounting Rail 16’ (4877mm)
	462339 462338	Guide Mounting Rail 17’ (5182mm)
	462339 462339	Guide Mounting Rail 18’ (5486mm)

Item	Part Number(s)	Description
2	462452MSS	Horizontal Shaft Gullwing Guide
3	462450MSS	Vertical Shaft Gullwing Guide
4	807–977	Acorn Nut
5	807–978	Guide Clamp
6	450187MSS	Cross Block
7	807–948	Cap, Vinyl
8	960612MSS	Hex Head Cap Screw M6–1.0 x 12mm
9	970620MSS	Socket Head Set Screw M6–1.0 x 20mm
10	462400MSS	Support Assembly, Gull Wing (Includes Items: 2 through 7)

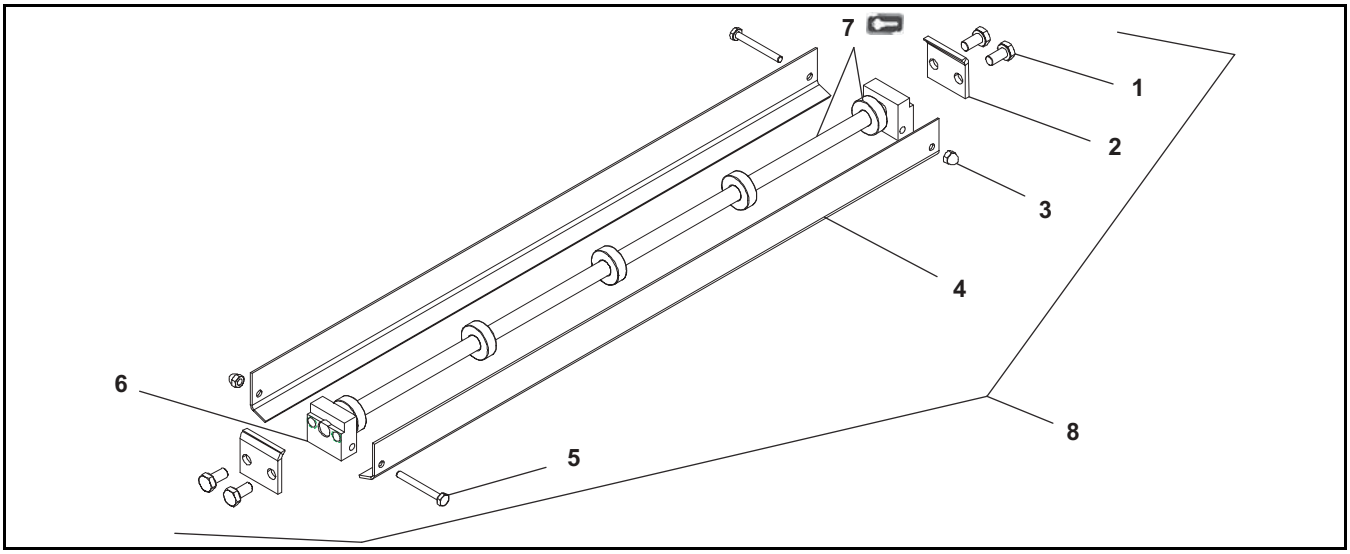
Sanitary 2” (51mm) Through 6” (152mm) Wide Flat and Cleated Belt Return Roller



Item	Part Number	Description
1	450593	Clamp Plate
2	450596	Mounting Block
3	802–123	Bearing
4	913–103	Dowel Pin

Item	Part Number	Description
5	960612MSS	Hex Head Screw M6–1.0 x 12mm
6	450594	Return Roller Assembly
7	450595	Roller Assembly (3 piece)

Sanitary 8” (203mm) Through 18” (457mm) Wide Flat Belt Return Roller

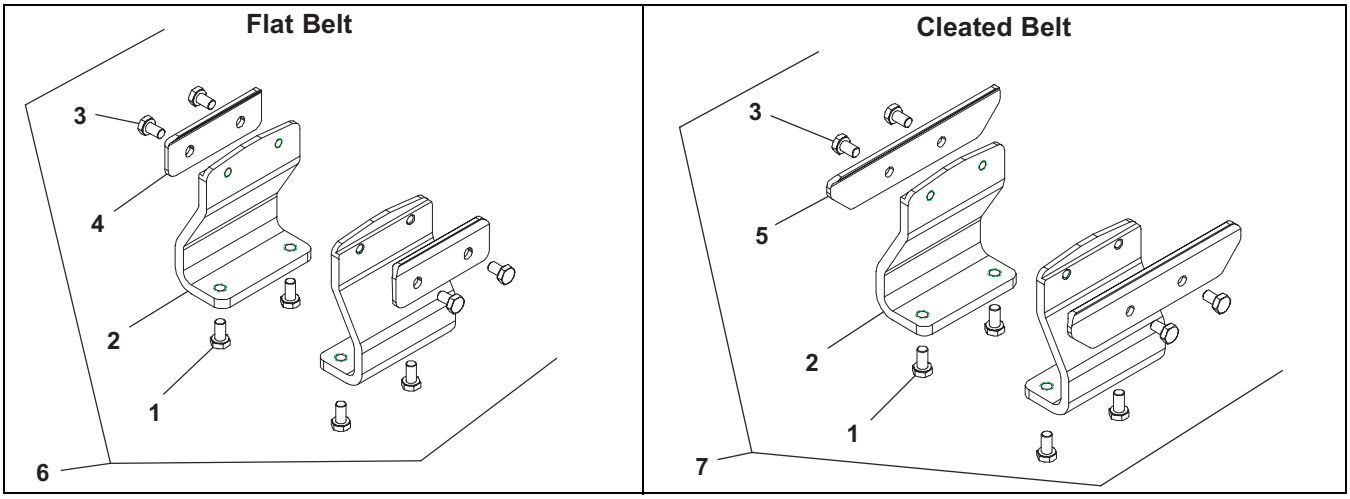


Item	Part Number	Description
1	960612MSS	Hex Head Cap Screw M6–1.0 x 12mm
2	450628	Clamp Plate
3	990408MSS	Acorn Nut M4–0.70
4	4516WW	Return Roller Guard
5	960435MSS	Hex Head Cap Screw M4–0.70 x 35mm

Item	Part Number	Description
6	450626	Mounting Block
7	4517WW	Shaft/Bearing Assembly
8	4514WW	Return Roller Assembly
WW = Conveyor width ref.: 08, 10, 12, 18		

Service Parts

Conveyor Mounting Brackets



Item	Part Number	Description
1	960612MSS	Hex Head Cap Screw M6–1.0 x 12mm
2	450590	Stand/Conveyor Ear Mount Bracket
3	960610MSS	Hex Head Cap Screw M6–1.0 x 10mm
4	492564SS	Clamp Plate – Flat Belt

Item	Part Number	Description
5	492566SS	Clamp Plate – Cleated Belt
6	450589	Mount Assembly – Flat Belt
7	450591	Mount Assembly – Cleated Belt

Configuring Conveyor Belt Part Number

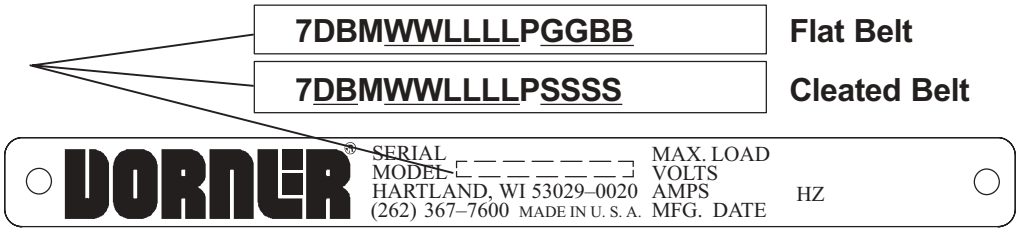
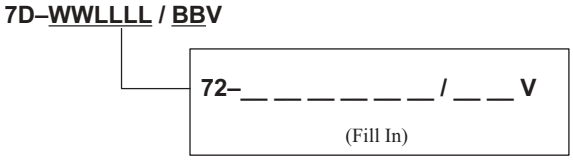


Figure 49

Flat Belt Conveyor

Refer to your serial and model number plate (Figure 49). From the model number, determine conveyor width (WW), length (LLLL), and belt type (BB). Use data to configure belt part number as indicated below.



EXAMPLE:

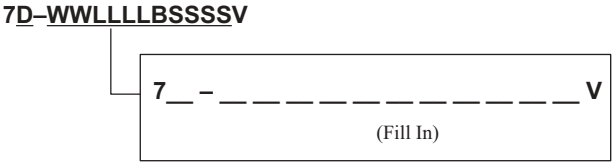
731M030200A0102 Conveyor

7300 Series end drive, flat belt conveyor with mounting brackets, USA English, 3” (76mm) wide x 2.0 ft (610mm) long, shaft position A, guide profile 01 and belt type /02 (general purpose, fused finger)

72–030200/02V Belt

Cleated Belt Conveyor

Refer to your serial and model number plate (Figure 49). From the model number, determine conveyor type (D), width (WW), length (LLLL), belt cleat type (B), and cleat spacing (SSSS). Use data to configure belt part number as indicated below.



EXAMPLE:

75AM030200A0659 Conveyor

7300 Series standard cleated belt conveyor with mounting brackets, A–style cleat, USA English, 3” (76mm) wide x 2.0 ft (610mm) long, shaft position A, and 6.59 in (167.4mm) cleat spacing

74–030200A0659V Belt

Return Policy

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

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

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

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

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

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

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

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

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