



2200 and 2300 Series Modular Belt Conveyors

Installation, Maintenance & Parts Manual



End Drive Conveyor



Center Drive Conveyor

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Introduction

IMPORTANT

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

Upon receipt of shipment:

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

Dorner’s Limited Warranty applies.

Dorner 2200 & 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.

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

Warnings – General Safety

⚠ WARNING

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

⚠ DANGER



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

⚠ DANGER



DO NOT OPERATE CONVEYORS IN AN EXPLOSIVE ENVIRONMENT.

⚠ WARNING



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

⚠ WARNING



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

⚠ WARNING

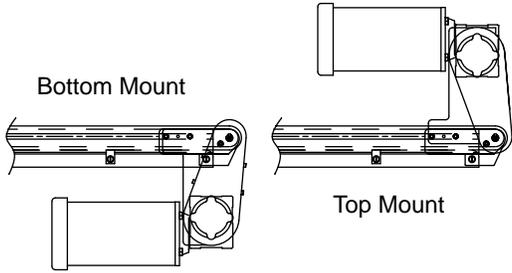


Conveyors are not reversible. Reversing creates pinch points which can cause severe injury.
DO NOT REVERSE CONVEYORS.

⚠ WARNING



Top and Bottom Mount Gearmotors must be mounted as shown below.
Failure to do so creates pinch points which can cause severe injury.



⚠ 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

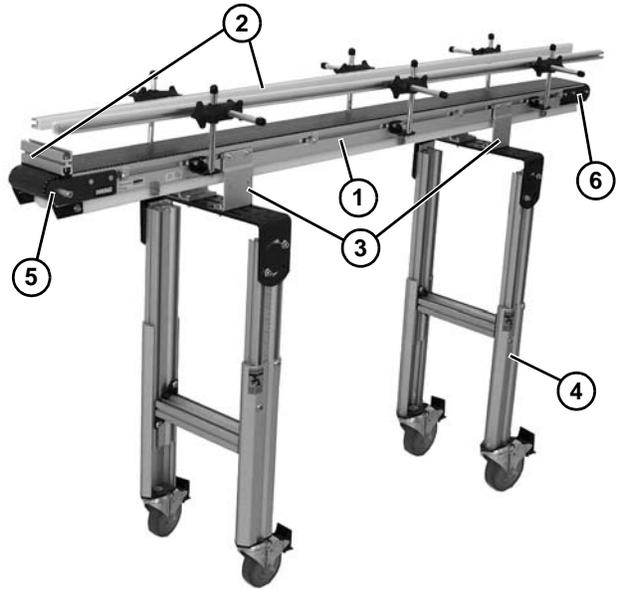


Loosening stand height or angle adjustment screws may cause conveyor sections to drop down, causing severe injury.
SUPPORT CONVEYOR SECTIONS PRIOR TO LOOSENING STAND HEIGHT OR ANGLE ADJUSTMENT SCREWS.

Product Description

Refer to Figure 1 for typical conveyor components.

1	Conveyor
2	Guiding & Accessories
3	Mounting Brackets
4	Support Stand
5	Drive End
6	Idler/Tension End
7	Center Drive Box (Center Drive Units)

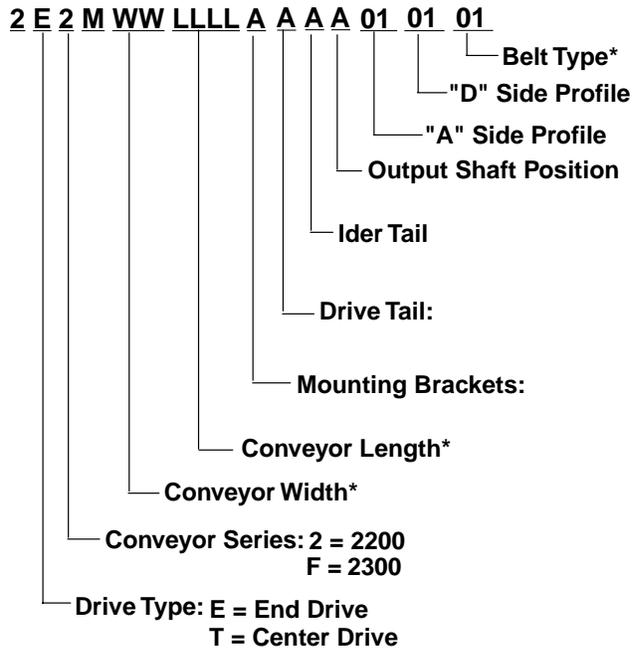


End Drive Conveyor
Figure 1



Center Drive Conveyor
Figure 2

Models:



* See Ordering and Specifications Catalog for details.

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

Conveyor Supports:

Maximum Distances:

1 = 18" (457 mm)**

2 = 6 ft (1829 mm)***

3 = 18" (457 mm)

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

*** For conveyors longer than 10 ft (3048 mm), install support at joint.

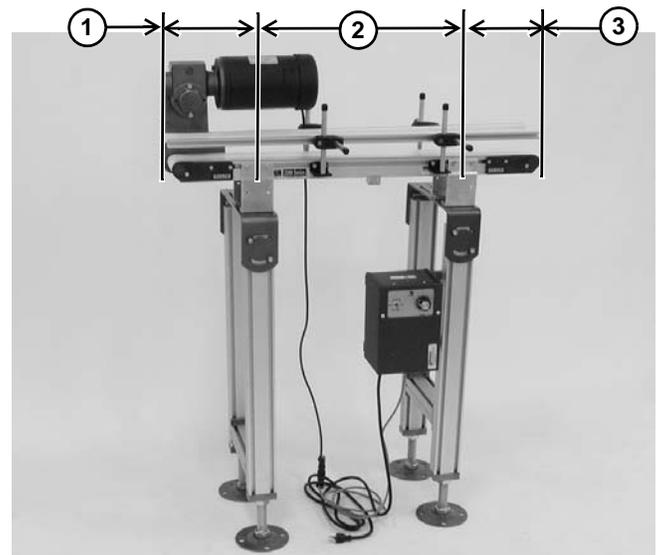


Figure 3

Specifications:

Conveyor Width Reference (WW)	04	08	12	24
Conveyor Belt Width	4.0" (102 mm)	8.0" (203 mm)	12.0" (305 mm)	24.0" (610 mm)
Conveyor Length Reference (LLLL)	0200 to 3000 in 0002 increments			
Conveyor Length	2 ft (610mm) to 30 ft (9144mm) in 0.24" (6mm) increments			
Belt Travel	3.54" (90 mm) per revolution of pulley			
Maximum Belt Speed*	250 ft/minute (76.2 m/minute)			

Specifications

Table 1: Center Drive 90° Gearmotor Specifications

	Standard Load Gearmotor			Heavy Load Gearmotor			
	Single-Phase	Three Phase	DC Variable Speed	Single-Phase	Three Phase	VFD Variable Speed	DC Variable Speed
Output Power	0.25 hp (0.19 kw)			0.5 hp (0.37 kw)			
Input Voltage	115VAC	208–230/460 VAC	130VDC	115VAC	208–230/460 VAC	230 VAC	90VDC
Input Frequency	60Hz		N/A	60Hz		10 – 60Hz	N/A
Input Current (Amperes)	5.0	1.2/0.6	2.2	7.4	2.1 – 2/1	1.6	5.0
Gearmotor Ratios	5:1, 10:1, 20:1, 40:1, 60:1			5:1, 10:1, 20:1, 40:1, 60:1			
Frame Size	NEMA 42CZ			NEMA 56C			
Motor Type	Totally enclosed, Fan cooled			Totally enclosed, Fan cooled			

Table 2: Center Drive Parallel Shaft Gearmotor Specifications

	Single Phase	Three Phase	DC Variable Speed
Output Power	0.17 hp (0.13 kw)		0.25 hp (0.19 kw)
Input Voltage	115 Volts A.C.	230 Volts A.C.	130 Volts D.C.
Input Frequency	60 Hz		N/A
Input Current	1.9 Amperes	1.2 Amperes	1.8 Amperes
Motor RPM	1725		2500
Gearmotor Ratios	5:1, 10:1, 20:1, 30:1, 60:1, 180:1		
Motor Type	Totally enclosed, Fan-cooled		Totally enclosed, Non-ventilated

Table 3: Belt Speeds for Standard & Heavy Load Fixed Speed 90° Gearmotors

Standard Load Gearmotors				Heavy Load Gearmotors				Belt Speed		Drive Pulley	Driven Pulley
Part Number	RPM	In-lb	N-m	Part Number	RPM	In-lb	N-m	Ft/min	M/min		
32M060EL4(vp)F(n)	29	226	25.5	32M060HS4(vp)F(n)	29	226	25.5	7	2	19	32
32M060EL4(vp)F(n)	29	226	25.5	32M060HS4(vp)F(n)	29	226	25.5	10	3	28	32
32M040EL4(vp)F(n)	43	237	26.8	32M040HS4(vp)F(n)	43	247	27.9	17	5	32	32
32M040EL4(vp)F(n)	43	237	26.8	32M040HS4(vp)F(n)	43	247	27.9	25	8	32	32
32M020EL4(vp)F(n)	86	142	16	32M020HS4(vp)F(n)	86	248	27.9	34	10	32	32
32M020EL4(vp)F(n)	86	142	16	32M020HS4(vp)F(n)	86	248	27.9	47	14	44	32
32M010EL4(vp)F(n)	173	78	8.8	32M010HS4(vp)F(n)	173	156	17.6	68	21	44	22
32M010EL4(vp)F(n)	173	78	8.8	32M010HS4(vp)F(n)	173	156	17.6	94	29	44	32
32M005EL4(vp)F(n)	345	41	4.6	32M005HS4(vp)F(n)	345	81	9.1	136	41	32	32
32M005EL4(vp)F(n)	345	41	4.6	32M005HS4(vp)F(n)	345	81	9.1	155	47	32	28
32M005EL4(vp)F(n)	345	41	4.6	32M005HS4(vp)F(n)	345	81	9.1	187	57	44	32
32M005EL4(vp)F(n)	345	41	4.6	32M005HS4(vp)F(n)	345	81	9.1	214	65	44	28
32M005EL4(vp)F(n)	435	41	4.6	32M005HS4(vp)F(n)	345	81	9.1	272	83	44	22

(vp) = voltage and phase

11 = 115 V, 1-phase

23 = 208 – 230/460 V, 3-phase

Specifications

Table 4: Belt Speeds for Standard & Heavy Load Variable Speed 90° DC Gearmotors

Standard Load Gearmotors				Heavy Load Gearmotors				Belt Speed		Drive Pulley	Driven Pulley
Part Number	RPM	In-lb	N-m	Part Number	RPM	In-lb	N-m	Ft/min	M/min		
32M060ELD3DEN	42	198	22.4	32M060HSD9DEN	42	198	22.4	1.2 – 10	0.4 – 3	19	32
32M060ELD3DEN	42	198	22.4	32M060HSD9DEN	42	198	22.4	2.0 – 17	0.6 – 5	32	32
32M040ELD3DEN	63	163	18.4	32M040HSD9DEN	63	215	24.3	3.0 – 25	0.9 – 8	32	32
32M020ELD3DEN	125	98	11.1	32M020HSD9DEN	125	196	22.1	5.9 – 49	1.8 – 15	32	32
32M010ELD3DEN	250	54	6.1	32M010HSD9DEN	250	108	12.2	11.8 – 99	3.6 – 30	32	32
32M010ELD3DEN	250	54	6.1	32M010HSD9DEN	250	108	12.2	18.6 – 155	5.7 – 47	44	28
32M005ELD3DEN	500	28	3.2	32M005HSD9DEN	500	56	6.3	20.7 – 172	6.3 – 53	28	32
32M005ELD3DEN	500	28	3.2	32M005HSD9DEN	500	56	6.3	27.0 – 225	8.2 – 69	32	28
32M005ELD3DEN	500	28	3.2	32M005HSD9DEN	500	56	6.3	32.5 – 271	9.9 – 83	44	32

Table 5: Belt Speeds for Heavy Load Variable Speed 90° VFD Gearmotors

Heavy Load Gearmotors				Belt Speed		Drive Pulley	Driven Pulley
Part Number	RPM	In-lb	N-m	Ft/min	M/min		
32M060ES423EN	29	226	25.5	0.8 – 7	0.2 – 2	19	32
32M060ES423EN	29	226	25.5	1.4 – 11	0.4 – 3	32	32
32M040ES423EN	43	247	27.9	2.0 – 17	0.6 – 5	32	32
32M020ES423EN	86	248	27.9	4.1 – 34	1.2 – 10	32	32
32M010ES423EN	173	156	17.6	8.2 – 68	2.5 – 21	32	32
32M010ES423EN	173	156	17.6	12.9 – 107	3.9 – 33	44	28
32M005ES423EN	345	81	9.1	14.3 – 119	4.4 – 36	28	32
32M005ES423EN	345	81	9.1	22.4 – 187	6.8 – 57	44	32
32M005ES423EN	345	81	9.1	28 – 233	8.5 – 71	48	28

Table 6: Belt Speeds for Standard Load Fixed Speed Parallel Shaft 60 Hz Gearmotors on MPD Series Conveyors

Gearmotors					Belt Speed		Drive Pulley	Driven Pulley
Part Number	Gear Ratio	RPM	In-lb	N-m	Ft/min	M/min		
62M180PS4(vp)F(n)	180:1	10	341	38.5	3	0.8	22	32
62M060PS4(vp)F(n)	60:1	29	270	30.5	7	2.1	19	32
62M180PS4(vp)F(n)	180:1	10	341	38.5	4	1.2	28	28
62M060PS4(vp)F(n)	60:1	29	270	30.5	8	2.4	22	32
62M060PS4(vp)F(n)	60:1	29	270	30.5	11	3.5	28	28
62M030PS4(vp)F(n)	30:1	58	135	15.3	22	7.0	28	28
62M020PS4(vp)F(n)	20:1	86	90	10.2	34	10.3	28	28

(vp) = voltage and phase

11 = 115V, 1-phase

23 = 230V, 3-phase

(n) = reversing capability

N = no reversing switch

R = with reversing switch (115V, 1 phase only)

Specifications

Table 7: Belt Speeds for Standard Load Variable Speed Parallel Shaft VFD Gearmotors on MPD Series Conveyors

Gearmotors					Belt Speed		Drive Pulley	Driven Pulley
Part Number	Gear Ratio	RPM*	In-lb*	N-m*	Ft/min	M/min		
62M060PS423EN	60:1	29	270	30.5	0.9 – 8	0.3 – 2.4	22	32
62M060PS423EN	60:1	29	270	30.5	1.4 – 11	0.4 – 3.5	28	28
62M020PS423EN	20:1	86	167	18.9	4.1 – 34	1.2 – 10.3	28	28
62M010PS423EN	10:1	173	115	13	8.2 – 68	2.5 – 20.8	28	28
62M010PS423EN	10:1	173	115	13	12.3 – 1025	3.7 – 31.2	48	32
62M005PS423EN	5:1	345	58	6.5	16.3 – 136	5.0 – 41.4	28	28

* At 60 Hz

Table 8: Belt Speeds for Standard Load Variable Speed Parallel Shaft DC Gearmotors on MPB Series Conveyors

Gearmotors					Belt Speed		Drive Pulley	Driven Pulley
Part Number	Gear Ratio	RPM	In-lb	N-m	Ft/min	M/min		
62M180PSD3DEN	180:1	14	341	38.5	0.7 – 6	0.2 – 1.7	28	28
62M060PSD3DEN	60:1	42	270	30.5	1.4 – 11	0.4 – 3.5	22	32
62M060PSD3DEN	60:1	42	270	30.5	2.0 – 17	0.6 – 5.0	28	28
62M060PSD3DEN	60:1	42	270	30.5	3.1 – 26	1.0 – 7.9	44	28
62M030PSD3DEN	30:1	83	135	15.3	3.9 – 33	1.2 – 10.0	28	28
62M020PSD3DEN	20:1	125	90	10.2	5.9 – 49	1.8 – 15.0	28	28
62M020PSD3DEN	20:1	125	90	10.2	8.9 – 74	2.7 – 22.5	48	32
62M010PSD3DEN	10:1	250	72	8.1	11.8 – 99	3.6 – 30.0	28	28
62M010PSD3DEN	10:1	250	72	8.1	17.7 – 148	5.4 – 45.0	48	32

* = Cleated and Sidewall Cleated belts operate at a maximum of 150 Ft/min (45.7 m/min)

NOTE

For belt speed other than those listed, contact factory for details.

No Load Torque

NOTE

1. The torque required to overcome the conveyor's initial startup inertia may temporarily exceed the average "no load" torque by a factor of 2 to 3 times.
2. Stated torques are average values based on Dorner standard belts running at 50' (15meters) per minute.

No Load Torque Data

Length(feet)	Width							
	4.0" (102 mm)		8.0" (203 mm)		12.0" (305 mm)		24.0" (610 mm)	
	in-lbs	N-m	in-lbs	N-m	in-lbs	N-m	in-lbs	N-m
2	5	0.6	6	0.6	6	0.7	7	0.8
3	5	0.6	6	0.7	7	0.8	8	1.0
4	6	0.6	6	0.7	7	0.8	10	1.1
5	6	0.7	6	0.7	8	0.9	11	1.2
6	6	0.7	7	0.7	8	0.9	12	1.3
7	6	0.7	7	0.8	9	1.0	13	1.5
8	6	0.7	7	0.8	9	1.1	14	1.6
9	6	0.7	7	0.8	10	1.1	15	1.7
10	7	0.7	8	0.9	11	1.2	16	1.9
11	7	0.8	8	0.9	11	1.3	18	2.0
12	7	0.8	8	0.9	12	1.3	19	2.1
13	7	0.8	8	0.9	12	1.4	20	2.3
14	7	0.8	9	1.0	13	1.4	21	2.4
15	7	0.8	9	1.0	13	1.5	22	2.5
16	8	0.9	9	1.0	14	1.6	23	2.6
17	8	0.9	9	1.1	14	1.6	25	2.8
18	8	0.9	10	1.1	15	1.7	26	2.9
19	8	0.9	10	1.1	16	1.8	27	3.0
20	8	0.9	10	1.2	16	1.8	28	3.2
21	8	0.9	10	1.2	17	1.9	29	3.3
22	9	1.0	11	1.2	17	1.9	30	3.4
23	9	1.0	11	1.2	18	2.0	31	3.6
24	9	1.0	11	1.3	18	2.1	33	3.7
25	9	1.0	11	1.3	19	2.1	34	3.8
26	9	1.0	12	1.3	19	2.2	35	3.9
27	9	1.1	12	1.4	20	2.3	36	4.1
28	9	1.1	12	1.4	21	2.3	37	4.2
29	10	1.1	13	1.4	21	2.4	38	4.3
30	10	1.1	13	1.4	22	2.5	39	4.5

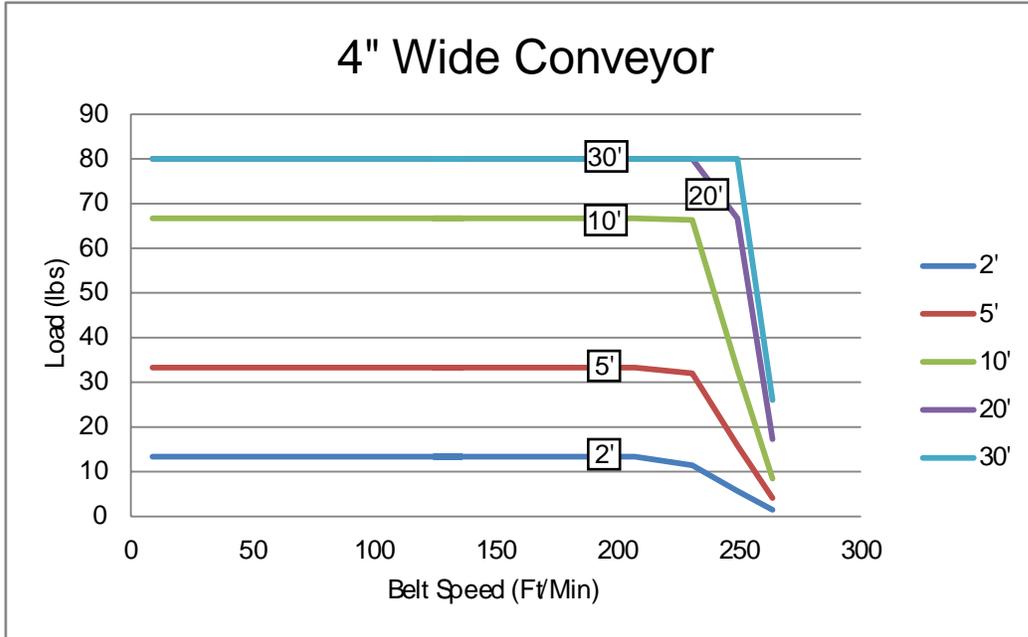
Specifications

Load vs. Speed vs Conveyor Length Per Width

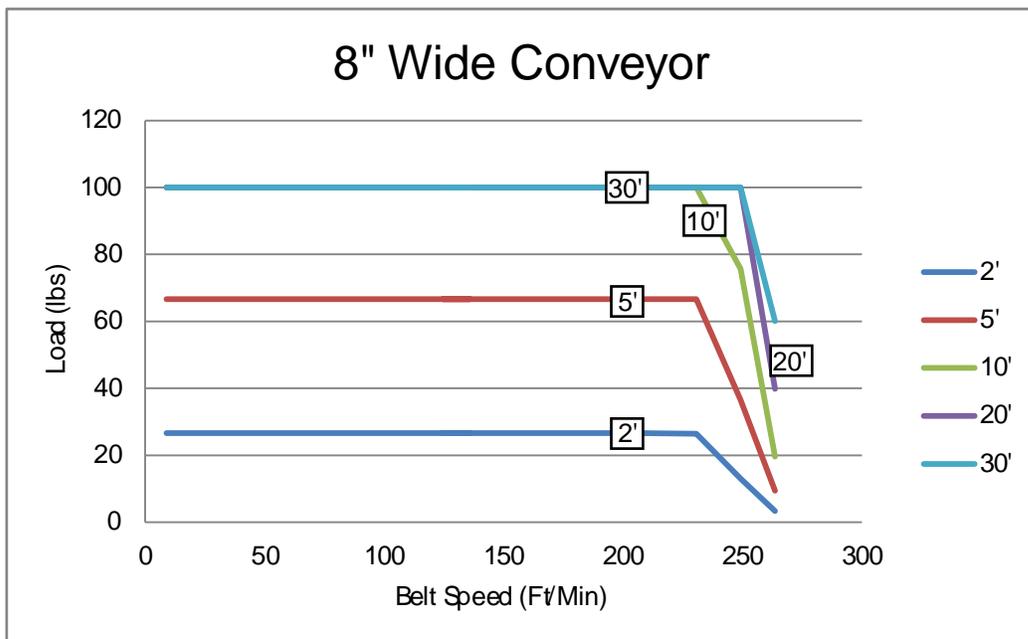
NOTE

- Maximum conveyor loads based on:
- Non-accumulating product
 - Product moving towards gearmotor
 - Conveyor being mounted horizontal

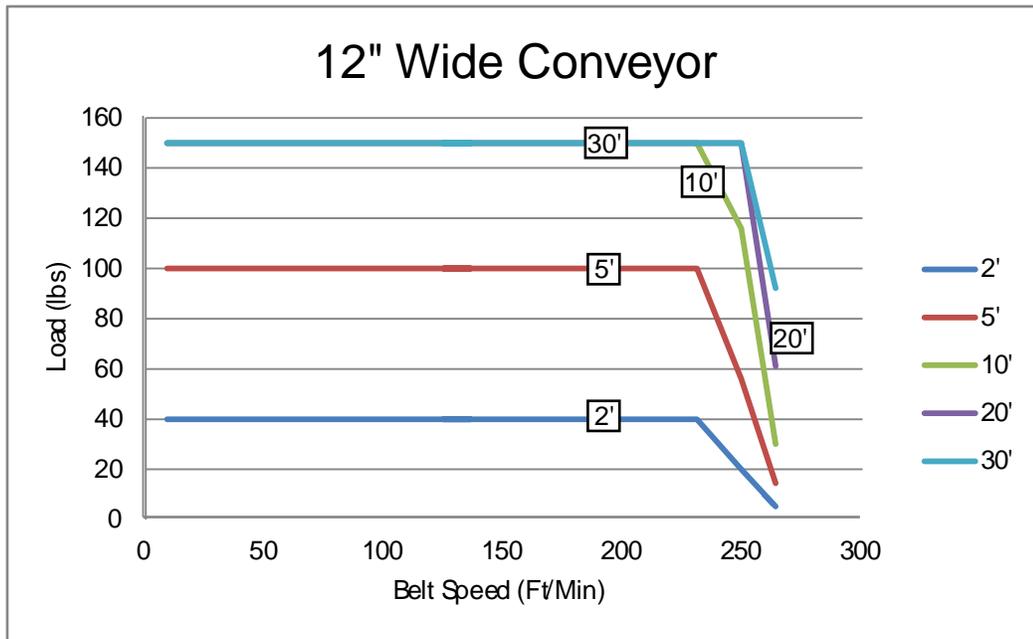
4" Wide Conveyor



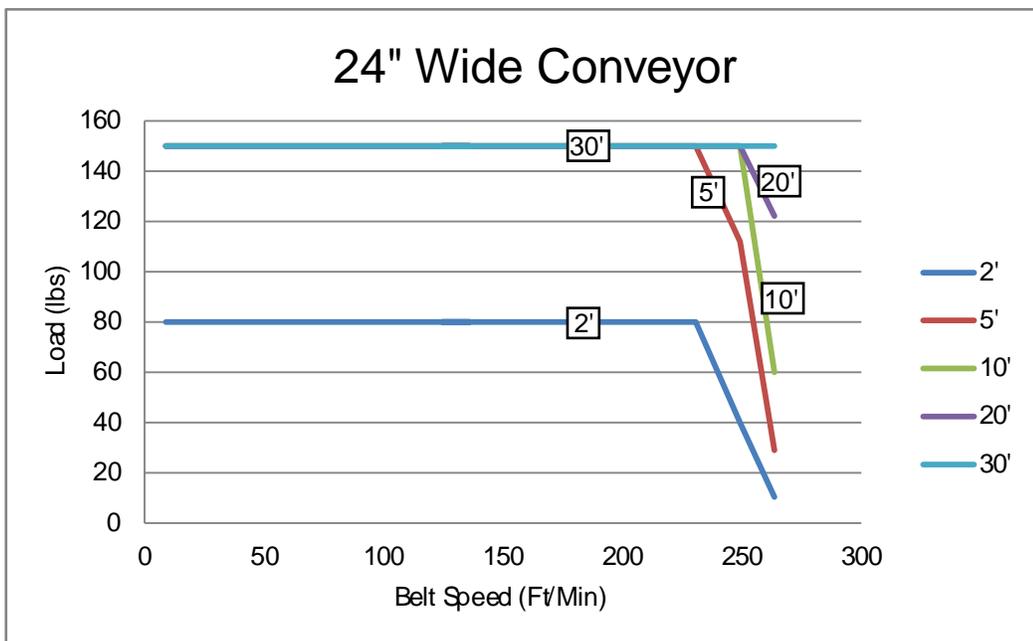
8" Wide Conveyor



12" Wide Conveyor



24" Wide Conveyor



Installation

⚠ WARNING



Conveyors are not reversible. Reversing creates pinch points which can cause severe injury.

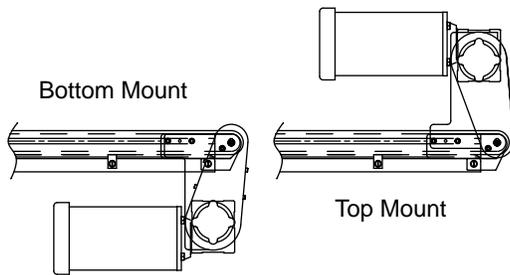
DO NOT REVERSE CONVEYORS.

⚠ WARNING



Top and Bottom Mount Gearmotors must be mounted as shown below.

Failure to do so creates pinch points which can cause severe injury.



NOTE

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

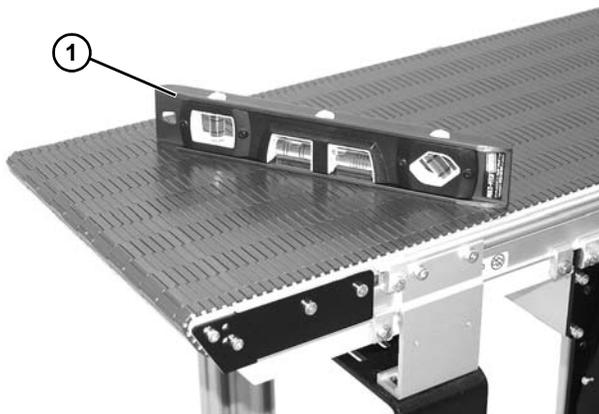


Figure 4

Required Tools

- Hex-key wrenches: 4 mm, 5 mm
- Level
- Torque wrench
- 3/32" (2.4 mm) wide Flat Blade screwdriver

Recommended Installation Sequence

- Install support stands (see accessory instructions)
- Assemble conveyor frame (if required) (page 12)
- Attach mounting brackets to conveyor frame and stands (page 13)
- Install Belt (page 15)
- Mount gearmotor mounting package (see accessory instructions)
- Attach guides/accessories (Refer to "Service Parts" on page 28 for details)

Conveyors Up to 10 ft (3048 mm)

No assembly is required. Install mounting brackets. Refer to "Mounting Brackets" on page 13.

Conveyors Longer Than 10 ft (3048 mm)

1. Locate conveyor sections (**Figure 5, item 1**).

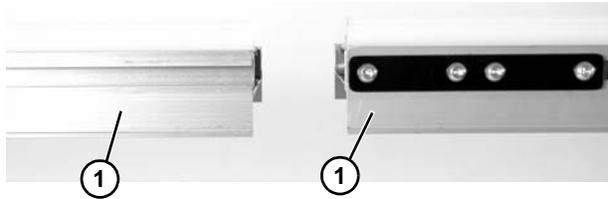


Figure 5

2. Join conveyor sections and install connector brackets (**Figure 6, item 1**) or connector/mount brackets (**Figure 6, item 2**) and screws (**Figure 6, item 3**) on both sides as indicated.

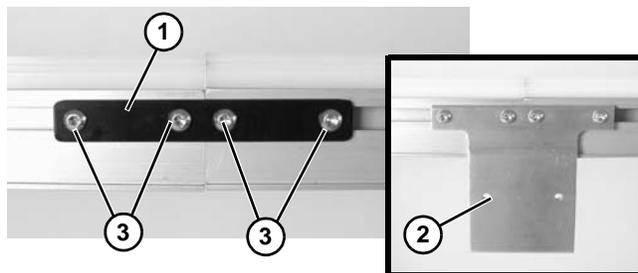


Figure 6

3. Tighten screw (**Figure 6, item 3**) to 60 in-lb (7 Nm) on both sides of conveyor.

2200 Series Mounting Brackets

1. Locate brackets. Exploded view shown in **Figure 7**.

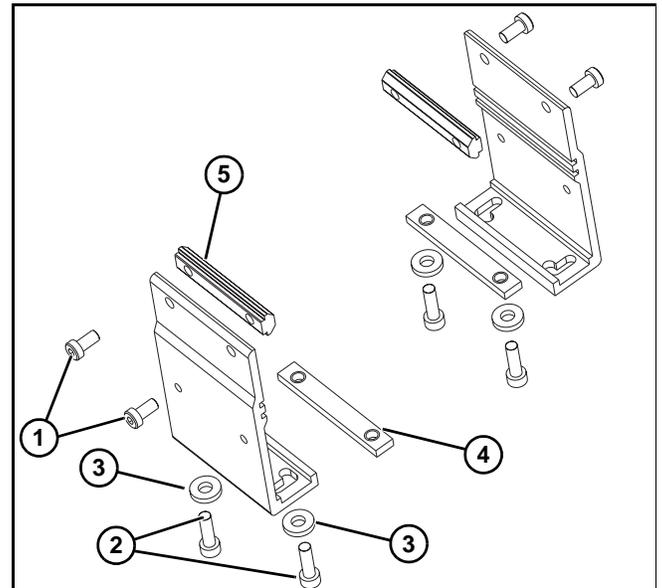


Figure 7

2. Remove screws (**Figure 7, item 1 & 2**), washers (**Figure 7, item 3**), connector bars (**Figure 7, item 4**) and T-bars (**Figure 7, item 5**) from brackets.
3. Insert T-bars (**Figure 7, item 5**) into conveyor side slots (**Figure 8, item 1**). Fasten brackets (**Figure 8, item 2**) to conveyor with mounting screws (**Figure 8, item 3**).

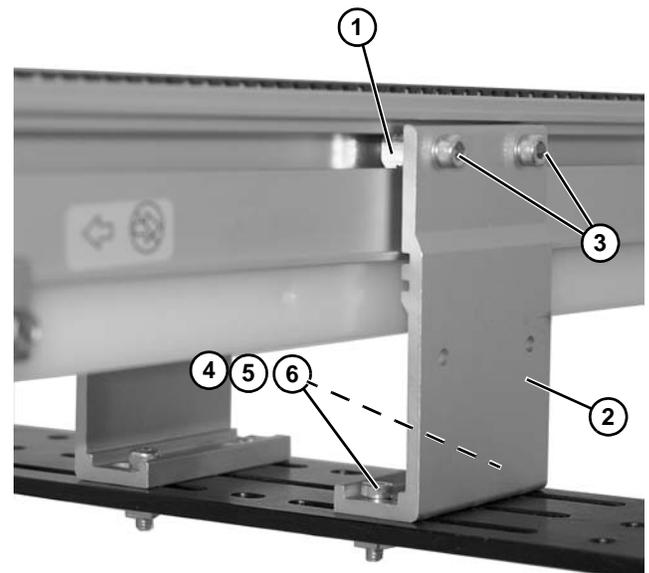


Figure 8

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

Installation

2300 Series Mounting Brackets

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

⚠ 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.**

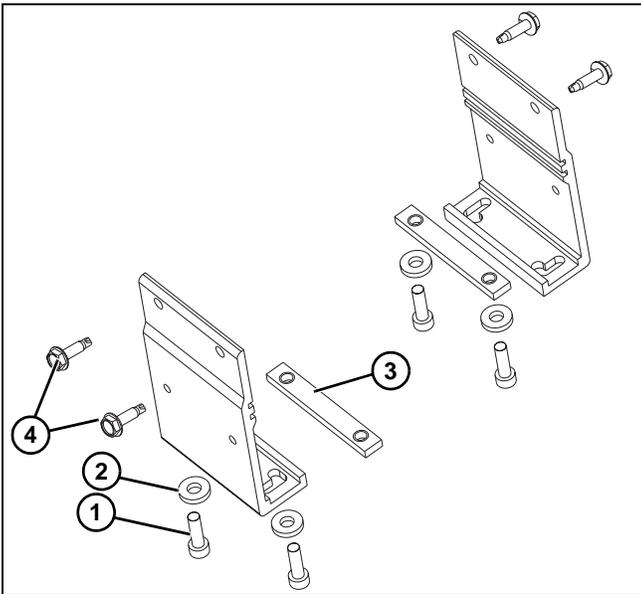


Figure 9

2. Remove screws (Figure 9, item 1), washers (Figure 9, item 2), and connector bar (Figure 9, item 3) from brackets.

IMPORTANT

For proper methods of attachment to conveyor side rail for 2300 series see page 16.

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.

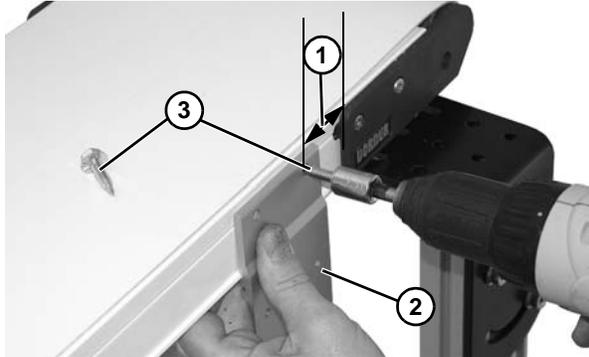


Figure 10

5. Fasten brackets (Figure 11, item 1) to support stand (Figure 11, item 2) with mounting screws (Figure 11, item 3), washers (Figure 11, item 4) and connector bar (Figure 11, item 5).

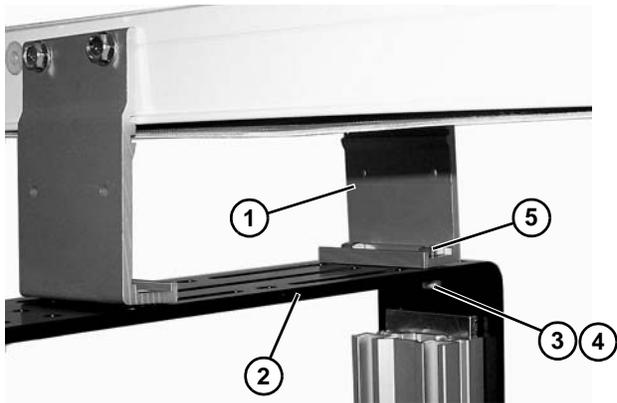


Figure 11

Installing Plastic Belt

1. Locate the conveyor belt retaining rod (**Figure 12, item 1**).

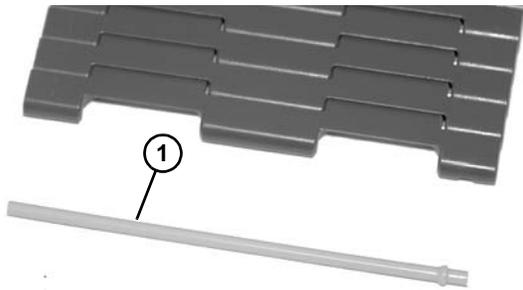


Figure 12

2. Align the belt grooves (**Figure 13, item 1**) to the evenly spaced sprockets (**Figure 13, item 2**) on the drive end of the conveyor.

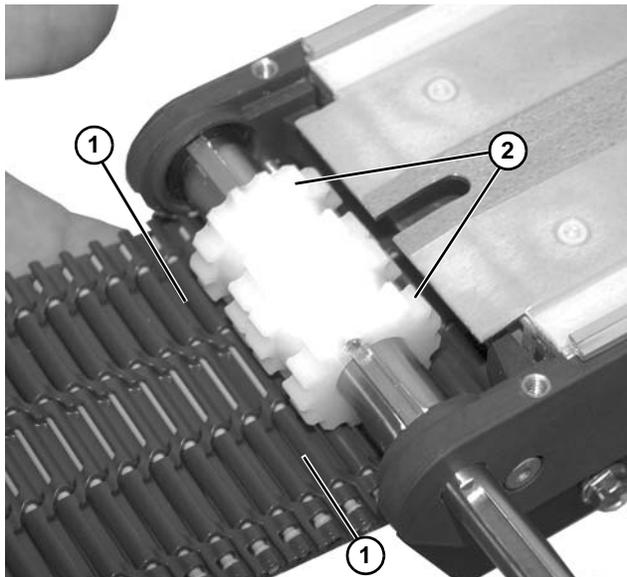


Figure 13

3. Feed belt into bottom wear strips (**Figure 14, item 1**) and pull through to the far end.

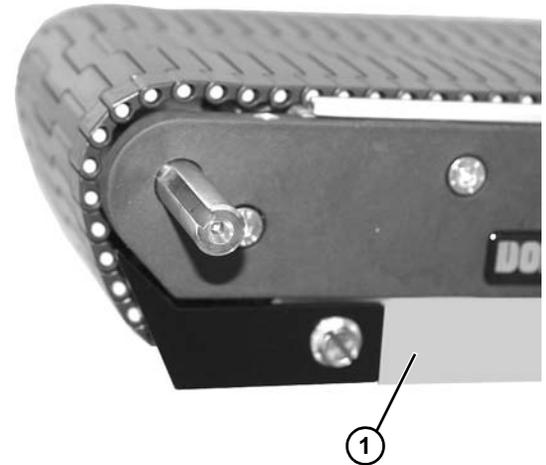


Figure 14

4. Splice the belt together by pushing the plastic rod (**Figure 15, item 1**) through the side hole on the rod retaining side of belt.



Figure 15

Installation

Proper Methods of Attachment to Side Rails (2300 Series Only)

⚠ 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 16, item 1**) to side rail. Hole should line up with notch (**Figure 16, item 2**) in side rail.

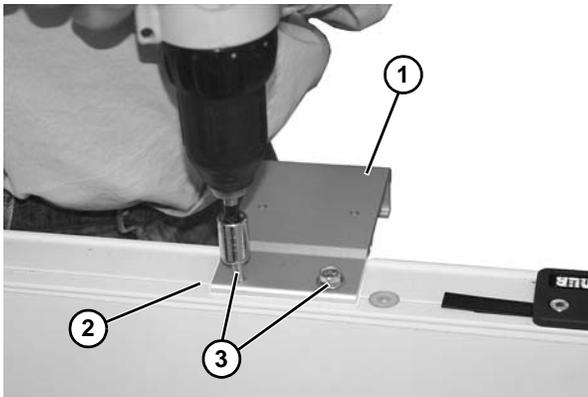


Figure 16

2. With a cordless drill or equivalent install self-drilling screws (**Figure 16, 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 17**). Recommended torque is 150 in.lbs (17 Nm).



Figure 17

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 18, item 1**) to side rail. Hole should line up with notch (**Figure 18, item 2**) in side rail. Mark the hole locations with a center punch (**Figure 18, item 3**) and remove the bracket.

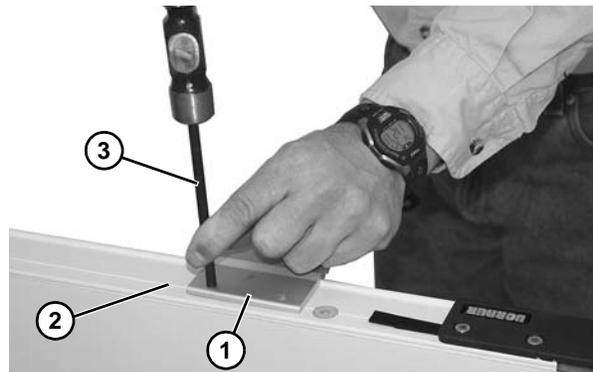


Figure 18

2. Drill the hole locations (**Figure 19, item 1**) with a 3/16" drill bit (**Figure 19, item 2**).

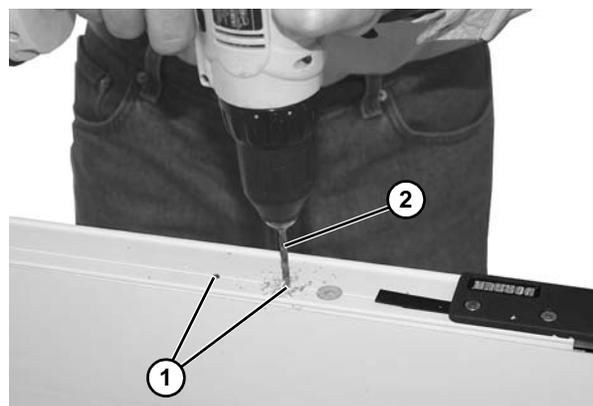


Figure 19

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

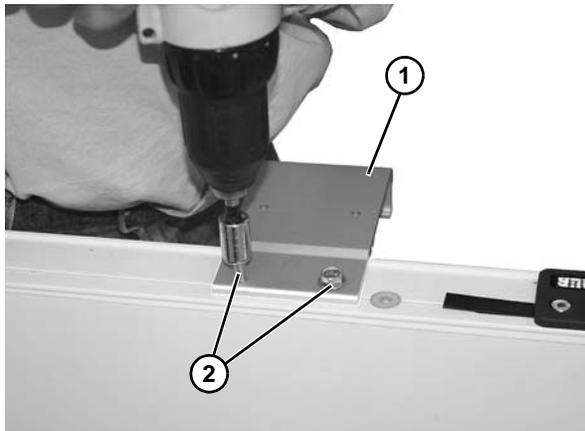


Figure 20

4. Hand tighten the screws to secure (Figure 21). Recommended torque is 150 in.lbs (17 Nm).



Figure 21

Guiding (2300 Series Only)

⚠ 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 22, item 1**) locations. The end clips should be no greater than 12" (**Figure 22, item 2**) from end of the conveyor.

NOTE

Profile -09, Low to High Side shown below. For other guide profile layouts see pages page 39 thru page 44.

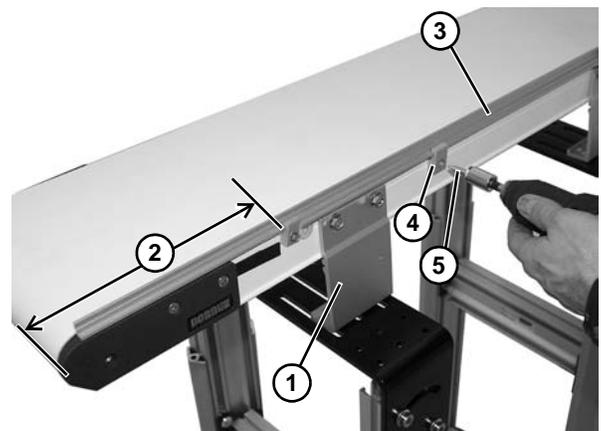


Figure 22

2. Hold guide (**Figure 22, item 3**) and retaining clips (**Figure 22, item 4**) to conveyor side rail. Install self-drilling screws (**Figure 22, item 5**) following the "Proper Methods of Attachment to Side Rails (2300 Series Only)" on page 16 procedure.

Preventive Maintenance and Adjustment

Required Tools

Standard Tools

- Hex-key wrenches:
2.5 mm, 4 mm, 5 mm
- 3/32" (2.4 mm) wide Flat Blade screw driver
- Arbor press
- Adjustable wrench to 1" (25 mm) wide

Special Tools

- 807–1078 Sealed Bearing Removal Tool
- 450293 Sealed Bearing Installation Tool

Checklist

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

Lubrication

No lubrication is required. Replace bearings if worn.

Maintaining Conveyor Belt

Troubleshooting

Inspect conveyor belt for:

- Surface cuts or wear
- Tooth skipping
- Loose links

Surface cuts and wear indicate:

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

Stalling or skipping belt indicates:

- Belt stretching
- Conveyor belt or drive timing belt are not properly tensioned
- Worn sprocket 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 Dornier Belt Cleaner. Mild soap and water may also be used. Do not soak the belt.

Conveyor Belt Replacement

WARNING



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

Conveyor Belt Replacement Sequence

- Remove old conveyor belt
- Install new conveyor belt

Belt Removal

1. Choose one link on either end of the conveyor to remove belt pin. Locate end of rod without retaining feature (**Figure 23, item 1**).

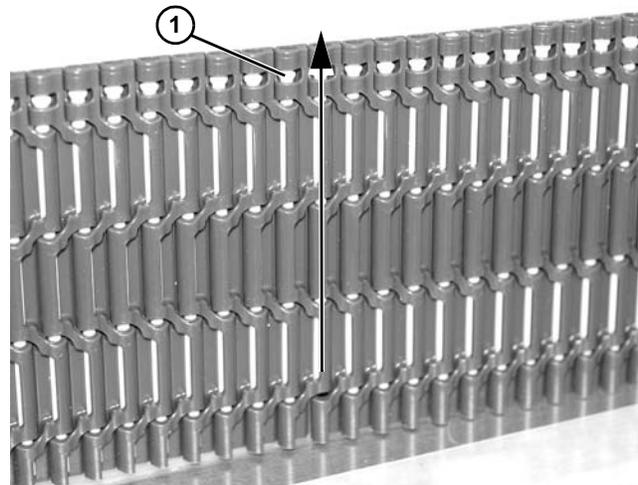


Figure 23

Preventive Maintenance and Adjustment

IMPORTANT

You may need to slightly raise the underside of the conveyor belt to properly drive pin out of slots.

2. Insert punch (Figure 24, item 1) into non-retaining side of belt, pushing rod out.

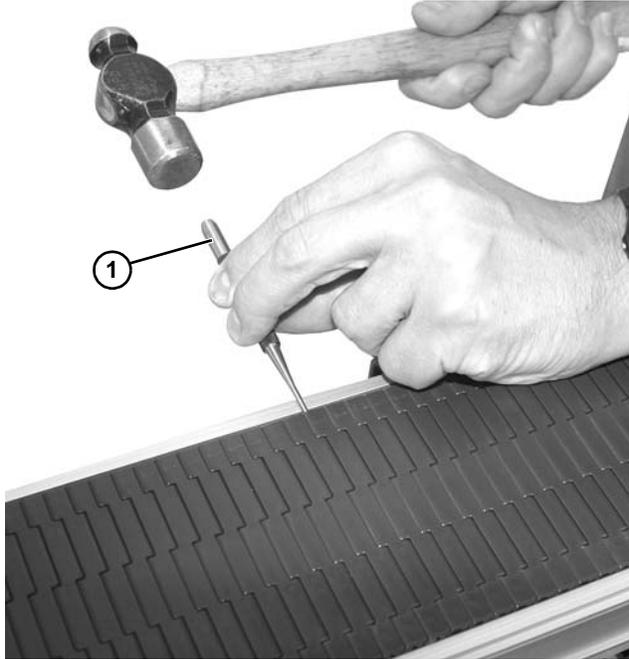


Figure 24

3. Remove rod (Figure 25, item 1) and separate belt.



Figure 25

4. Pull back topside of belt to the drive end of the conveyor. See Figure 26.



Figure 26

5. Remove belt by pulling belt out of bottom wear strips (Figure 27, item 1).

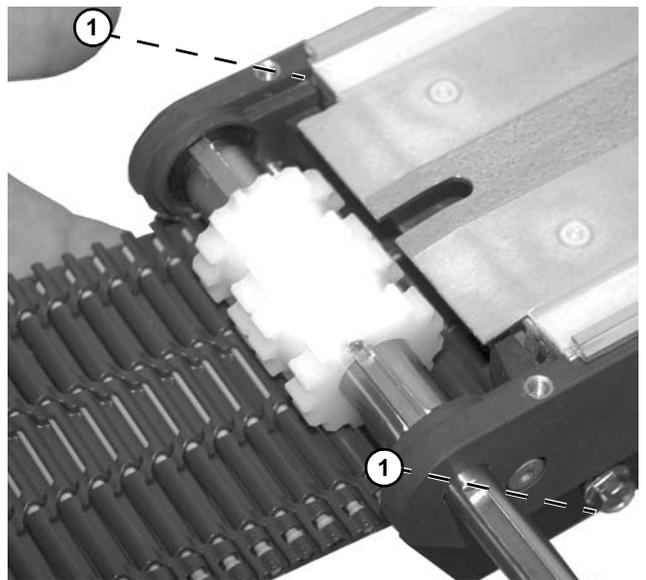


Figure 27

Belt Installation

1. See "Installing Plastic Belt" page 15.

Preventive Maintenance and Adjustment

Conveyor Belt Tension

⚠ WARNING



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

NOTE

The Modular Belt Conveyor is designed to operate with minimal belt tension. Conveyor will come with proper amount of belt sag at drive end of conveyor belt. See Figure 28. As belt stretches, it may be necessary to remove links to avoid too much belt sag. See Figure 29.



Figure 28



Figure 29

⚠ WARNING



Operating conveyor with belt sag beyond maximum shown in Figure 29 will create belt pinch points which can cause injury. **REMOVE BELT LINKS IF MAXIMUM SAG IS REACHED**

Removal of Belt Links

1. Choose one link on either end of the conveyor to remove belt pin. Locate end of rod without retaining feature (Figure 30, item 1).

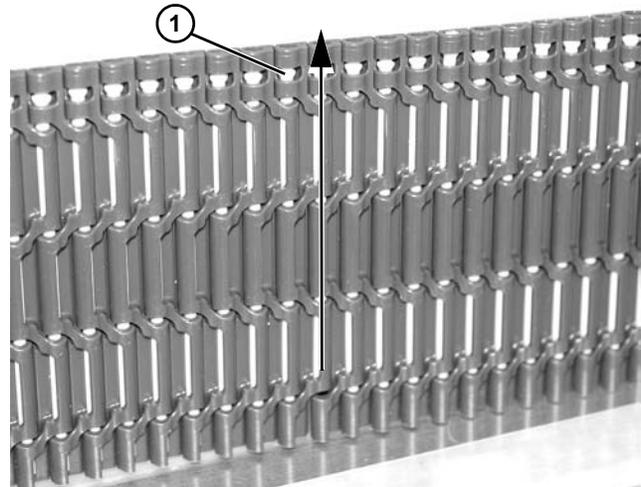


Figure 30

IMPORTANT

You may need to slightly raise the underside of the conveyor belt to properly drive pin out of slots.

Preventive Maintenance and Adjustment

2. Insert punch (Figure 31, item 1) into non-retaining side of belt, pushing rod out.

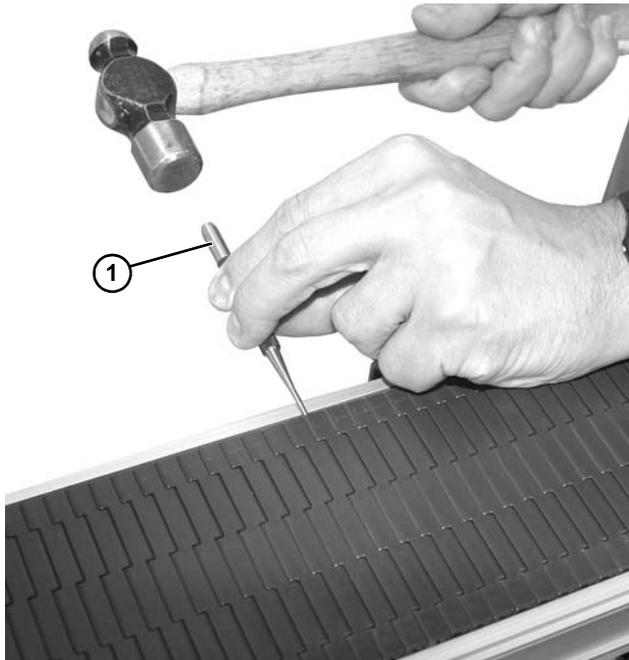


Figure 31

3. Remove rod (Figure 32, item 1) and separate belt.



Figure 32

4. Determine the number of links to be removed. Start with 1 link and progress if additional tensioning is required repeat steps 1 - 3.

5. Splice the belt together by pushing the plastic rod (Figure 33, item 1) through the side hole on the rod retaining side of belt.



Figure 33

6. Review belt sag at drive end to ensure it does not create a pinch point. If additional tensioning is required repeat steps 1 through 5.

Pulley and Sprockets 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 18. Remove the desired pulley following the corresponding instructions below:

- A – End Drive Conveyor
- B – Center Drive Conveyor

Preventive Maintenance and Adjustment

A – End Drive Conveyor

⚠ WARNING

Drive shaft keyway may be sharp. HANDLE WITH CARE.

1. On side of conveyor, remove two (2) fastening screws (Figure 34, item 1).



Figure 34

2. Remove head plate (Figure 35, item 1) and spindle (Figure 35, item 2).



Figure 35

3. Use bearing removal tool (807-1078) (Figure 36, item 1) to remove bearings from drive pulley.

IMPORTANT
<i>You must replace with a new bearing after it is removed from shaft.</i>

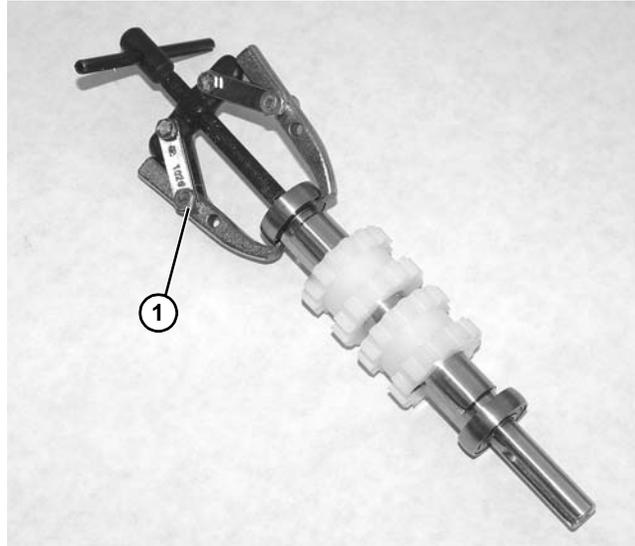


Figure 36

4. Slide free moving sprocket(s) (Figure 37, item 1) off the end of pulley (Figure 37, item 2).

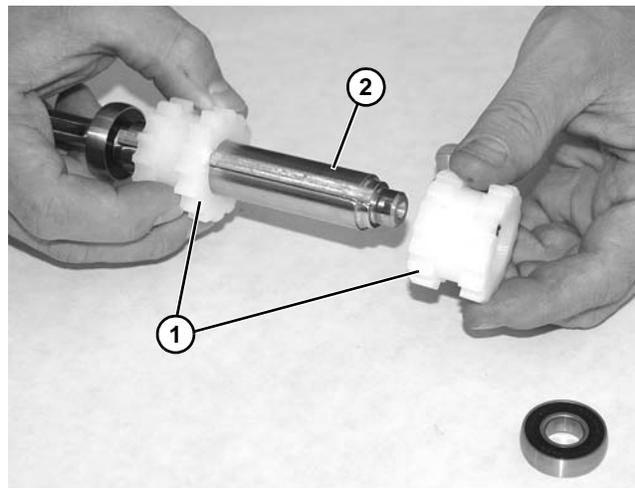


Figure 37

Preventive Maintenance and Adjustment

B – Center Drive Conveyor

⚠ WARNING

Removing drive module without support under the module may lead to personnel injury. PROVIDE SUPPORT UNDERNEATH THE DRIVE MODULE BEFORE REMOVING THE MODULE.

1. Loosen and remove two (2) fastening screws (Figure 38, item 1) and clips (Figure 38, item 2) on each side of conveyor to lower and remove center drive module (Figure 38, item 3).

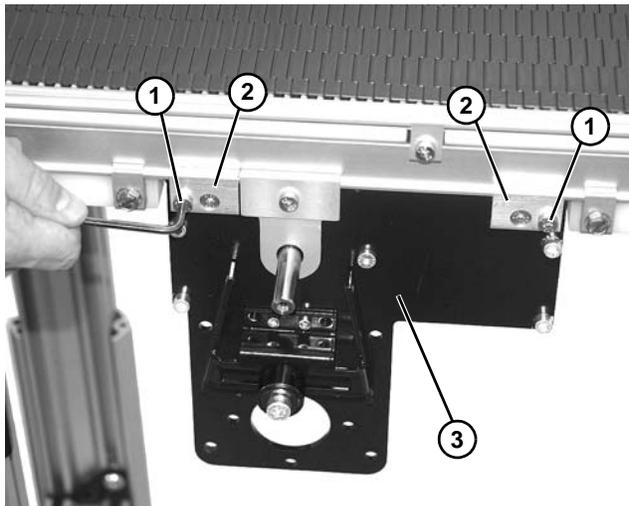


Figure 38

⚠ WARNING

Drive shaft keyway may be sharp. HANDLE WITH CARE.

2. Loosen and remove screw (Figure 39, item 1) and bearing housing (Figure 39, item 2) and remove drive pulley (Figure 39, item 2).

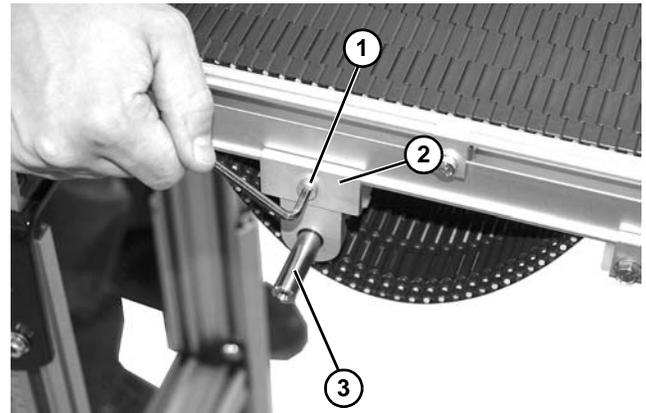


Figure 39

3. Use bearing removal tool (807-1078) (Figure 40, item 1) to remove bearings from drive pulley.

IMPORTANT
<i>You must replace with a new bearing after it is removed from shaft.</i>

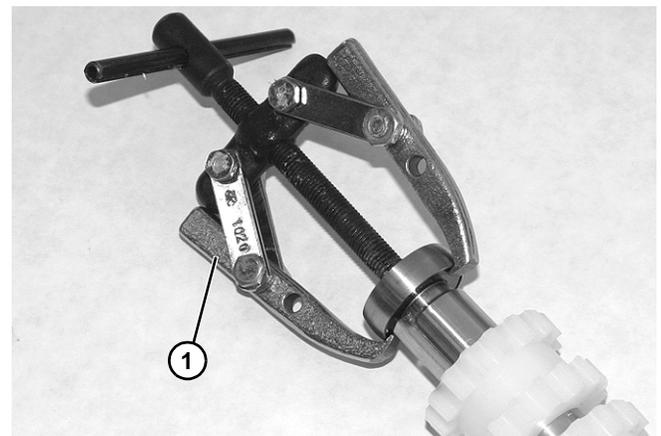


Figure 40

4. Slide free moving sprocket(s) (Figure 41, item 1) off the end of pulley (Figure 41, item 2).

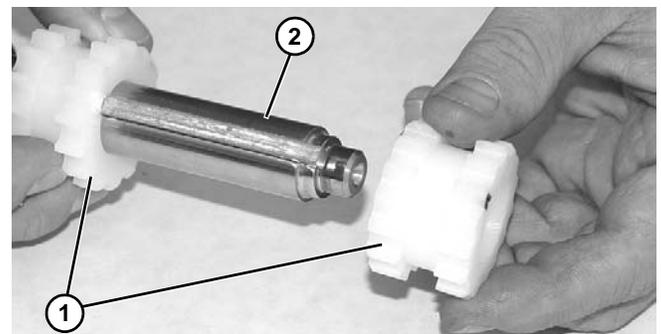


Figure 41

Preventive Maintenance and Adjustment

Bearing Removal & Replacement

Removal

IMPORTANT

You must replace with a new bearing after it is removed from shaft.

1. Remove drive pulley. For end drive pulley see section “A – End Drive Conveyor,” steps 1 through 3. For drive pulley see section “B – Center Drive Conveyor,” steps 1 through 3.

Replacement

1. Inspect head plate bearing surface. If worn or damaged, replace head plate. See “Service Parts” on page 28.

Pulley and Sprockets Replacement

1. Install required quantity of sprockets (**Figure 42, item 1**) onto drive pulley (**Figure 42, item 2**).

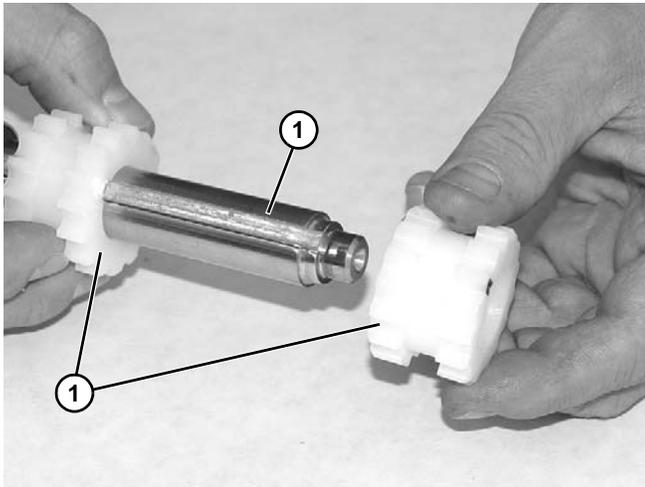


Figure 42

2. Press new bearing onto drive pulley using installation tool 450293 (**Figure 43, item 1**).

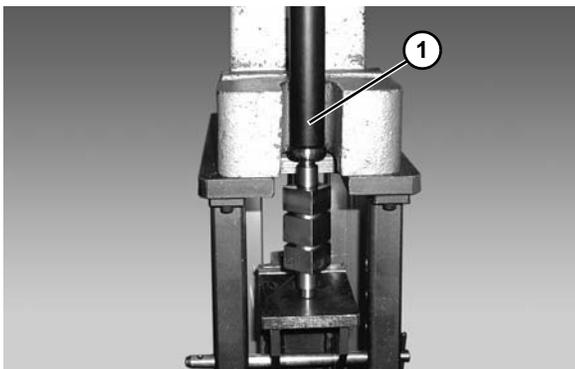


Figure 43

3. Install pulley assembly (**Figure 44, item 1**) on conveyor head plate (**Figure 44, item 2**) and install opposite end head plate (**Figure 44, item 3**).

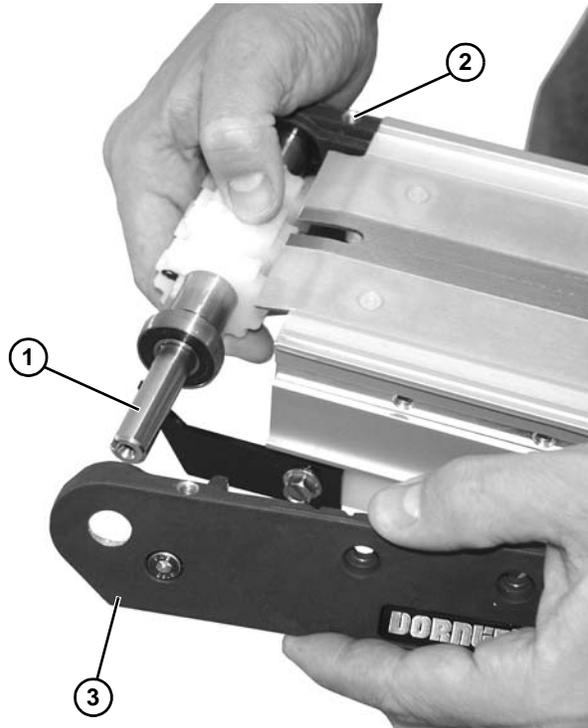


Figure 44

4. Install and tighten fastening screws (**Figure 45, item 1**) to 60 in-lb (7 N-m).



Figure 45

Preventive Maintenance and Adjustment

Idler End Wear Items

⚠ 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 18. Remove the desired pulley following the corresponding instructions below:

- A – Standard Idler Tail
- B – Nose Bar Idler Tail

A - Standard Idler Tail

1. On one side of conveyor, remove one (1) fastening screw (Figure 46, item 1).

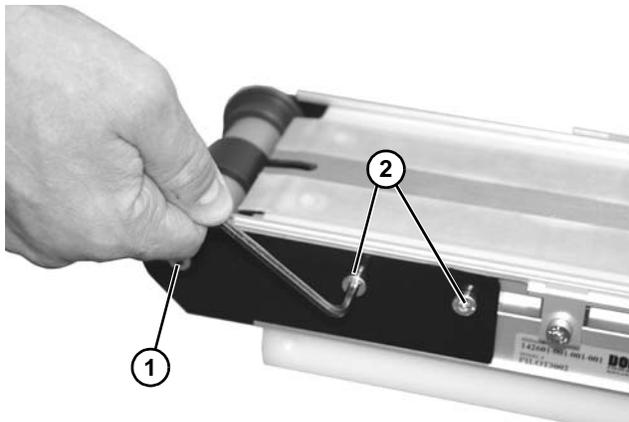


Figure 46

2. On the same side of conveyor, remove two (2) fastening screws (Figure 46, item 2).

3. Remove head plate (Figure 47, item 1).



Figure 47

4. Slide tracking sleeves (Figure 48, item 1), spacers (Figure 48, item 2), and idler sleeves (Figure 48, item 3) off the end of pulley (Figure 48, item 4).

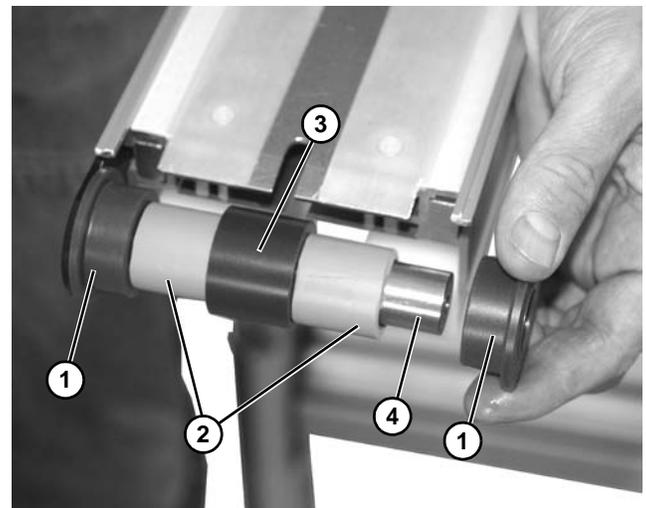


Figure 48

Preventive Maintenance and Adjustment

B - Nose Bar Idler Tail

1. On one side of conveyor, remove two (2) fastening screws (Figure 49, item 1).

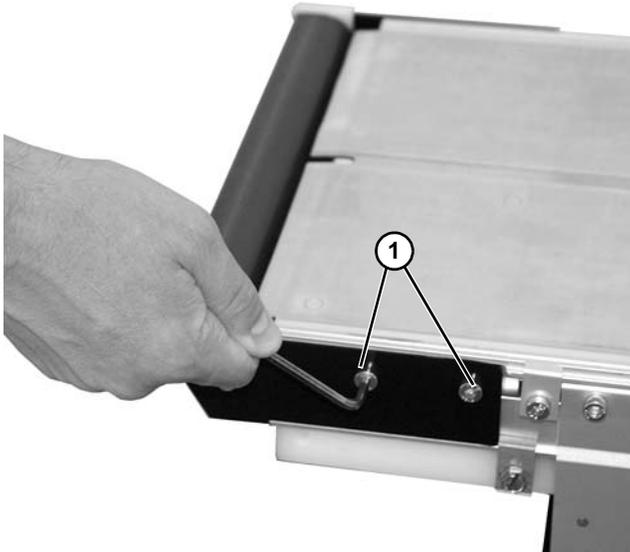


Figure 49

2. On the same side of conveyor, remove two (2) fastening screws (Figure 50, item 1).

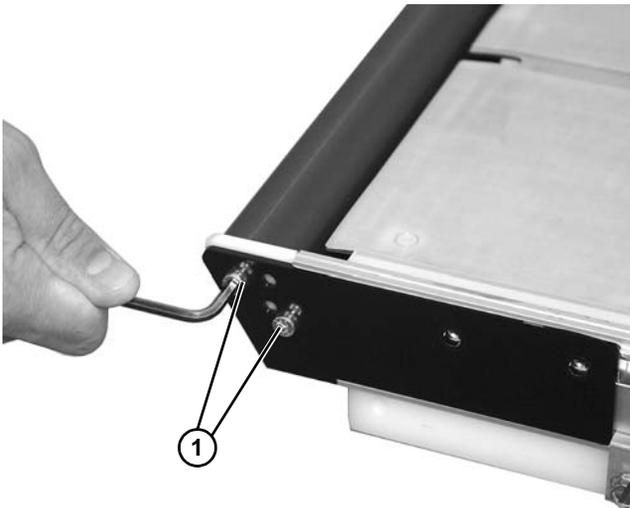


Figure 50

3. Remove head plate (Figure 51, item 1).

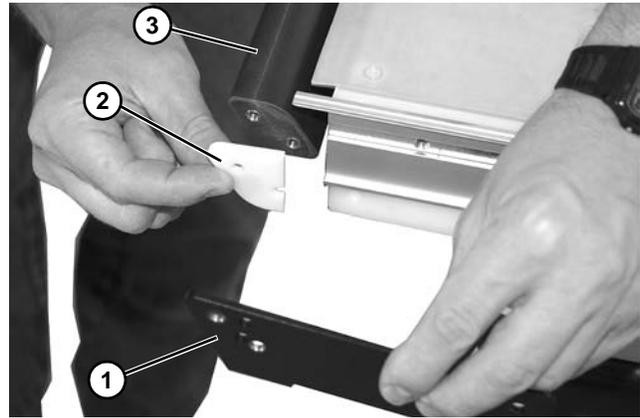
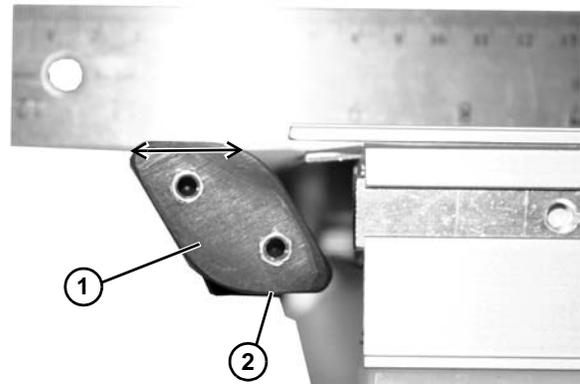


Figure 51

4. Remove tracking plate (Figure 51, item 2), off the end of the bar and remove bar (Figure 51, item 3).
5. Re-install bar (Figure 52, item 1), making certain to only flip bar as shown below, and do not rotate. Bar should be level with conveyor as shown below.

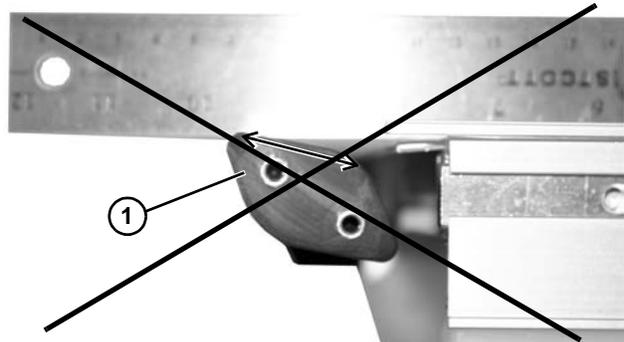
NOTE

Bar may be flipped 180° to use second wear surface (Figure 52, item 2).



Correct orientation

Figure 52



Incorrect orientation

Figure 53

Preventive Maintenance and Adjustment

Upper Wear Strip Replacement

⚠ WARNING

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

1. Remove conveyor belt. See “Belt Removal” section on page 18.
2. With a putty knife (Figure 54, item 1), start by raising edge of wear strip (Figure 54, item 2).

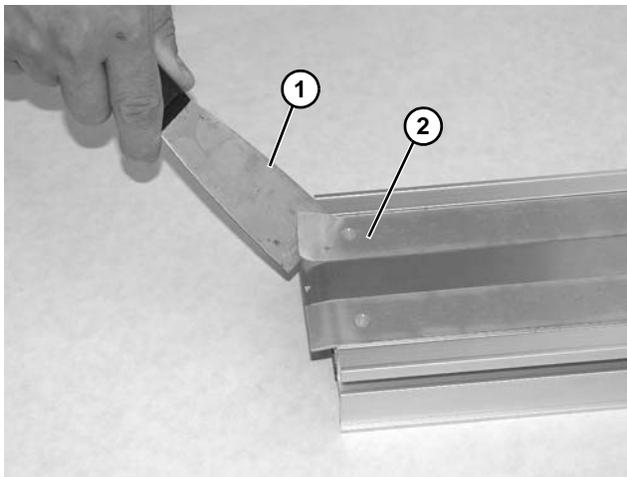


Figure 54

3. Remove old wear strip with a pliers (Figure 55, item 1).

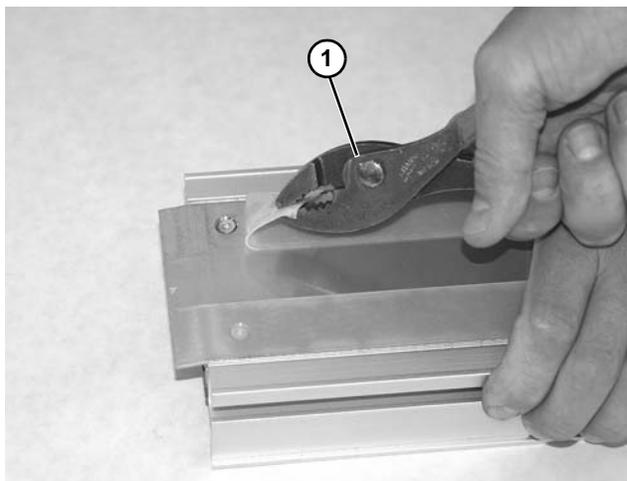


Figure 55

4. Clean conveyor surface with isopropyl alcohol and allow to fully dry.

5. Install new wear strip (Figure 56, item 1).

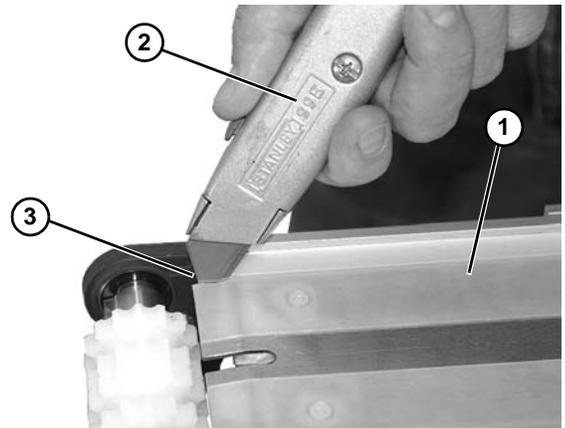


Figure 56

6. Using a utility knife (Figure 56, item 2), cut out notch in each corner (Figure 56, item 3).

Lower Wear Strip Replacement

⚠ WARNING

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

1. Remove conveyor belt. See “Belt Removal” section on page 18.
2. Remove screw (Figure 57, item 1) and sag guard plate (Figure 57, item 2).

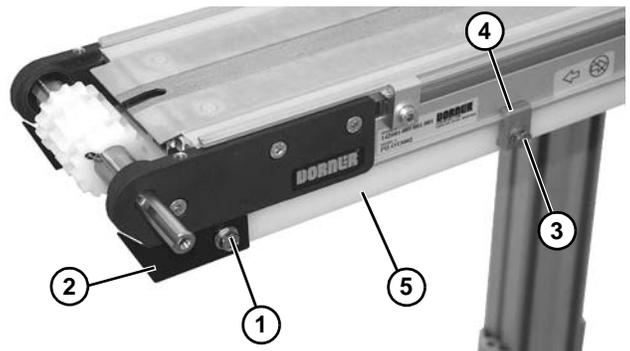


Figure 57

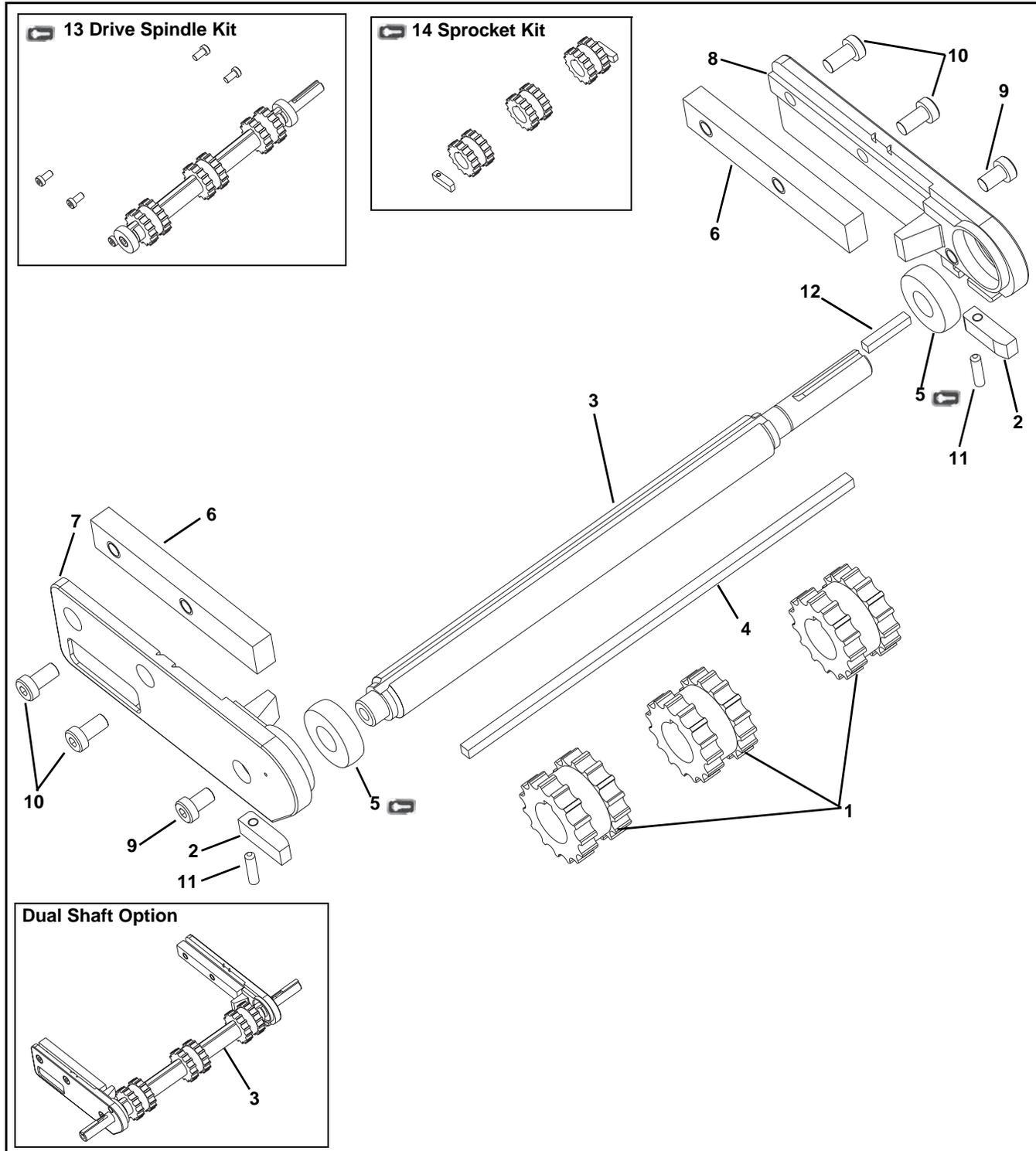
3. Remove screw(s) (Figure 57, item 3) from each retaining clip (Figure 57, item 4), and remove lower wear strip (Figure 57, item 5).
4. Clean conveyor surface with isopropyl alcohol and allow to fully dry.
5. Install new wear strip and secure with retaining clips.
6. Install sag guard plate with screw.

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

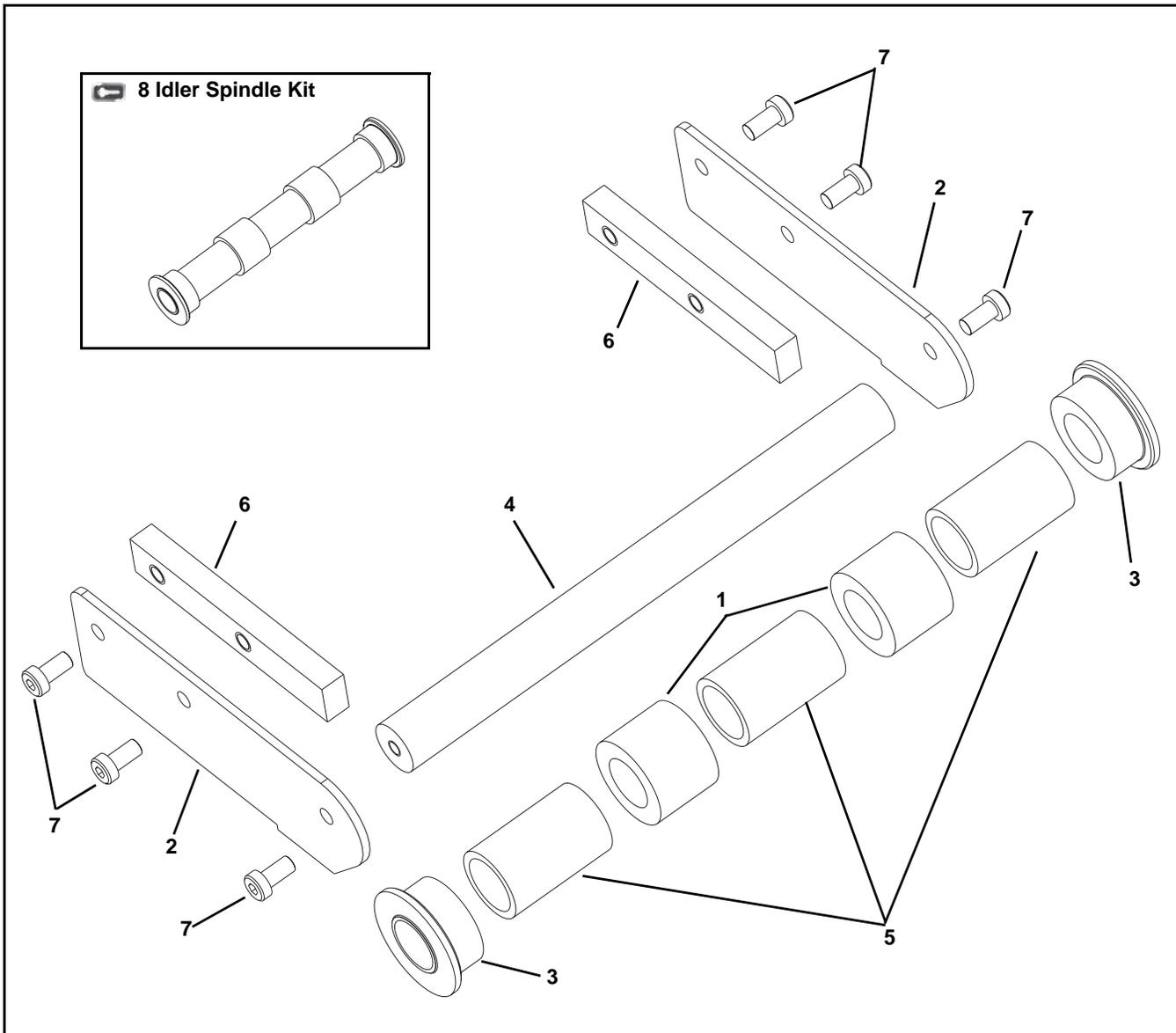


Item	Part Number	Description
1	807-2009	Sprocket
2	201418	Drive Tracking Block
3	201432- <u>WW</u>	Drive Spindle
	202398- <u>WW</u>	Dual Shaft Drive Spindle
4	201433- <u>WW</u>	Square Key 3/16" *
5	22BK2	Bearing Kit (2 pack)
6	240329	Tension Slide Bar (2200 Series Only)
	712016	Tension Slide Bar (2300 Series Only)
7	240426	Right Hand Head Plate, for A & B Position
	240428	Right Hand Head Plate, for C & D Position
8	240427	Left Hand Drive Plate, for A & B Position
	240425	Left Hand Drive Head, for C & D Position
9	950610M	Low Head Cap Screw, M6 - 1.00 x 10 mm
10	950612M	Low Head Cap Screw, M6 - 1.00 x 12 mm (2200 Series Only)
	950610M	Low Head Cap Screw, M6 - 1.00 x 10 mm (2300 Series Only)
11	970416M	Cup Set Screw, M4 - 0.70 x 12 mm
12	980422M	Square Key, 4 mm x 22 mm
13	2XMBDS- <u>WW</u>	Drive Spindle Kit (Includes items 1, 3, 4, 5, 9 and 10)
	2XMBDDS- <u>WW</u>	Drive Spindle Kit - Dual Shaft (Includes items 1, 3, 4, 5, 9 and 10)
14	2XMBS- <u>WW</u>	Sprocket Kit (Includes items 1 and 2)
<u>WW</u> = Conveyor width reference: 04, 08, 12 & 24		

* 24" wide - uses two 201433-12.

Service Parts

Idler End

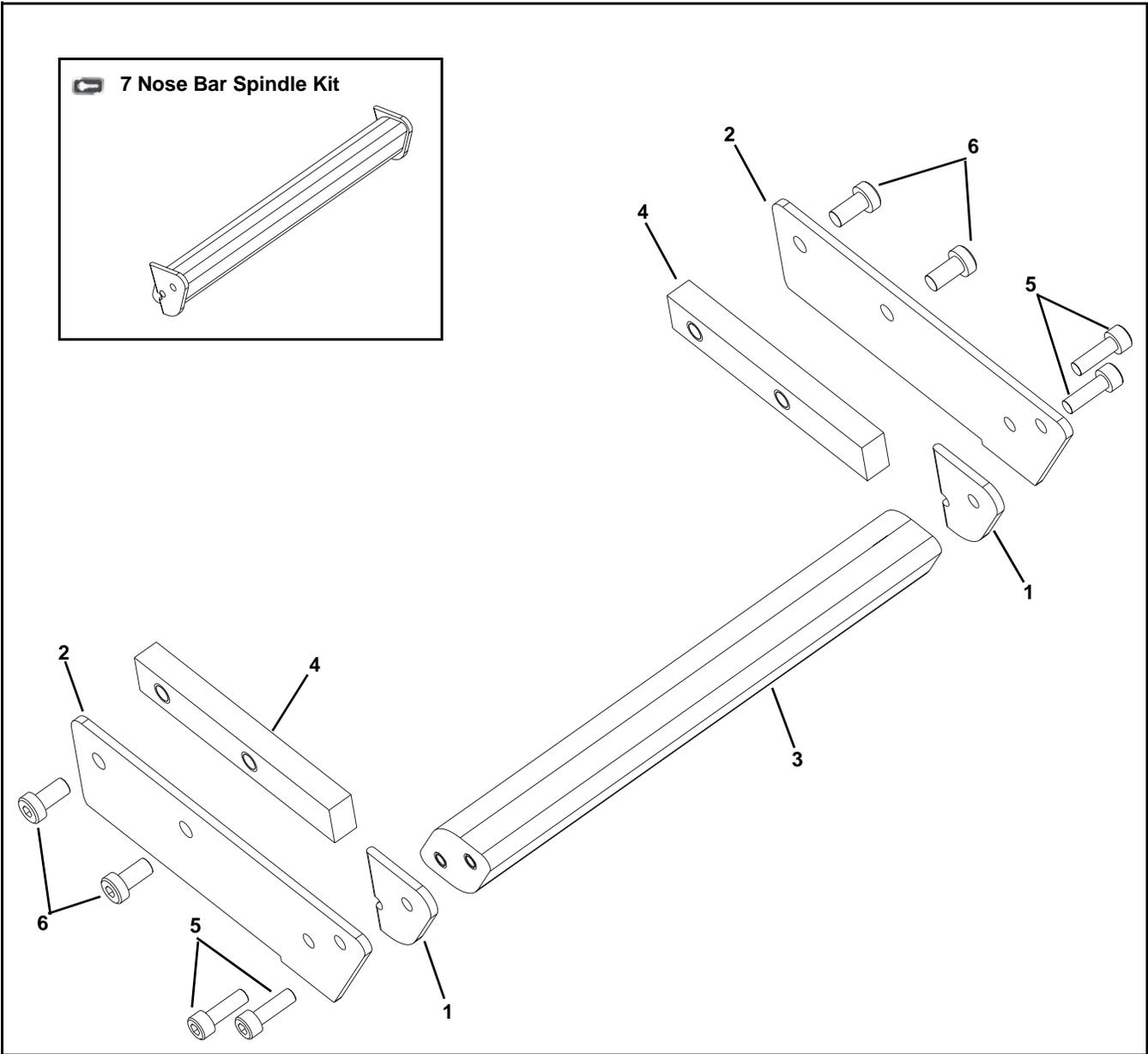


Item	Part Number	Description
1	201401	Idler Sleeve
2	201402	Idler Side Plate
3	201411	Tracking Sleeve
4	201412- <u>WW</u>	Idler Shaft
5	201422- <u>WW</u>	Idler Spacer

Item	Part Number	Description
6	240329	Tension Slide Bar (2200 Series Only)
	712016	Tension Slide Bar (2300 Series Only)
7	950612M	Low Head Cap Screw, M6 - 1.00 x 12 mm (2200 Series Only)
	950610M	Low Head Cap Screw, M6 - 1.00 x 10 mm (2300 Series Only)
8	2XMBT- <u>WW</u>	Idler Spindle Kit (Includes items 1, 3 and 5)

WW = Conveyor width reference: 04, 08, 12 & 24

Nose Bar Idler End

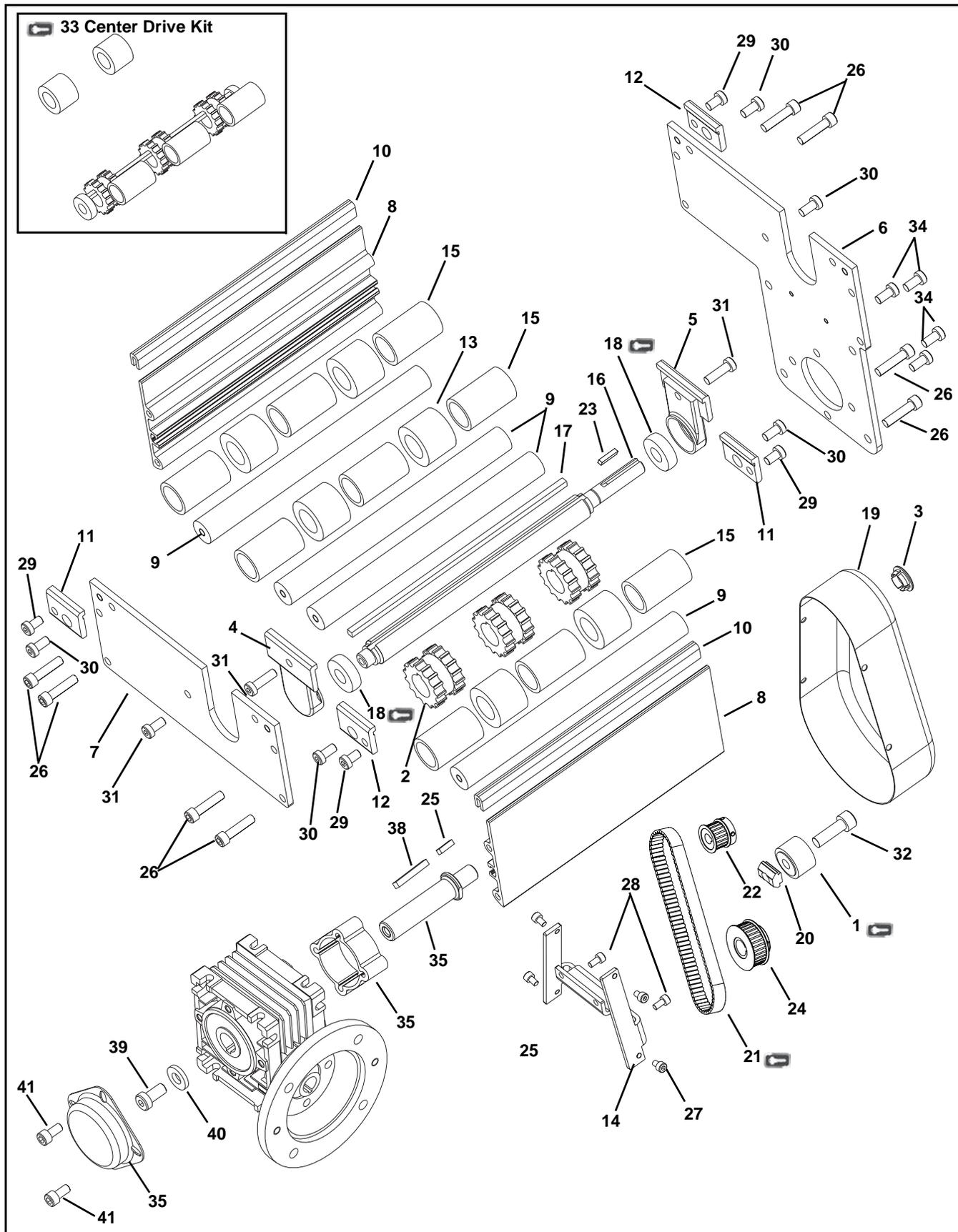


Item	Part Number	Description
1	201415	Tracking Plate
2	201416	Idler Side Plate
3	201419- <u>WW</u>	Nosebar Assembly
4	240329	Tension Slide Bar (2200 Series Only)
	712016	Tension Slide Bar (2300 Series Only)
5	920516M	Socket Head Screw, M5-0.80 x 16 mm
6	950612M	Low Head Cap Screw, M6 - 1.00 x 12 mm (2200 Series Only)
	950610M	Low Head Cap Screw, M6 - 1.00 x 10 mm (2300 Series Only)
7	2XMBNB- <u>WW</u>	NoseBar Spindle Kit, (Includes items 1 and 3)

WW = Conveyor width reference: 04, 08, 12 & 24

Service Parts

Center Drive Module



2200 and 2300 Series Modular Belt Conveyors

Service Parts

Item	Part Number	Description
1	802-046	Bearing Cam
2	807-2009	Sprocket
3	807-226	Plug
4	202417	Bearing Housing
5	202416	Drive Side Bearing Housing
6	201394	Center Drive Plate
7	201395	Short Center Drive Plate
8	201396- <u>WW</u>	Center Drive Extrusion
9	201397- <u>WW</u>	Takeup Shaft
10	201398- <u>WW</u>	Wear Strip Guard
11	201399	Center Clip Left Hand
12	201400	Center Clip Right Hand
13	201401	Idler Sleeve
14	201417	Guard Mount Bracket
15	201422- <u>WW</u>	Idler Spacer
16	201432- <u>WW</u>	Drive Spindle
17	201433- <u>WW</u>	Square Key 3/16" *
18	22BK2	Bearing Kit (2 pack)
	22BK4	Bearing Kit (4 pack)
19	200376M	Drive Guard
20	202390M	Nut, Cam Follower
21	814-103	Timing Belt, 15 mm Wide x 385 mm Long
	814-100	Timing Belt, 15 mm Wide x 400 mm Long
	814-096	Timing Belt, 15 mm Wide x 425 mm Long
	814-105	Timing Belt, 15 mm Wide x 460 mm Long
22	450365MP	Driven Pulley, 19 Tooth
	450366MP	Driven Pulley, 22 Tooth
	450367MP	Driven Pulley, 28 Tooth
	450368MP	Driven Pulley, 32 Tooth
23	980422M	Square Key, 4 mm x 22 mm
24	450434	Drive Pulley, 22 Tooth (for parallel shaft gearmotors)
	450435	Drive Pulley, 28 Tooth (for parallel shaft gearmotors)
	450436	Drive Pulley, 32 Tooth (for parallel shaft gearmotors)
	450437	Drive Pulley, 44 Tooth (for parallel shaft gearmotors)
	450438	Drive Pulley, 48 Tooth (for parallel shaft gearmotors)
	450439	Drive Pulley, 60 Tooth (for parallel shaft gearmotors)
	450365MP	Drive Pulley, 19 Tooth (for 90° gearmotors)
	450366MP	Drive Pulley, 22 Tooth (for 90° gearmotors)
	450367MP	Drive Pulley, 28 Tooth (for 90° gearmotors)
	450368MP	Drive Pulley, 32 Tooth (for 90° gearmotors)
	450369MP	Drive Pulley, 44 Tooth (for 90° gearmotors)
	450370MP	Drive Pulley, 48 Tooth (for 90° gearmotors)
	450371MP	Drive Pulley, 60 Tooth (for 90° gearmotors)

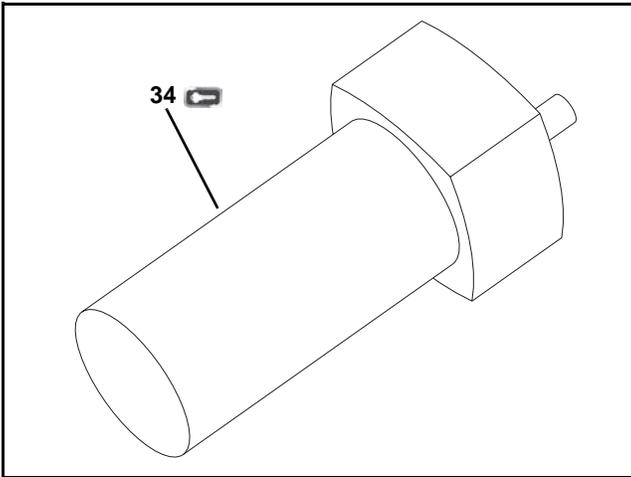
Item	Part Number	Description
25	912-078	Square Key 0.188" x 0.75" (for parallel shaft gearmotors)
	980422M	Square Key 4 mm x 22 mm (for 90° gearmotors)
26	708180P	Socket Head Screw, M6 - 1.00 x 25 mm
27	920406M	Socket Head Screw, M4 - 0.70x6 mm
28	920408M	Socket Head Screw, M4 - 0.70 x 8 mm
29	950610M	Low Head Cap Screw, M6 - 1.00 x 10 mm
30	950612M	Low Head Cap Screw, M6 - 1.00 x 12 mm
31	950620M	Low Head Cap Screw, M6 - 1.00 x 20 mm
32	920825M	Socket Head Screw, M8 - 1.25 x 25 mm
33	2XMBCD- <u>WW</u>	Center Drive Kit, (Includes items 2, 13, 15, 16, 17 an d18)
34	902-157	Socket Head Screw, 1/4-28 x 0.75" for parallel shaft gearmotors
	920645M	Socket Head Screw, M6 - 1.00 x 45 mm (for standard load 90° gearmotors)
	920620M	Socket Head Screw, M6 - 1.00 x 20 mm (for heavy load 90° gearmotors)
35	202272	Drive Shaft (for E-Drive 42CZ C Face Gearmotors)
	350122	Drive Shaft (for E-Drive 56 C Face Gearmotors)
36	807-2059	Drive-Bearing Shaft Cover (for E- Drive 42CZ C Face Gearmotors)
	807-2016	Drive-Bearing Shaft Cover (for E- Drive 56 C Face, IEC 63B5 and IEC 71B5 Gearmotors)
37	202270-00113	Adapter (for E-Drive 42CZ C Face Gearmotors)
	350115	Adapter (for E-Drive 56 C Face Gearmotors)
38	912-084	Square Key, 0.188" x 1.50"
39	950816M	Low Head Cap Screw, M8-1.25 x 16 mm (for E-Drive 42CZ C Face Gearmotors)
	931020MSS	Flat Head Screw M10-1.50 x 20 mm (for E-Drive 56 C Face Gearmotors)
40	605280P	Washer
41	920612M	Socket Head Screw, M6-1.00 x 12 mm

WW = Conveyor width ref.: 04, 08, 12, & 24

* 24" wide - uses two 201433-12.

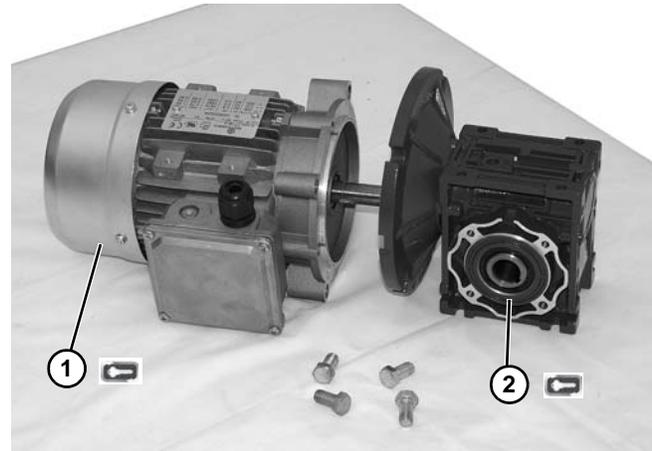
Service Parts

Parallel Shaft Gearmotors



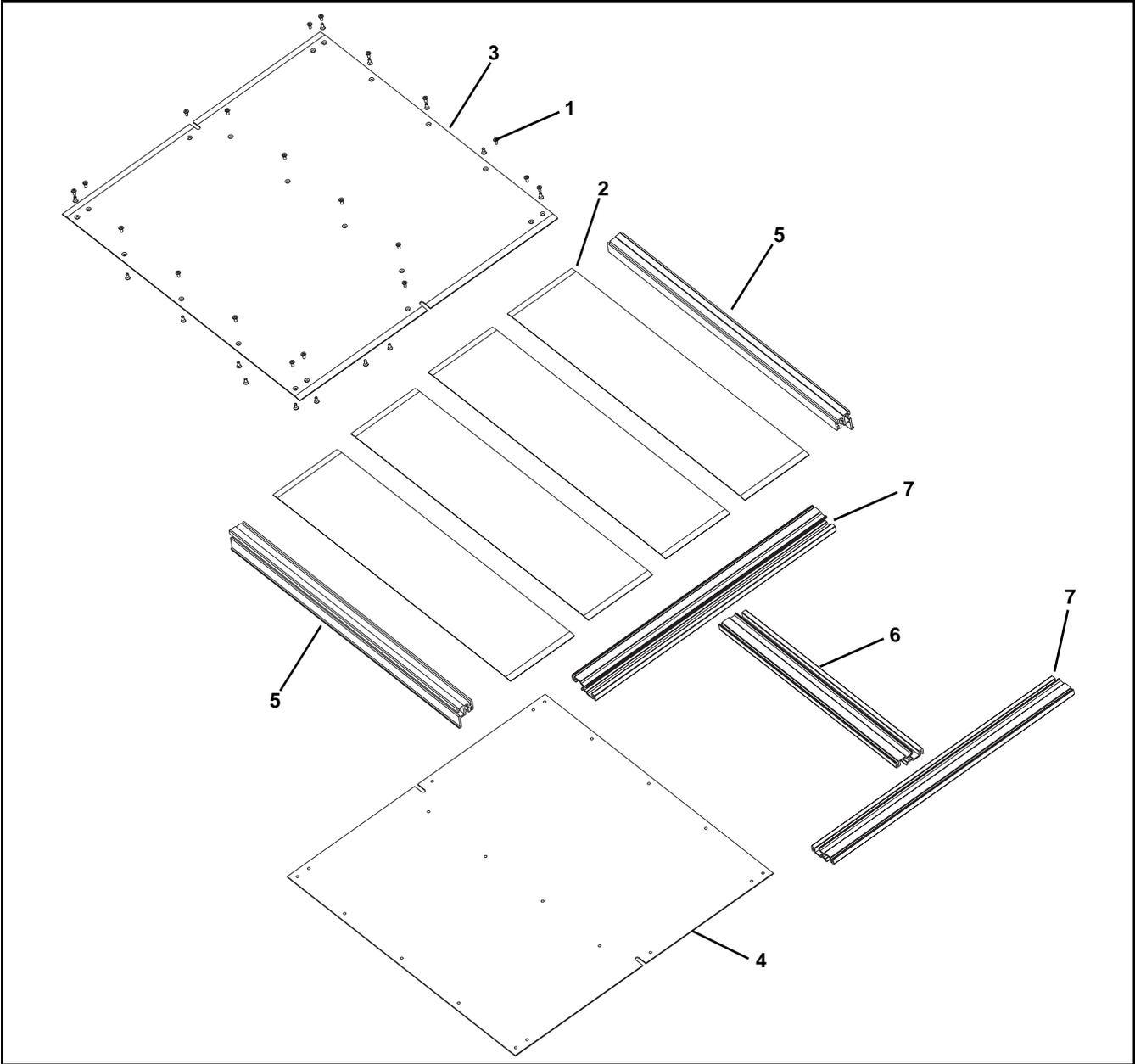
Item	Part Number	Description
34	62M180PS411FN	Motor, 0.08hp (0.06Kw), 10 RPM, 115VAC, 60Hz, 1-Phase
	62M060PS411FN	Motor, 0.17hp (0.13Kw), 29 RPM, 115VAC, 60Hz, 1-Phase
	62M060PS423EN	Motor, 0.17hp (0.13Kw), 29 RPM, 230/460 Volts, 10-60Hz, 3-Phase
	62M060PS423FN	Motor, 0.25hp (0.19Kw), 29 RPM, 230VAC, 60Hz, 3-Phase
	62M030PS411FN	Motor, 0.17hp (0.13Kw), 58 RPM, 115VAC, 60Hz, 1-Phase
	62M030PS423EN	Motor, 0.38hp (0.28Kw), 58 RPM, 230/460 Volt, 10-60Hz, 3-Phase
	62M030PS423FN	Motor, 0.25hp (0.19Kw), 58 RPM, 230VAC, 60Hz, 3-Phase
	62M020PS411FN	Motor, 0.17hp (0.13Kw), 86 RPM, 115VAC, 60Hz, 1-Phase
	62M020PS423EN	Motor, 0.38hp (0.28Kw), 86 RPM, 230/460 Volt, 10-60Hz, 3-Phase
	62M010PS411FN	Motor, 0.17hp (0.13Kw), 173 RPM, 115VAC, 60Hz, 1-Phase
	62M010PS423EN	Motor, 0.38hp (0.28Kw), 173 RPM, 230/460 Volt, 10-60Hz, 3-Phase
	62M010PS423FN	Motor, 0.25hp (0.19Kw), 173 RPM, 230VAC, 60Hz, 3-Phase
	62M005PS411FN	Motor, 0.17hp (0.13Kw), 345 RPM, 115VAC, 60Hz, 1-Phase
	62M005PS423EN	Motor, 0.38hp (0.28Kw), 345 RPM, 230/460 Volt, 10-60Hz, 3-Phase
	61M180PSD3DEN	Motor, 0.12hp (0.09Kw), 14 RPM, 130VDC
	61M060PSD3DEN	Motor, 0.25hp (0.19Kw), 42 RPM, 130VDC
	61M030PSD3DEN	Motor, 0.25hp (0.19Kw), 83 RPM, 130VDC
	61M020PSD3DEN	Motor, 0.25hp (0.19Kw), 125 RPM, 130VDC
	61M010PSD3DEN	Motor, 0.25hp (0.19Kw), 250 RPM, 130VDC
	61M005PSD3DEN	Motor, 0.25hp (0.19Kw), 500 RPM, 130VDC

90° Gearmotors



Item	Part Number	Description	
1	62MES411FN	Motor, 0.25HP, (0.19 Kw), 115/230 Volts, 60 Hz, 1-Phase	
	62MES423FN	Motor, 0.25HP, (0.19 Kw), 208-230/460 Volts, 60 Hz, 3-Phase	
	62MSD3DEN	Motor, 0.25HP, (0.19 Kw), 130 VDC	
	62MEH411FN	Motor, 0.50HP, (0.37 Kw), 115/230 Volts, 60 Hz, 1-Phase, non-reversing	
	62MEH423FN	Motor, 0.50HP, (0.37 Kw), 115/230 Volts, 60 Hz, 1-Phase	
	32MEH423FN	Motor, 0.50HP, (0.37 Kw), 208-230/460 Volts, 60 Hz, 3-Phase	
	62MHD9DEN	Motor, 0.50HP, (0.37 Kw), 90 VDC	
	32MES423EN	Motor, 0.50HP, (0.37 Kw), 230 Volts, 3-Phase Inverter Duty	
	2	32M005EL	Gear Reducer, 5:1, NEMA 42 CZ
		32M010EL	Gear Reducer, 10:1, NEMA 42 CZ
32M020EL		Gear Reducer, 20:1, NEMA 42 CZ	
32M040EL		Gear Reducer, 40:1, NEMA 42 CZ	
32M060EL		Gear Reducer, 60:1, NEMA 42 CZ	
32M005ES		Gear Reducer, 5:1, 56C	
32M010ES		Gear Reducer, 10:1, 56C	
32M020ES		Gear Reducer, 20:1, 56C	
32M040ES		Gear Reducer, 40:1, 56C	
32M060ES		Gear Reducer, 60:1, 56C	

2200 Series Frame Assembly

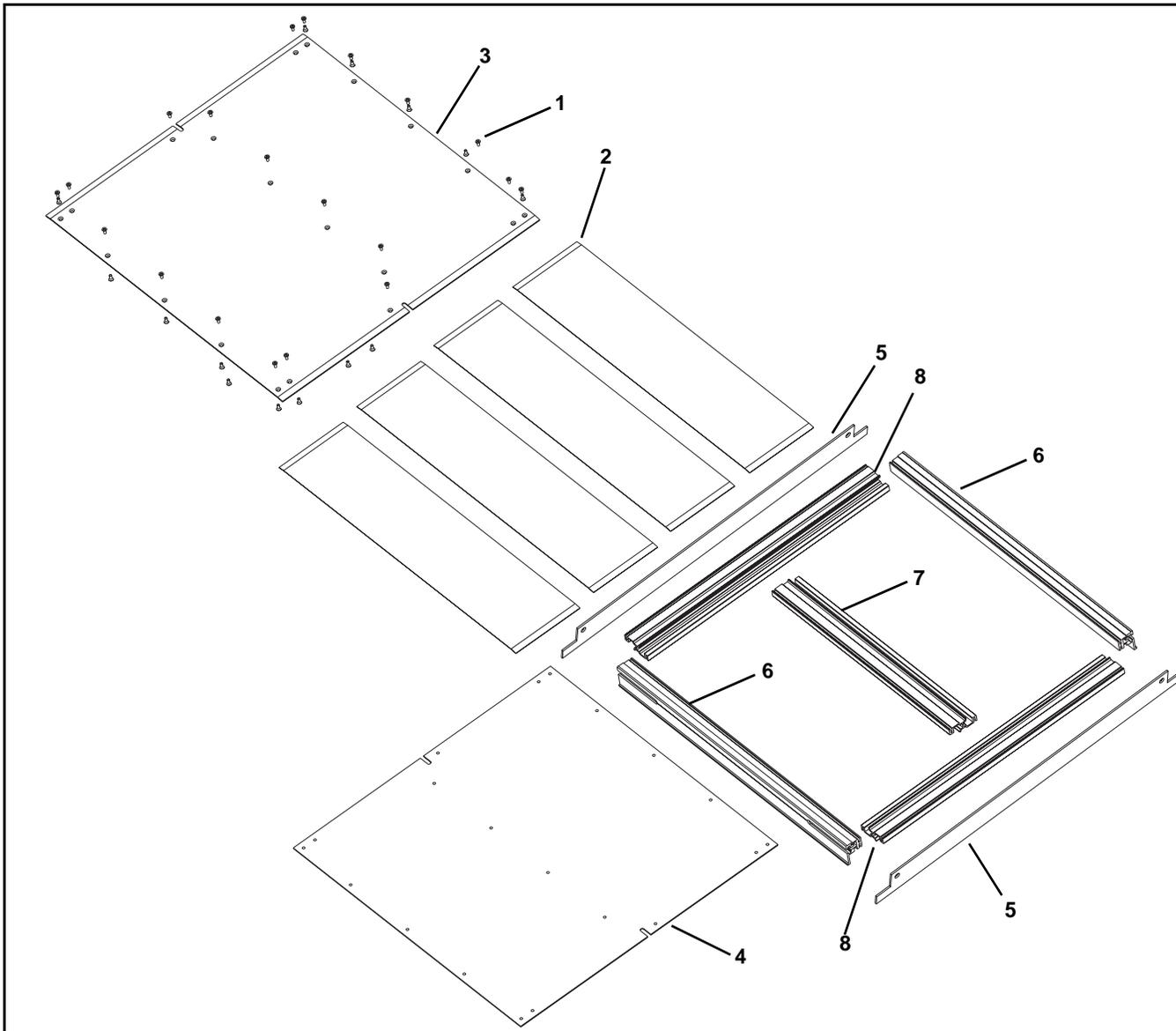


Item	Part Number	Description
1	807-1105	Flat Head Screw, M4 - 0.70 x 10 mm
2	807-2052	UHMW Tape 1.625" for 4" Wide Conveyors
	807-2053	UHMW Tape 2.50" for 8" Wide Conveyors
	807-2054	UHMW Tape 5.75" for 12" & 24" Wide Conveyors
3	201420- <u>WW</u> - <u>LLLLL</u>	Bed Plate for Single Piece Frames
	201913- <u>WW</u> - <u>LLLLL</u>	End Bed Plate for Multi Piece Frames
	201914- <u>WW</u> - <u>LLLLL</u>	Mid Bed Plate for Multi Piece Frames

Item	Part Number	Description
4	201914- <u>WW</u> - <u>LLLLL</u>	Bottom Bed Plate
5	240411- <u>LLLLL</u>	Frame Rail
6	240415- <u>LLLLL</u>	Center Rail for 8", 12" & 24" Wide Conveyors
7	240415-02162	Center Cross Rail for 24" Wide Conveyors
<u>WW</u> = Conveyor width reference: 04, 08, 12 & 24		
<u>LLLLL</u> = Part length in inches with 2 decimal places.		
Example: Part Length = 95.25" <u>LLLLL</u> = 09525		

Service Parts

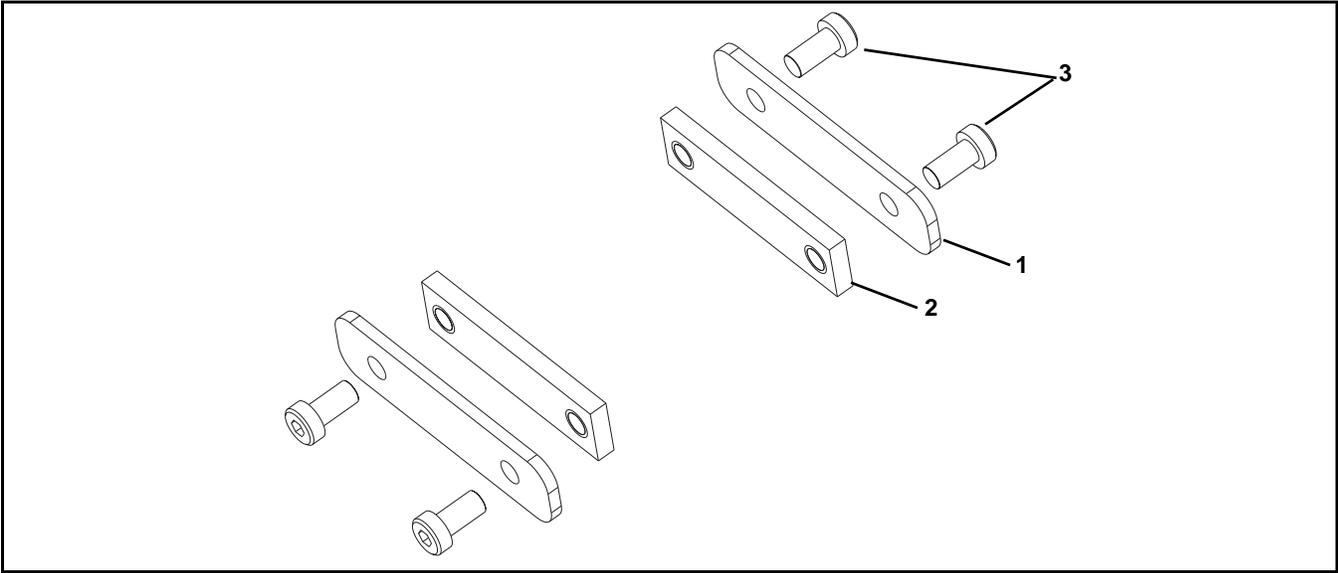
2300 Series Frame Assembly



Item	Part Number	Description
1	807-1105	Flat Head Screw, M4 - 0.70 x 10 mm
2	807-2052	UHMW Tape 1.625" for 4" Wide Conveyors
	807-2053	UHMW Tape 2.50" for 8" Wide Conveyors
	807-2054	UHMW Tape 5.75" for 12" & 24" Wide Conveyors
3	201420- <u>WW</u> - <u>LLLLL</u>	Bed Plate for Single Piece Frames
	201913- <u>WW</u> - <u>LLLLL</u>	End Bed Plate for Multi Piece Frames
	201914- <u>WW</u> - <u>LLLLL</u>	Mid Bed Plate for Multi Piece Frames
4	201914- <u>WW</u> - <u>LLLLL</u>	Bottom Bed Plate
5	202248- <u>WW</u>	Frame Cap Plate, for 4", 8", & 12" Wide Conveyors

Item	Part Number	Description
6	712071- <u>LLLLL</u>	Frame Rail for Single Piece Frames
	712073L- <u>LLLLL</u>	Left Hand End Frame Rail for Multi Piece Frames
	712073R- <u>LLLLL</u>	Right Hand End Frame Rail for Multi Piece Frames
	712036- <u>LLLLL</u>	Mid Frame Rail for Multi Piece Frames
7	240415- <u>LLLLL</u>	Center Rail for 8", 12" & 24" Wide Conveyors
8	240415-02162	Center Cross Rail for 24" Wide Conveyors
		<u>WW</u> = Conveyor width reference: 04, 08, 12 & 24
		<u>LLLLL</u> = Part length in inches with 2 decimal places.
		Example: Part Length = 95.25" <u>LLLLL</u> = 09525

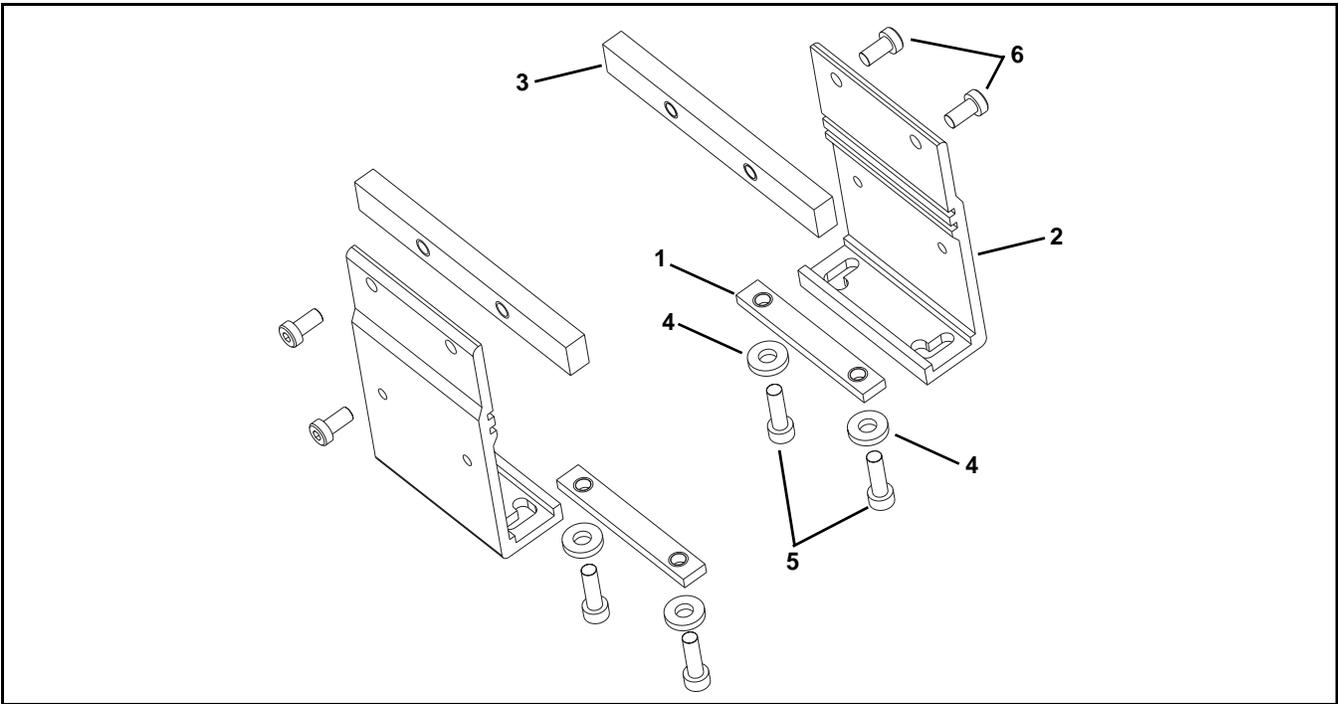
Connecting Assembly without Stand Mounts



Item	Part Number	Description
1	240859	Connecting Plate
2	240858	Connecting Bar (2200 Series Only)
	712033	Connecting Bar (2300 Series Only)

Item	Part Number	Description
3	950612M	Low Head Cap Screw, M6 - 1.00 x 12 mm

Connecting Assembly with Mounting Brackets

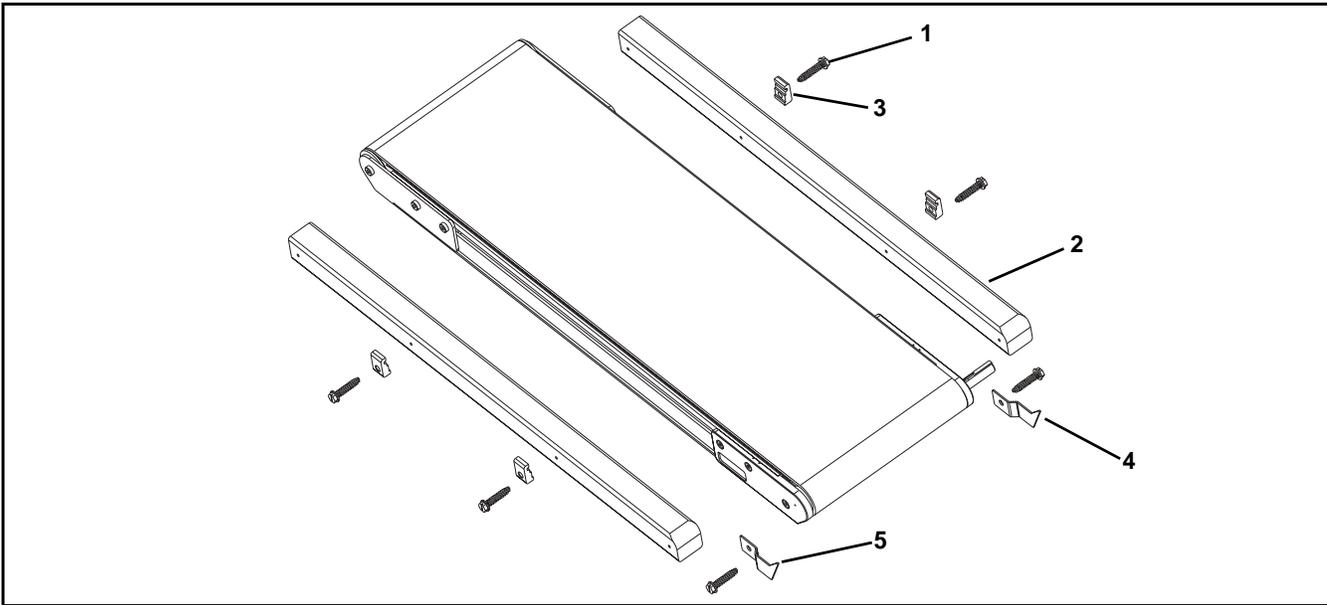


Item	Part Number	Description
1	202303	Connector Bar
2	202394	Stand Mount
3	240858	Connecting Bar (2200 Series Only)
	712033	Connecting Bar (2300 Series Only)

Item	Part Number	Description
4	605279P	Washer
5	920620M	Socket Head Screw, M6 - 1.00 x 20 mm
6	950612M	Low Head Cap Screw, M6 - 1.00 x 12 mm

Service Parts

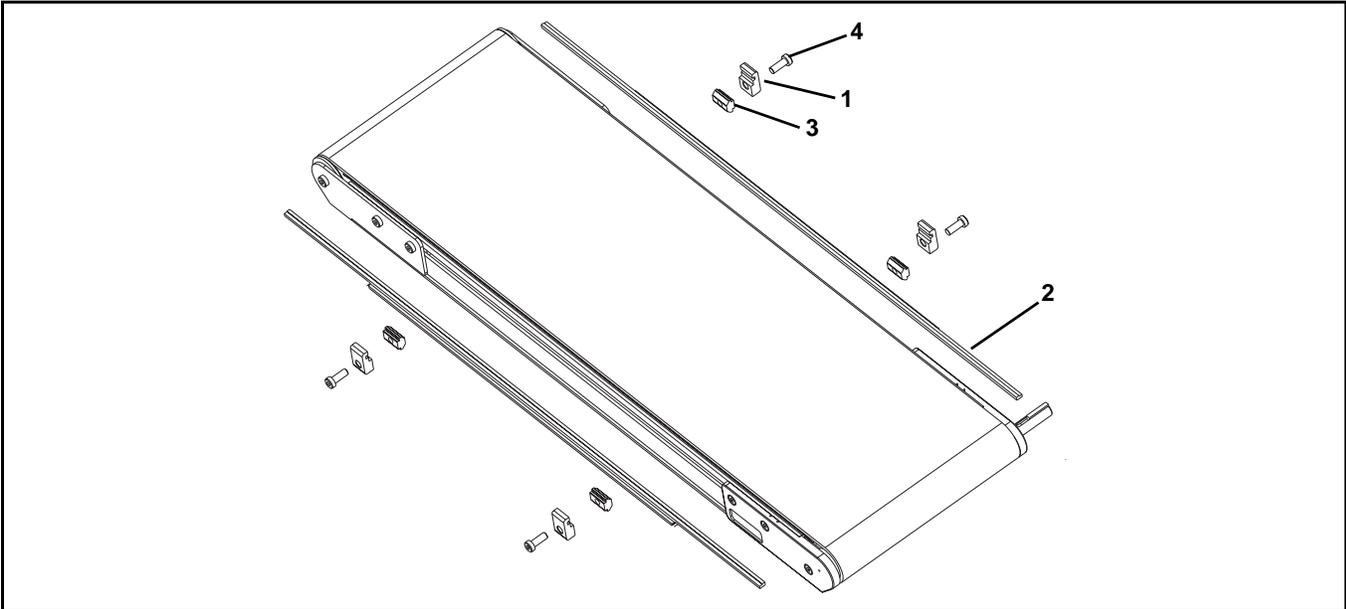
Return Wear Strip



Item	Part Number	Description
1	807-2041	Sheet Metal Screw, #14 x 1.25"
2	201915-LLLLL	Return Wear Strip
3	201941	Retaining Clip
4	202412	Sag Guard Plate Left Hand

Item	Part Number	Description
5	202413	Sag Guard Plate Right Hand
LLLLL = Part length in inches with 2 decimal places.		
Example: Part Length = 95.25" LLLLL = 09525		

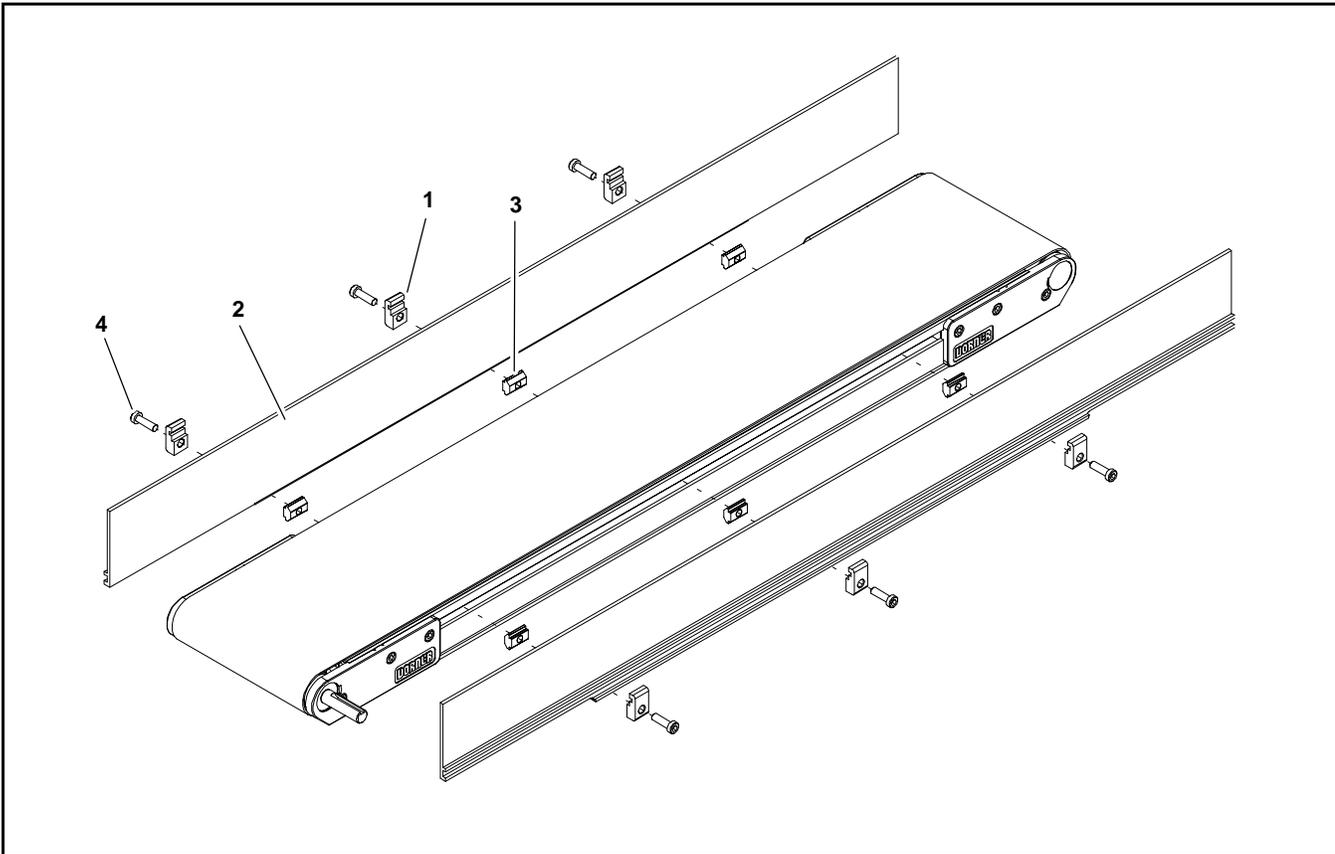
-01 Low Side



Item	Part Number	Description
1	200121	Guide Retaining Clip
2	201552-LLLLL	Low Side Guides
3	639971MK10	Single Drop-in Tee Bar (2200 Series Only) (x10)
4	950620M	Low Head Cap Screw, M6 - 1.00 x 20 mm (2200 Series Only)
	807-1937	Self-Drilling Hex Head Screw, 1/4 - 20 x 1" (2300 Series Only)
LLLLL = Part length in inches with 2 decimal places.		
Example: Part Length = 95.25" LLLLL = 09525		

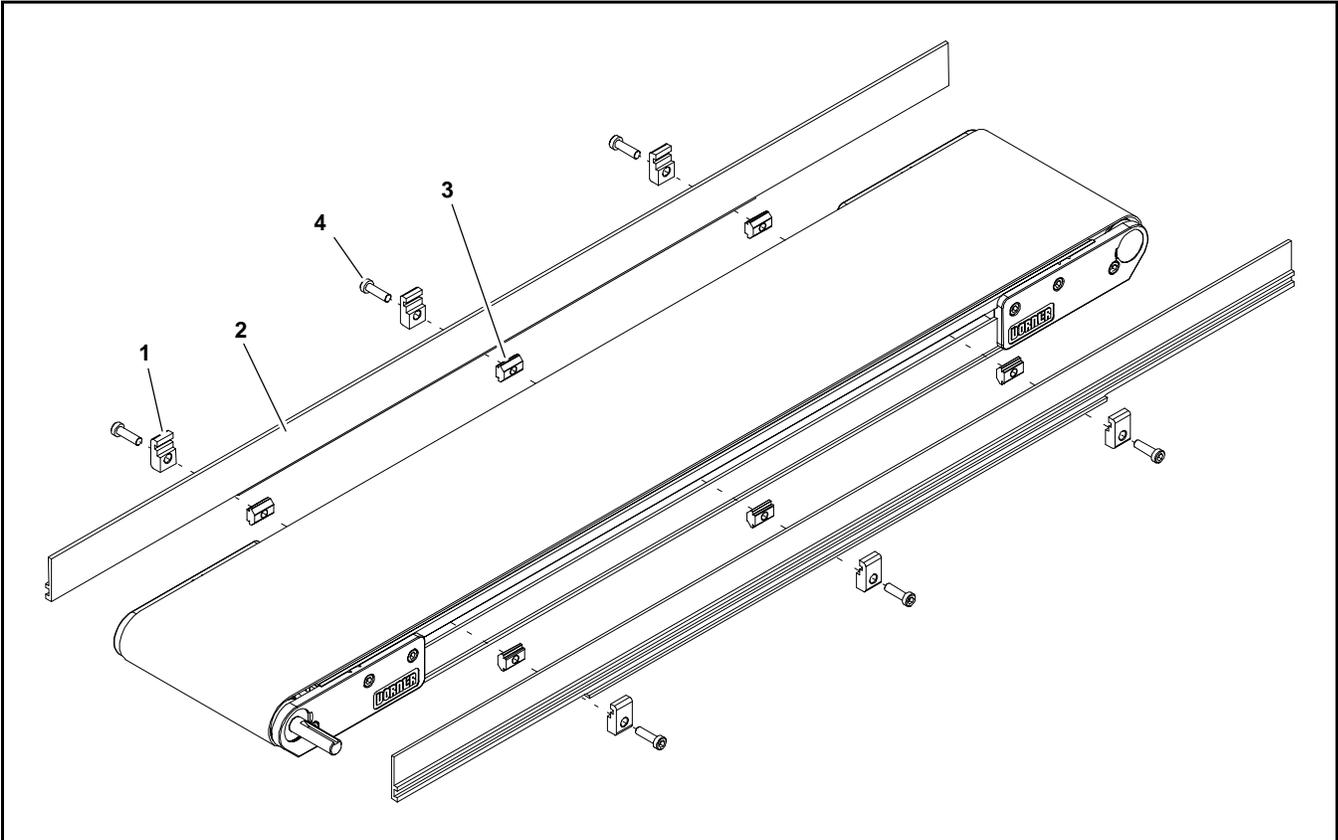
Service Parts

-04 3" (76 mm) Aluminum Side



Item	Part Number	Description
1	200121	Guide Retaining Clip
2	280403- <u>LLLLL</u>	3" (76 mm) High Side Guides
3	639971MK10	Single Drop-in Tee Bar (2200 Series Only) (x10)
4	950620M	Low Head Cap Screw, M6 x 20 mm (2200 Series)
	807-1937	Self-Drilling Hex Head Screw, 1/4-20x1" (2300 Series)
<u>LLLLL</u> = Part length in inches with 2 decimal places.		
Example: Part Length = 35.25" <u>LLLLL</u> = 03525		

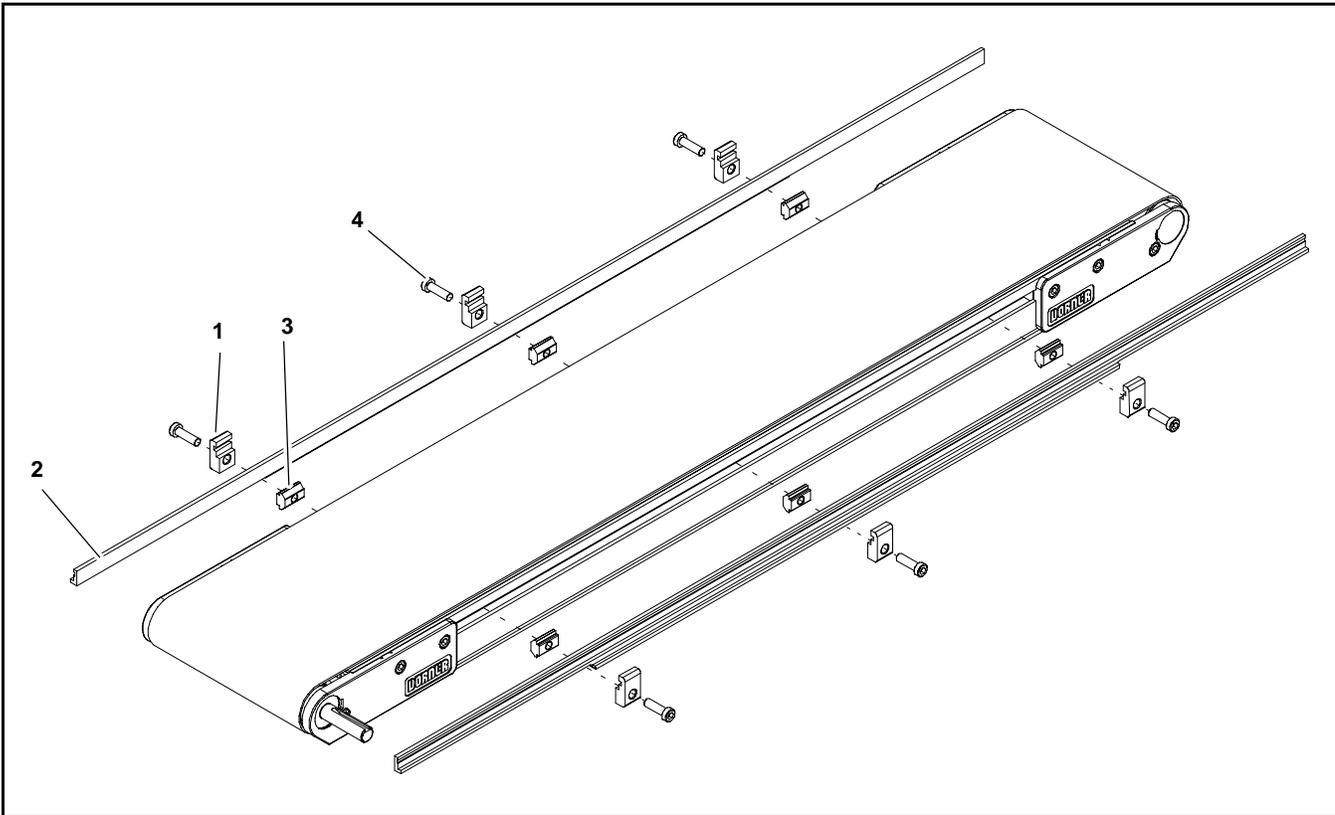
-05 1.5" (38 mm) Aluminum Side



Item	Part Number	Description
1	200121	Guide Retaining Clip
2	280503-LLLLL	1.5" (38 mm) High Side Guides
3	639971MK10	Single Drop-in Tee Bar (2200 Series Only) (x10)
4	950620M	Low Head Cap Screw, M6 x 20 mm (2200 Series)
	807-1937	Self-Drilling Hex Head Screw, 1/4-20x1" (2300 Series)
LLLLL = Part length in inches with 2 decimal places.		
Example: Part Length = 35.25" LLLLL = 03525		

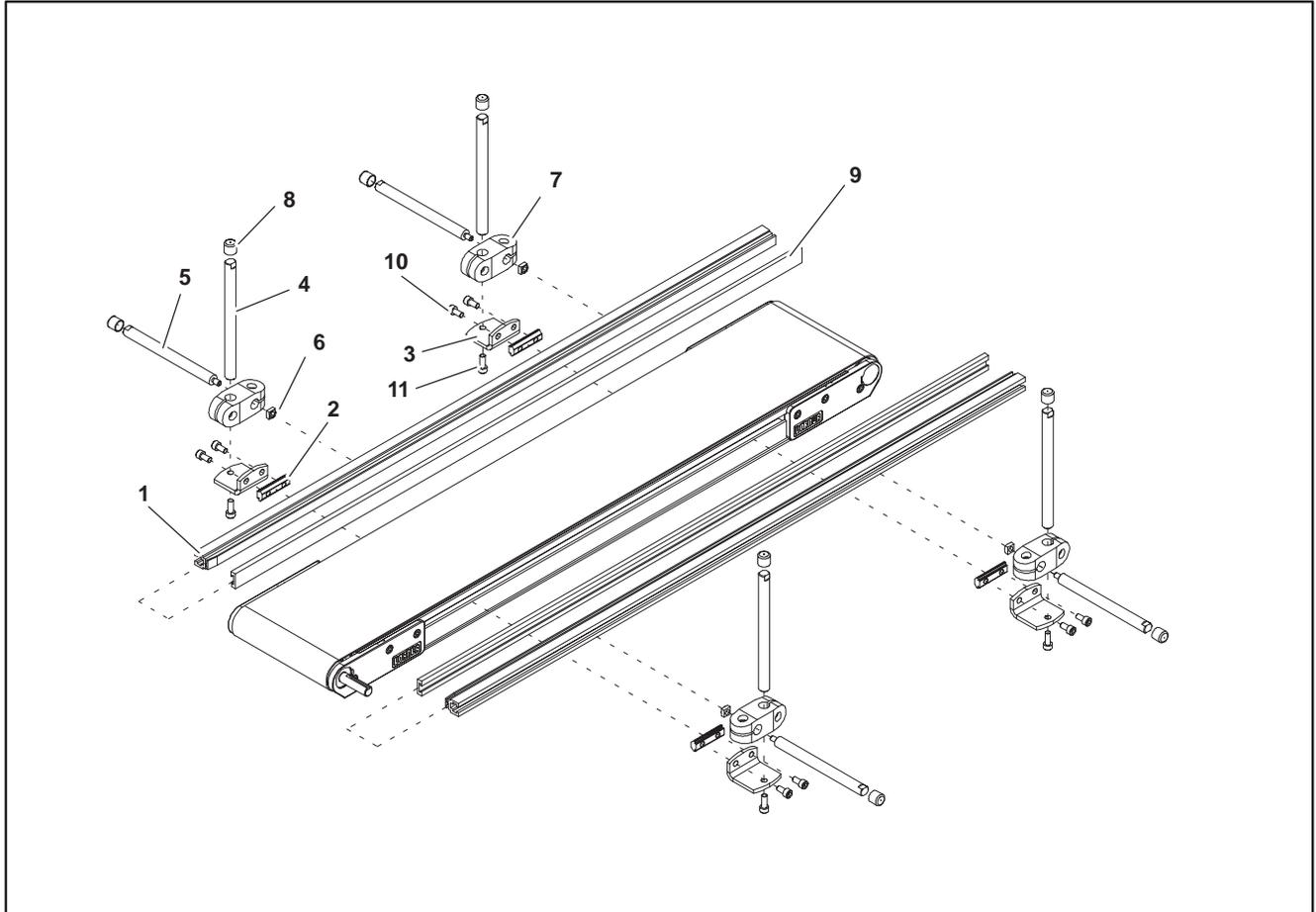
Service Parts

-09 Low to High Side



Item	Part Number	Description
1	200121	Guide Retaining Clip
2	280903-LLLLL	0.5" (13 mm) High Side Guides
3	639971MK10	Single Drop-in Tee Bar (2200 Series Only) (x10)
4	950620M	Low Head Cap Screw, M6 x 20 mm (2200 Series)
	807-1937	Self-Drilling Hex Head Screw, 1/4-20x1" (2300 Series)
LLLLL = Part length in inches with 2 decimal places.		
Example: Part Length = 35.25" LLLLL = 03525		

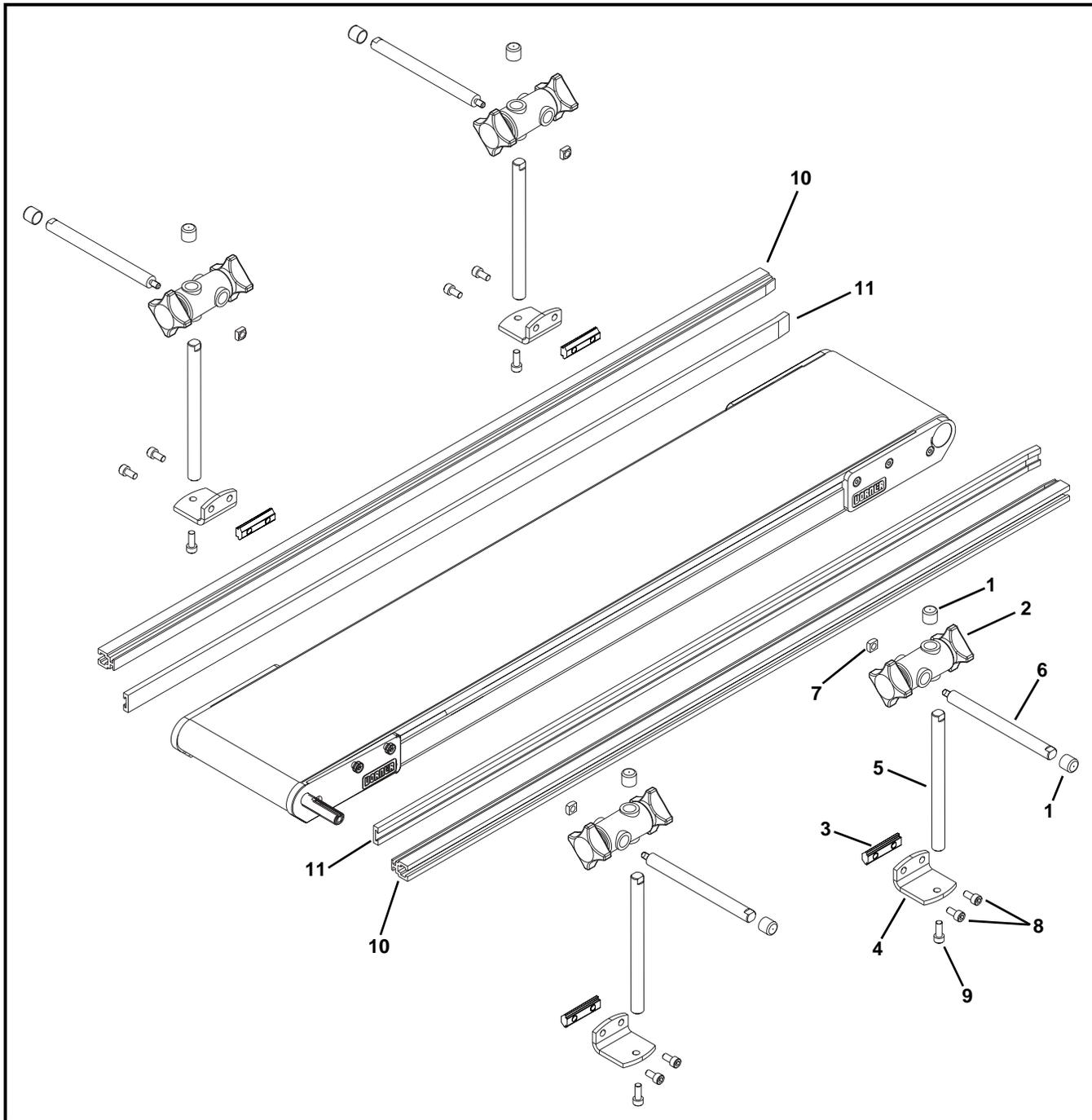
-13 Adjustable Guiding



Item	Part Number	Description
1	460063-LLLLL	Aluminum Profile Guide
2	200830M	Drop-In Tee Bar (2200 Series Only)
3	202004	Mounting Bracket
4	202027M	Guide Mounting Shaft Vertical
5	202028M	Guide Mounting Shaft Horizontal
6	674175MP	Square Nut
7	807-652	Cross Block
8	807-948	Vinyl Shaft Cap
9	614068P	Flat Extruded Guide (per foot)
10	920612M	Socket Head Screw, M6 x 12 mm (2200 Series)
	807-1937	Self-Drilling Hex Head Screw, 1/4-20x1" (2300 Series)
11	920616M	Socket Head Screw, M6 x 16 mm
LLLLL = Part length in inches with 2 decimal places.		
Example: Part Length = 35.25" LLLLL = 03525		

Service Parts

-14 Tool-Less Adjustable Guiding

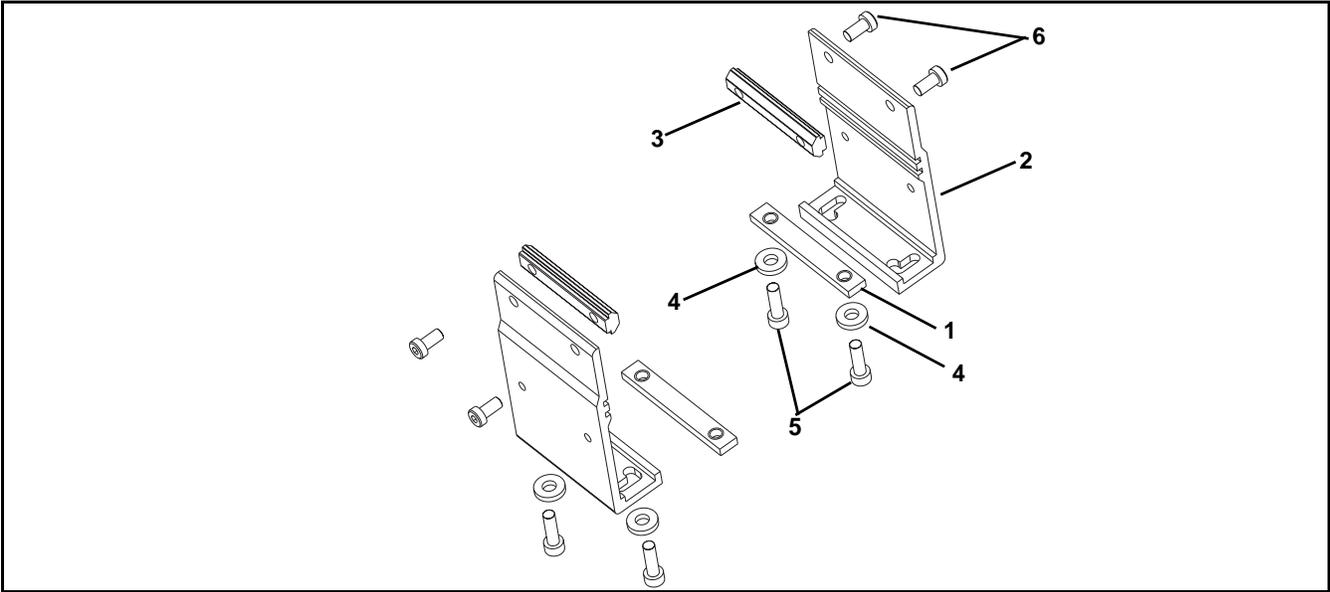


Item	Part Number	Description
1	807-948	Shaft Cap
2	807-1470	Cross Block
3	200830M	Drop-In Tee Bar (2200 Series Only)
4	202004M	Mounting Bracket
5	202027M	Vertical Mounting Guide Shaft
6	202028M	Horizontal Mounting Guide Shaft

Item	Part Number	Description
7	674175MP	Square Nut, M6-1.00
8	920612M	Socket Head Screw, M6-1.00 x 12 mm (2200 Series)
	807-1937	Self-Drilling Hex Head Screw, 1/4-20x1" (2300 Series)
9	920616M	Socket Head Screw, M6-1.00 x 16 mm
10	460063-LLLLL	Aluminum Profile Guide
11	614068P-LLLLL	Extruded Guide
LLLLL = Part length in inches with 2 decimal places.		
Example: Part Length = 95.25" LLLLL = 09525		

2200 and 2300 Series Modular Belt Conveyors

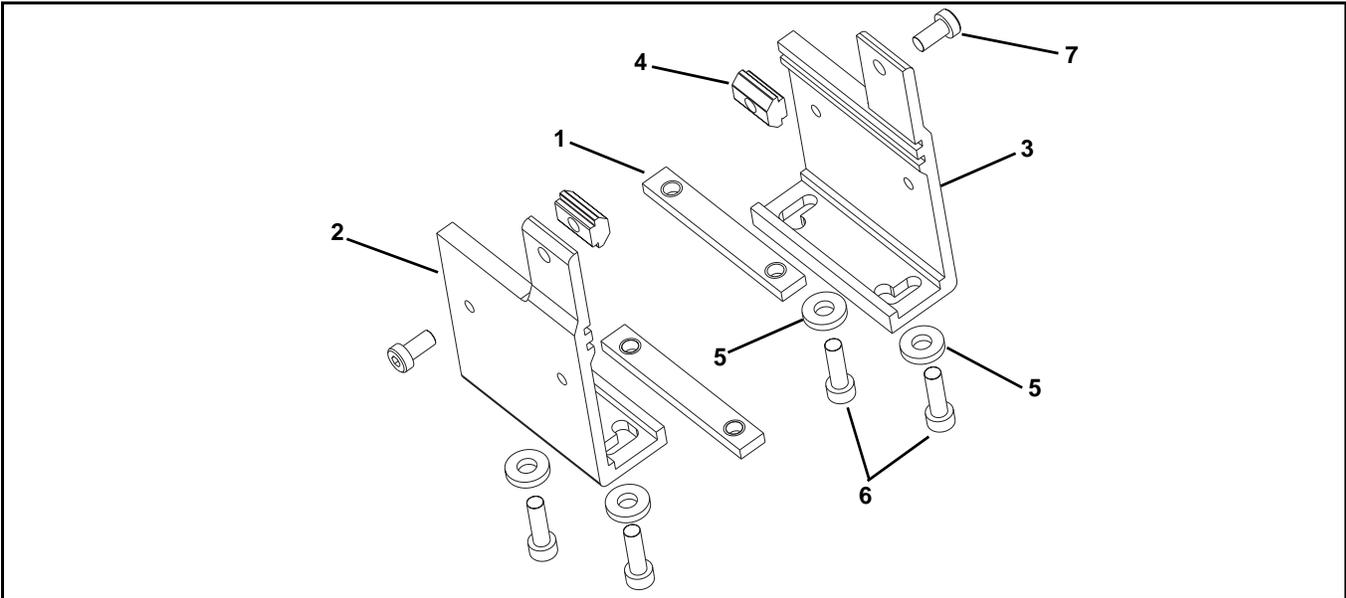
Mounting Brackets



Item	Part Number	Description
1	202303	Connector Bar
2	202394	Stand Mount
3	300150M	Drop-in Tee Bar (2200 Series Only)
4	605279P	Washer

Item	Part Number	Description
5	920620M	Socket Head Screw, M6 - 1.00 x 20 mm
6	950612M	Low Head Cap Screw, M6 - 1.00 x 12 mm (2200 Series Only)
	807-1937	Self-Drilling Hex Head Screw, 1/4 - 20 x 1" (2300 Series Only)

Mounting Brackets for 2' (610 mm) Conveyors

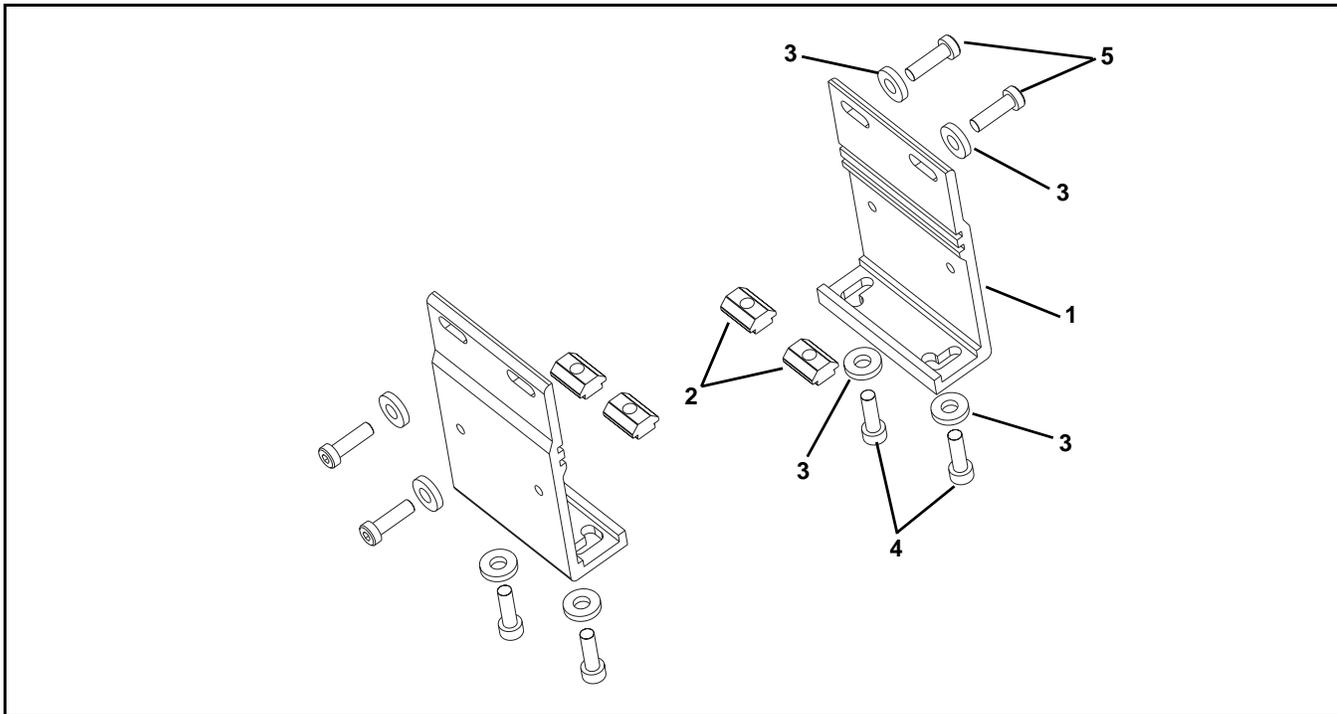


Item	Part Number	Description
1	202303	Connector Bar
2	202304	2' Stand Mount Left Hand
3	202305	2' Stand Mount Right Hand
4	639971M	Drop-in Tee Bar (2200 Series Only)

Item	Part Number	Description
5	605279P	Washer
6	920620M	Socket Head Screw, M6 - 1.00 x 20 mm
7	950612M	Low Head Cap Screw, M6 - 1.00 x 12 mm (2200 Series Only)
	807-1937	Self-Drilling Hex Head Screw, 1/4 - 20 x 1" (2300 Series Only)

Service Parts

Mounting Brackets for Short Center Drive Conveyors



Item	Part Number	Description
1	240850	Stand Mount
2	639971M	Drop-in Tee Bar
3	605279P	Washer

Item	Part Number	Description
4	920620M	Socket Head Screw, M6 - 1.00 x 20 mm
5	950625M	Low Head Cap Screw, M6 - 1.00 x 25 mm

Conveyor Belting

Belting Per Foot (305 mm)

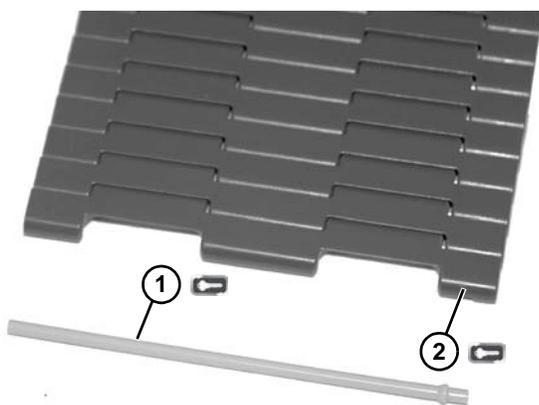


Figure 58

Item	Part Number	Description
1	807-2103	4" Belt Rod
	807-2104	8" Belt Rod
	807-2105	12" Belt Rod
	807-2106	24" Belt Rod
2	2P - <u>WW</u> /01	Belting per 1ft (305mm) <u>WW</u> =Width: 04, 08, 12, 24

Return Policy

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

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

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

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

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

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

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

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

 <p>Dorner Mfg. Corp. reserves the right to change or discontinue products without notice. All products and services are covered in accordance with our standard warranty. All rights reserved. © Dorner Mfg. Corp. 2015</p>	<p>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</p>	<p>Outside the USA: TEL 1-262-367-7600 FAX 1-262-367-5827</p>
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