



# 2200 Series Version 2 Conveyors

## Installation, Maintenance & Parts Manual



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# Introduction

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<b>IMPORTANT</b>
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<i>Some illustrations may show guards removed. DO NOT operate equipment without guards.</i>
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Upon receipt of shipment:

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

Dorner's Limited Warranty applies.

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

Dorner 2200 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.

## Warnings – General Safety

### WARNING

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

### DANGER



#### SEVERE HAZARD!

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

### WARNING



#### SEVERE HAZARD!

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

### WARNING



#### BURN HAZARD!

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

### WARNING



#### PUNCTURE HAZARD!

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

### DANGER



#### EXPLOSION HAZARD!

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

### WARNING



#### CRUSH HAZARD!

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

### WARNING



#### CRUSH HAZARD!

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

### WARNING



#### SEVERE HAZARD!

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

# Product Description

## Typical Conveyor Components 1:

- |    |                            |
|----|----------------------------|
| 1  | Conveyor                   |
| 2  | Gearmotor Mounting Package |
| 3  | Gearmotor                  |
| 4  | Guiding & Accessories      |
| 5  | Mounting Brackets          |
| 6  | Return Rollers             |
| 7  | Support Stand              |
| 8  | Variable Speed Controller  |
| 9  | Drive End                  |
| 10 | Idler/Tension End          |

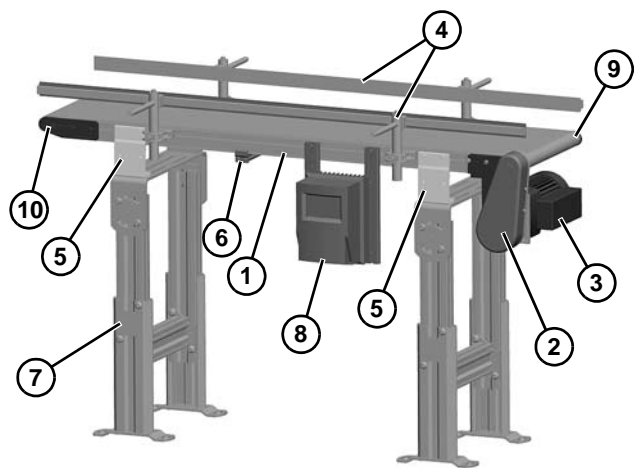


Figure 1

## Typical iDrive Control Components 2:

- |   |                           |
|---|---------------------------|
| 1 | Speed Control             |
| 2 | Directional On/Off Switch |
| 3 | Power Input Jack          |

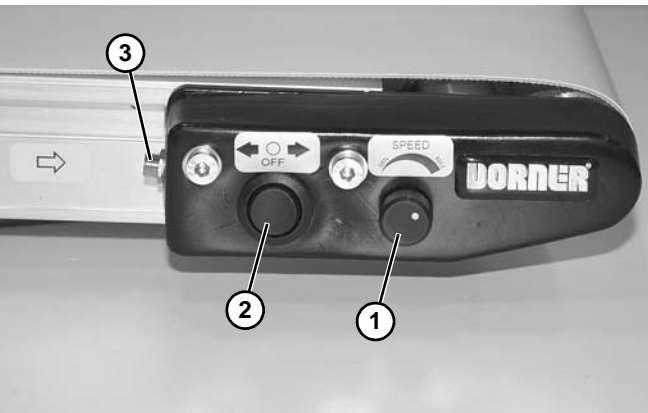
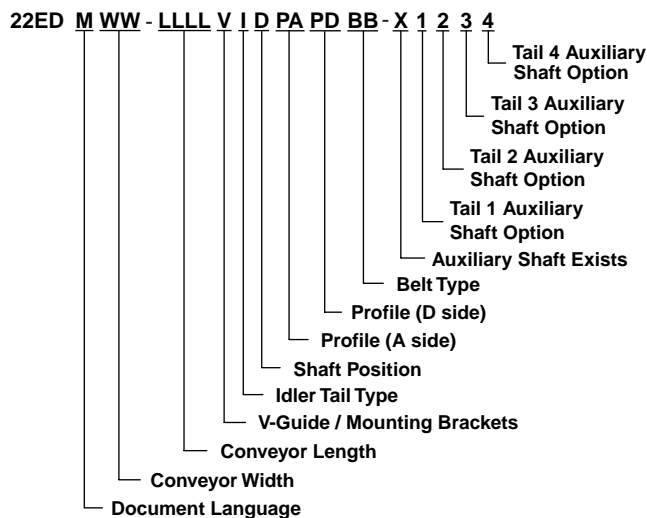


Figure 2

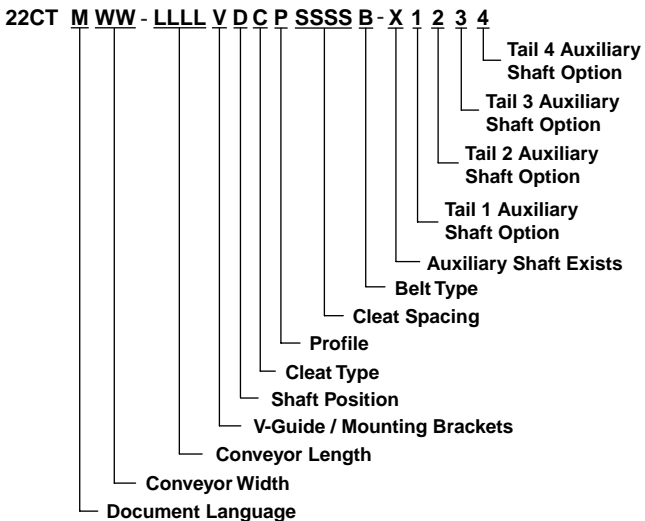
# Specifications

## Models:

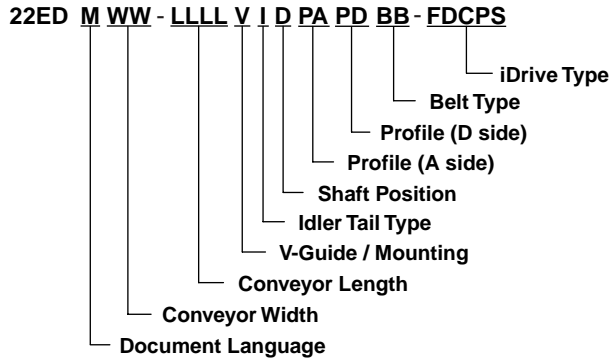
### Flat Belt 2200 Series End Drive Conveyor



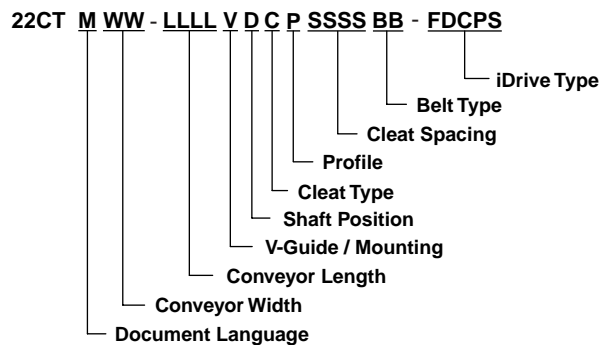
### Cleated Belt 2200 Series End Drive Conveyor



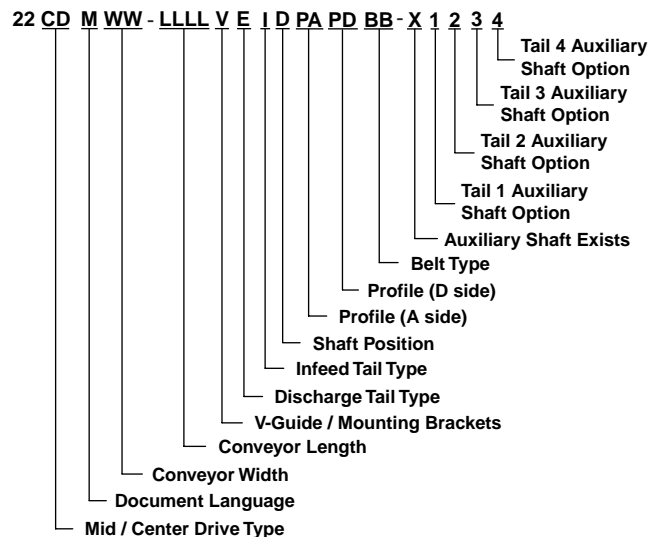
## Flat Belt 2200 Series iDrive Conveyor



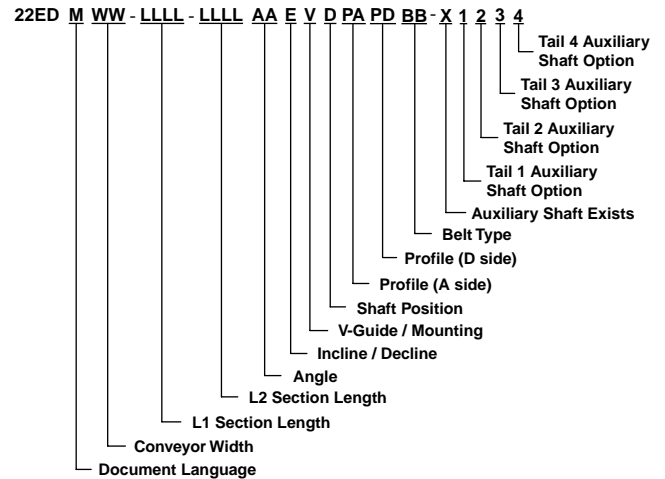
## Cleated Belt 2200 Series iDrive Conveyor



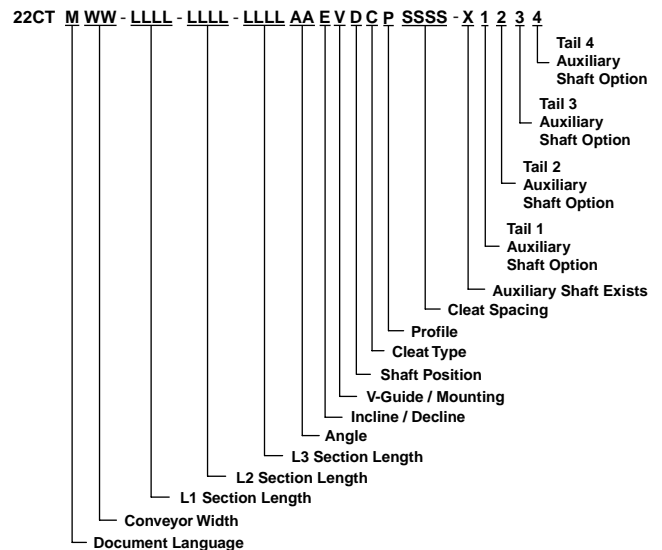
## Flat Belt 2200 Series Mid / Center Drive Conveyor



## Flat Belt 2200 Series LPZ End Drive Conveyor



## Cleated Belt 2200 Series LPZ End Drive Conveyor



\* See Ordering and Specifications Catalog for details.

# Specifications

## Conveyor Supports

### End Drive and iDrive Conveyor Supports

#### Maximum Distances:

- 1 = 24" (610 mm)
- 2 = 18" (457 mm)
- 3 = 96" (2438 mm)

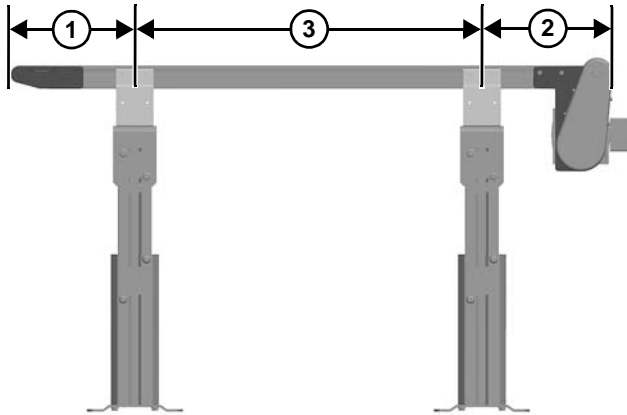


Figure 3

### Flat Belt LPZ Conveyor Supports

#### Maximum Distances:

- 1 = 18" (457 mm) (Drive End)
- 2 = 96" (2438 mm)
- 3 = 24" (610 mm) (Idler End)

#### Maximum Angle:

- 4 = 5 to 20 degrees

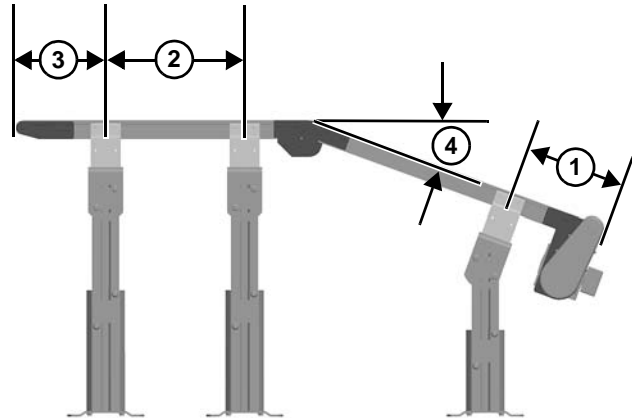


Figure 5

### Mid / Center Drive Conveyor Supports

#### Maximum Distances:

- 1 = 24" (610 mm) (Idler End)
- 2 = 96" (2438 mm)\*\*

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

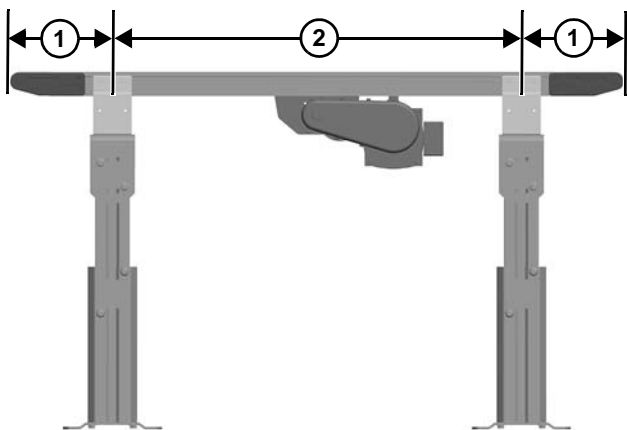


Figure 4

### Cleated Belt LPZ Conveyor Supports

#### Maximum Distances:

- 1 = 18" (457 mm) (Drive End)
- 2 = 96" (2438 mm)
- 3 = 24" (610 mm) (Idler End)

#### Maximum Angle:

- 4 = 30 to 60 degrees

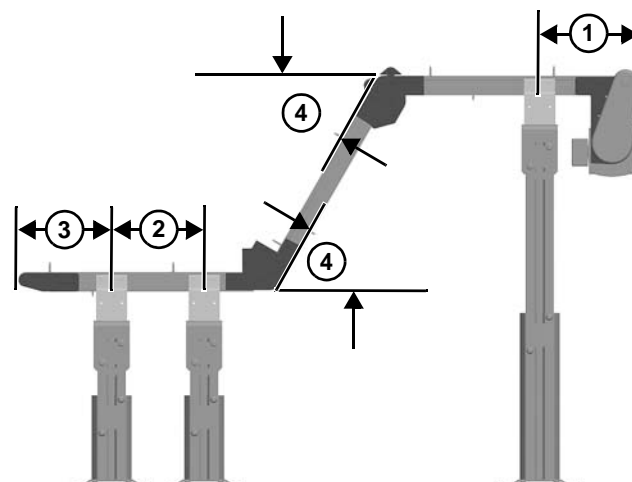


Figure 6



## End/Mid Drive Conveyor Specifications

Conveyor Width Reference (WW)	02	03	04	05	06	08	10
Conveyor Belt Width	1.75" (44 mm)	2.75" (70 mm)	3.75" (95 mm)	5" (127 mm)	6" (152 mm)	8" (203 mm)	10" (254 mm)
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)
End Drive Conveyor Startup Torque**	2 in-lb (0.2 Nm)	3 in-lb (0.3 Nm)	4 in-lb (0.5 Nm)	6 in-lb (0.7 Nm)	8 in-lb (0.9 Nm)	10 in-lb (1.1 Nm)	12 in-lb (1.4 Nm)
Mid Drive Conveyor Startup Torque**	4 in-lb (0.5 Nm)	5 in-lb (0.6 Nm)	6 in-lb (0.7 Nm)	8 in-lb (0.9 Nm)	10 in-lb (1.1 Nm)	12 in-lb (1.4 Nm)	14 in-lb (1.6 Nm)
End Drive Conveyor Length Reference (LLLL)	0150 to 1800 in 0001 increments						
Mid Drive Conveyor Length Reference (LLLL)	0200 to 2400 in 0001 increments						
End Drive Conveyor Length	1.50 ft (457 mm) to 18 ft (5486 mm) in 0.12" (0.31 mm) increments						
Mid Drive Conveyor Length	2.00 ft (610 mm) to 24 ft (7315 mm) in 0.12" (0.31 mm) increments						
Belt Travel	4.0" (88 mm) per revolution of pulley						
Maximum Belt Speed*	264 ft/minute (80.5 m/minute)						
Belt Take-up	0.38" (10 mm) of stroke = 0.75" (19 mm) of belt take-up						

Conveyor Width Reference (WW)	12	14	16	18	20	22	24
Conveyor Belt Width	12" (305 mm)	14" (356 mm)	16" (406 mm)	18" (457 mm)	20" (508 mm)	22" (559 mm)	24" (609 mm)
Maximum Conveyor Load* (See NOTE Below)	80 lb (36 kg)	80 lb (36 kg)	80 lb (36 kg)	80 lb (36 kg)	80 lb (36 kg)	80 lb (36 kg)	80 lb (36 kg)
End Drive Conveyor Startup Torque**	13 in-lb (1.5 Nm)	14 in-lb (1.6 Nm)	15 in-lb (1.7 Nm)	16 in-lb (1.8 Nm)	17 in-lb (1.9 Nm)	18 in-lb (2.0 Nm)	20 in-lb (2.3 Nm)
Mid Drive Conveyor Startup Torque**	15 in-lb (1.7 Nm)	16 in-lb (1.8 Nm)	17 in-lb (1.9 Nm)	18 in-lb (2.0 Nm)	19 in-lb (2.1 Nm)	20 in-lb (2.3 Nm)	22 in-lb (2.5 Nm)
End Drive Conveyor Length Reference (LLLL)	0150 to 1800 in 0001 increments						
Mid Drive Conveyor Length Reference (LLLL)	0200 to 2400 in 0001 increments						
End Drive Conveyor Length	1.50 ft (457 mm) to 18 ft (5486 mm) in 0.12" (0.31 mm) increments						
Mid Drive Conveyor Length	2.00 ft (610 mm) to 24 ft (7315 mm) in 0.12" (0.31 mm) increments						
Belt Travel	4.0" (88 mm) per revolution of pulley						
Maximum Belt Speed*	264 ft/minute (80.5 m/minute)						
Belt Take-up	0.38" (10 mm) of stroke = 0.75" (19 mm) of belt take-up						

\* See Ordering and Specifications Catalog for details.

\*\* Conveyor Startup Torque dependent on belt type and conveyor length.

# Specifications

## Center Drive Conveyor Specifications

Conveyor Width Reference (WW)	02	03	04	05	06	08	10
Conveyor Belt Width	1.75" (44 mm)	2.75" (70 mm)	3.75" (95 mm)	5" (127 mm)	6" (152 mm)	8" (203 mm)	10" (254 mm)
Maximum Conveyor Load* (See NOTE Below)	40 lb (18 kg)	50 lb (23 kg)	60 lb (27 kg)	75 lb (34 kg)	90 lb (41 kg)	105 lb (47 kg)	120 lb (54 kg)
Conveyor Startup Torque**	9 in-lb (1.0 Nm)	10 in-lb (1.1 Nm)	11 in-lb (1.2 Nm)	12 in-lb (1.4 Nm)	15 in-lb (1.7 Nm)	20 in-lb (2.3 Nm)	23 in-lb (2.6 Nm)
Conveyor Length Reference (LLLL)	0200 to 2400 in 0001 increments						
Conveyor Length	2.00 ft (457 mm) to 24 ft (7315 mm) in 0.12" (0.31 mm) increments						
Belt Travel	4.2" (107 mm) per revolution of pulley						
Maximum Belt Speed*	235 ft/minute (72 m/minute)						
Belt Take-up	1" (25 mm) of stroke = 2" (51 mm) of belt take-up (Center Drive Conveyors Only)						

Conveyor Width Reference (WW)	12	14	16	18	20	22	24
Conveyor Belt Width	12" (305 mm)	14" (356 mm)	16" (406 mm)	18" (457 mm)	20" (508 mm)	22" (559 mm)	24" (609 mm)
Maximum Conveyor Load* (See NOTE Below)	120 lb (54 kg)	120 lb (54 kg)	120 lb (54 kg)	120 lb (54 kg)	120 lb (54 kg)	120 lb (54 kg)	120 lb (54 kg)
Conveyor Startup Torque**	25 in-lb (2.8 Nm)	26 in-lb (2.9 Nm)	28 in-lb (3.2 Nm)	30 in-lb (3.4 Nm)	32 in-lb (3.6 Nm)	34 in-lb (3.8 Nm)	35 in-lb (4.0 Nm)
Conveyor Length Reference (LLLL)	0200 to 2400 in 0001 increments						
Conveyor Length	2.00 ft (457 mm) to 24 ft (7315 mm) in 0.12" (0.31 mm) increments						
Belt Travel	4.2" (107 mm) per revolution of pulley						
Maximum Belt Speed*	235 ft/minute (72 m/minute)						
Belt Take-up	1" (25 mm) of stroke = 2" (51 mm) of belt take-up (Center Drive Conveyors Only)						

\* See Ordering and Specifications Catalog for details.

\*\* Conveyor Startup Torque dependent on belt type and conveyor length.

## Flat Belt LPZ Conveyor Specifications

Conveyor Width Reference (WW)	02	03	04	05	06	08	10
Conveyor Belt Width	1.75" (44 mm)	2.75" (70 mm)	3.75" (95 mm)	5" (127 mm)	6" (152 mm)	8" (203 mm)	10" (254 mm)
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)
Conveyor Startup Torque**	4 in-lb (0.5 Nm)	5 in-lb (0.6 Nm)	6 in-lb (0.7 Nm)	8 in-lb (0.9 Nm)	10 in-lb (1.1 Nm)	12 in-lb (1.4 Nm)	14 in-lb (1.6 Nm)
Conveyor Length Reference (LLL)	0200 to 1000 in 0001 increments						
Conveyor Section Length	2.00 ft (610 mm) to 10.00 ft (3048 mm) in 0.12" (0.31 mm) increments						
Belt Travel	4.0" (88 mm) per revolution of pulley						
Maximum Belt Speed*	264 ft/minute (80.5 m/minute)						
Belt Take-up	0.38" (10 mm) of stroke = 0.75" (19 mm) of belt take-up						

Conveyor Width Reference (WW)	12	14	16	18	20	22	24
Conveyor Belt Width	12" (305 mm)	14" (356 mm)	16" (406 mm)	18" (457 mm)	20" (508 mm)	22" (559 mm)	24" (609 mm)
Maximum Conveyor Load* (See NOTE Below)	80 lb (36 kg)	80 lb (36 kg)	80 lb (36 kg)	80 lb (36 kg)	80 lb (36 kg)	80 lb (36 kg)	80 lb (36 kg)
Conveyor Startup Torque**	15 in-lb (1.7 Nm)	16 in-lb (1.8 Nm)	17 in-lb (1.9 Nm)	18 in-lb (2.0 Nm)	19 in-lb (2.1 Nm)	20 in-lb (2.3 Nm)	22 in-lb (2.5 Nm)
Conveyor Length Reference (LLL)	0200 to 1000 in 0001 increments						
Conveyor Section Length	2.00 ft (610 mm) to 10.00 ft (3048 mm) in 0.12" (0.31 mm) increments						
Belt Travel	4.0" (88 mm) per revolution of pulley						
Maximum Belt Speed*	264 ft/minute (80.5 m/minute)						
Belt Take-up	0.38" (10 mm) of stroke = 0.75" (19 mm) of belt take-up						

\* See Ordering and Specifications Catalog for details.

\*\* Conveyor Startup Torque dependent on belt type and conveyor length.

# Specifications

## Cleated Belt LPZ Conveyor Specifications

Conveyor Width Reference (WW)	02	03	04	05	06	08	10
Conveyor Belt Width	1.75" (44 mm)	2.75" (70 mm)	3.75" (95 mm)	5" (127 mm)	6" (152 mm)	8" (203 mm)	10" (254 mm)
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)
Conveyor Startup Torque**	4 in-lb (0.5 Nm)	5 in-lb (0.6 Nm)	6 in-lb (0.7 Nm)	8 in-lb (0.9 Nm)	10 in-lb (1.1 Nm)	12 in-lb (1.4 Nm)	14 in-lb (1.6 Nm)
Conveyor Length Reference (LLL)	0200 to 1000 in 0001 increments						
Conveyor Section Length	2.00 ft (610 mm) to 10.00 ft (3048 mm) in 0.12" (0.31 mm) increments						
Total Conveyor Length							
Belt Travel	4.0" (88 mm) per revolution of pulley						
Maximum Belt Speed*	264 ft/minute (80.5 m/minute)						
Belt Take-up	0.38" (10 mm) of stroke = 0.75" (19 mm) of belt take-up						

Conveyor Width Reference (WW)	12	14	16	18	20	22	24
Conveyor Belt Width	12" (305 mm)	14" (356 mm)	16" (406 mm)	18" (457 mm)	20" (508 mm)	22" (559 mm)	24" (609 mm)
Maximum Conveyor Load* (See NOTE Below)	80 lb (36 kg)	80 lb (36 kg)	80 lb (36 kg)	80 lb (36 kg)	80 lb (36 kg)	80 lb (36 kg)	80 lb (36 kg)
Conveyor Startup Torque**	15 in-lb (1.7 Nm)	16 in-lb (1.8 Nm)	17 in-lb (1.9 Nm)	18 in-lb (2.0 Nm)	19 in-lb (2.1 Nm)	20 in-lb (2.3 Nm)	22 in-lb (2.5 Nm)
Conveyor Length Reference (LLL)	0200 to 1000 in 0001 increments						
Conveyor Section Length	2.00 ft (610 mm) to 10.00 ft (3048 mm) in 0.12" (0.31 mm) increments						
Total Conveyor Length							
Belt Travel	4.0" (88 mm) per revolution of pulley						
Maximum Belt Speed*	264 ft/minute (80.5 m/minute)						
Belt Take-up	0.38" (10 mm) of stroke = 0.75" (19 mm) of belt take-up						

\* See Ordering and Specifications Catalog for details.

\*\* Conveyor Startup Torque dependent on belt type and conveyor length.

## iDrive Conveyor Specifications

Conveyor Width Reference (WWW)	02	03	04	05	06	08
Conveyor Belt Width	1.75" (44 mm)	2.75" (70 mm)	3.75" (95 mm)	5" (127 mm)	6" (152 mm)	8" (203 mm)
Maximum Conveyor Load	See iDrive Load Capacity Chart Below					
Conveyor Length Reference (LLLL)	0150 to 0800 in 0001 increments					
Conveyor Length	1.50 ft (457 mm) to 8 ft (2438 mm) in 0.12" (0.31 mm) increments					
Belt Travel	4.0" (88 mm) per revolution of spindle					
Maximum Belt Speed*	70 ft/minute (21 m/minute)					
Belt Take-up	0.38" (10 mm) of stroke = 0.75" (19 mm) of belt take-up					

Conveyor Width Reference (WWW)	10	12	14	16	18
Conveyor Belt Width	10" (254 mm)	12" (305 mm)	14" (356 mm)	16" (406 mm)	18" (457 mm)
Maximum Conveyor Load	See iDrive Load Capacity Chart Below				
Conveyor Length Reference (LLLL)	0150 to 0800 in 0001 increments				
Conveyor Length	1.50 ft (457 mm) to 8 ft (2438 mm) in 0.12" (0.31 mm) increments				
Belt Travel	4.0" (88 mm) per revolution of spindle				
Maximum Belt Speed*	70 ft/minute (21 m/minute)				
Belt Take-up	0.38" (10 mm) of stroke = 0.75" (19 mm) of belt take-up				

\* See Ordering and Specifications Catalog for details.

## iDrive Motor Specifications

Output Power	25 watt	25 watt
Motor Voltage	24 volt DC, 0.8 amp	24 volt DC, 0.8 amp
Transformer Voltage	100-240 VAC, 50/60 Hz	100-240 VAC, 50/60 Hz
Gearmotor Ratio	23:1	66:1
Motor Type	Brushless DC	Brushless DC
Belt Speeds	7-70 Ft./Min., 5-50 Ft./Min.	2.4-24 Ft./Min., 1.7-17 Ft./Min
Duty Cycle	Non-Continuous Duty	Non-Continuous Duty
Index Capacity	Up to 30 per Minute	Up to 30 per Minute

# Specifications

## iDrive Load Capacity (lbs)

		7 - 70 Ft./Min. FOR BELT TYPE 09						
		LENGTH						
		2	3	4	5	6	7	8
WIDTH	2	13	13	13	13	12	12	0
	3	13	13	13	13	12	12	0
	4	11	11	11	11	11	10	0
	5	11	11	10	10	10	10	0
	6	10	10	10	10	9	9	0
	8	9	9	9	8	8	8	0
	10-18	0	0	0	0	0	0	0

		5 - 50 Ft./Min. FOR BELT TYPE 09						
		LENGTH						
		2	3	4	5	6	7	8
WIDTH	2	24	24	24	24	24	24	0
	3	24	24	24	24	24	24	0
	4	22	22	22	22	22	22	0
	5	22	22	22	21	21	21	0
	6	21	21	21	21	21	20	0
	8	20	20	20	20	19	19	0
	10	17	17	17	16	16	0	0
	12	15	15	14	0	0	0	0
	14-18	0	0	0	0	0	0	0

		2.4 - 24 Ft./Min. FOR BELT TYPE 09						
		LENGTH						
		2	3	4	5	6	7	8
WIDTH	2	25	25	25	25	25	25	25
	3	25	25	25	25	25	25	25
	4	25	25	25	25	25	25	25
	5	25	25	25	25	25	25	25
	6	25	25	25	25	25	25	25
	8	25	25	25	25	25	25	25
	10	25	25	25	25	25	0	0
	12	25	25	25	0	0	0	0
	14	25	25	25	0	0	0	0
	16	25	25	25	0	0	0	0
	18	25	25	0	0	0	0	0

		1.7 - 17 Ft./Min. FOR BELT TYPE 09						
		LENGTH						
		2	3	4	5	6	7	8
WIDTH	2	25	25	25	25	25	25	25
	3	25	25	25	25	25	25	25
	4	25	25	25	25	25	25	25
	5	25	25	25	25	25	25	25
	6	25	25	25	25	25	25	25
	8	25	25	25	25	25	25	25
	10	25	25	25	25	25	0	0
	12	25	25	25	0	0	0	0
	14	25	25	25	0	0	0	0
	16	25	25	25	0	0	0	0
	18	25	25	0	0	0	0	0

# Specifications

## iDrive Load Capacity (lbs) (continued)

		7 - 70 Ft./Min. FOR DOUBLE CARCASS BELT TYPE 05						
		LENGTH						
		2	3	4	5	6	7	8
WIDTH	2	9	9	8	8	8	8	0
	3	9	9	5	8	8	8	0
	4	7	7	7	7	6	6	0
	5	6	6	6	6	6	6	0
	6	6	6	6	6	5	5	0
	8-18	0	0	0	0	0	0	0

		5 - 50 Ft./Min. FOR DOUBLE CARCASS BELT TYPE 05						
		LENGTH						
		2	3	4	5	6	7	8
WIDTH	2	20	20	20	20	20	20	0
	3	20	20	20	20	20	20	0
	4	18	18	18	18	18	18	0
	5	18	18	18	17	17	17	0
	6	17	17	17	17	17	17	0
	8	16	16	16	16	15	15	0
	10	13	13	13	12	12	0	0
	12	11	11	10	0	0	0	0
	14-18	0	0	0	0	0	0	0

		2.4 - 24 Ft./Min. FOR DOUBLE CARCASS BELT TYPE 05						
		LENGTH						
		2	3	4	5	6	7	8
WIDTH	2	25	25	25	25	25	25	25
	3	25	25	25	25	25	25	25
	4	25	25	25	25	25	25	25
	5	25	25	25	25	25	25	25
	6	25	25	25	25	25	25	25
	8	25	25	25	25	25	25	25
	10	25	25	25	25	25	0	0
	12	25	25	25	25	0	0	0
	14-18	25	25	25	25	0	0	0

		1.7 - 17 Ft./Min. FOR DOUBLE CARCASS BELT TYPE 05						
		LENGTH						
		2	3	4	5	6	7	8
WIDTH	2	25	25	25	25	25	25	25
	3	25	25	25	25	25	25	25
	4	25	25	25	25	25	25	25
	5	25	25	25	25	25	25	25
	6	25	25	25	25	25	25	25
	8	25	25	25	25	25	25	25
	10	25	25	25	25	25	0	0
	12	25	25	25	0	0	0	0
	14-18	25	25	0	0	0	0	0

# Specifications

## iDrive Load Capacity (lbs) (continued)

		7 - 70 Ft./Min. FOR SINGLE PLY BELT TYPES 19, 53, 72, 73 AND 76						
		LENGTH						
		2	3	4	5	6	7	8
WIDTH	2	19	19	19	19	19	19	0
	3	19	19	19	19	19	19	0
	4	17	17	17	17	17	17	0
	5	17	17	17	17	17	16	0
	6	16	16	16	16	16	16	0
	8	15	15	15	15	15	15	0
	10	12	12	12	12	12	0	0
	12	10	10	10	0	0	0	0
14-18		0	0	0	0	0	0	0

		5 - 50 Ft./Min. FOR SINGLE PLY BELT TYPES 19, 53, 72, 73 AND 76						
		LENGTH						
		2	3	4	5	6	7	8
WIDTH	2	25	25	25	25	25	25	25
	3	25	25	25	25	25	25	25
	4	25	25	25	25	25	25	25
	5	25	25	25	25	25	25	25
	6	25	25	25	25	25	25	25
	8	25	25	25	25	25	25	25
	10	23	23	23	23	23	0	0
	12	21	21	21	0	0	0	0
14-18		16	16	0	0	0	0	0

		2.4 - 24 Ft./Min. FOR SINGLE PLY BELT TYPES 19, 53, 72, 73 AND 76						
		LENGTH						
		2	3	4	5	6	7	8
WIDTH	2	25	25	25	25	25	25	25
	3	25	25	25	25	25	25	25
	4	25	25	25	25	25	25	25
	5	25	25	25	25	25	25	25
	6	25	25	25	25	25	25	25
	8	25	25	25	25	25	25	25
	10	25	25	25	25	25	0	0
	12	25	25	25	0	0	0	0
14-18		25	25	0	0	0	0	0

		1.7 - 17 Ft./Min. FOR SINGLE PLY BELT TYPES 19, 53, 72, 73 AND 76						
		LENGTH						
		2	3	4	5	6	7	8
WIDTH	2	25	25	25	25	25	25	25
	3	25	25	25	25	25	25	25
	4	25	25	25	25	25	25	25
	5	25	25	25	25	25	25	25
	6	25	25	25	25	25	25	25
	8	25	25	25	25	25	25	25
	10	25	25	25	25	25	0	0
	12	25	25	25	0	0	0	0
14-18		25	25	0	0	0	0	0



## iDrive Load Capacity (lbs) (continued)

		7 - 70 Ft./Min. FOR ALL OTHER BELT TYPES						
		LENGTH						
		2	3	4	5	6	7	8
WIDTH	2	6	5	5	5	5	5	0
	3	6	5	5	5	5	5	0
	4-18	0	0	0	0	0	0	0

		5 - 50 Ft./Min. FOR ALL OTHER BELT TYPES						
		LENGTH						
		2	3	4	5	6	7	8
WIDTH	2	17	17	17	17	16	16	0
	3	17	17	17	17	16	16	0
	4	15	15	15	15	15	14	0
	5	15	15	14	14	14	14	0
	6	14	14	14	14	13	13	0
	8	13	13	13	12	12	12	0
	10	10	10	9	9	9	0	0
	12-18	0	0	0	0	0	0	0

		2.4 - 24 Ft./Min. FOR ALL OTHER BELT TYPES						
		LENGTH						
		2	3	4	5	6	7	8
WIDTH	2	25	25	25	25	25	25	25
	3	25	25	25	25	25	25	25
	4	25	25	25	25	25	25	25
	5	25	25	25	25	25	25	25
	6	25	25	25	25	25	25	25
	8	25	25	25	25	25	25	25
	10	25	25	25	25	25	0	0
	12	25	25	25	0	0	0	0
	14-18	25	25	0	0	0	0	0

		1.7 - 17 Ft./Min. FOR ALL OTHER BELT TYPES						
		LENGTH						
		2	3	4	5	6	7	8
WIDTH	2	25	25	25	25	25	25	25
	3	25	25	25	25	25	25	25
	4	25	25	25	25	25	25	25
	5	25	25	25	25	25	25	25
	6	25	25	25	25	25	25	25
	8	25	25	25	25	25	25	25
	10	25	25	25	25	25	0	0
	12	25	25	25	0	0	0	0
	14-18	25	25	0	0	0	0	0

# Specifications

## iDrive Load Capacity (lbs) (continued)

		2.4 - 24 Ft./Min. FOR NOSE BAR BELTS						
		LENGTH						
		2	3	4	5	6	7	8
WIDTH	2	20	20	20	20	20	20	0
	3	20	20	20	20	20	20	0
	4	18	18	18	18	18	18	0
	5	18	18	18	18	18	17	0
	6	17	17	17	17	17	17	0
	8	16	16	16	16	16	15	0
	10	13	13	13	12	12	0	0
	12	11	11	11	0	0	0	0
14-18		0	0	0	0	0	0	0

		1.7 - 17 Ft./Min. FOR NOSE BAR BELTS						
		LENGTH						
		2	3	4	5	6	7	8
WIDTH	2	25	25	25	25	25	25	0
	3	25	25	25	25	25	25	0
	4	25	25	25	25	25	25	0
	5	25	25	25	25	25	25	0
	6	25	25	25	25	25	25	0
	8	25	25	25	25	25	25	0
	10	25	25	25	25	25	0	0
	12	25	25	25	0	0	0	0
14-18		25	25	0	0	0	0	0

### NOTE

Maximum conveyor loads based on:

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

## ⚠ WARNING



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

**DO NOT REVERSE LPZ SERIES CONVEYORS.**

## NOTE

Conveyor *MUST* be mounted straight, flat, and level within confines of conveyor. Use a level (Figure 7, item 1) for setup.

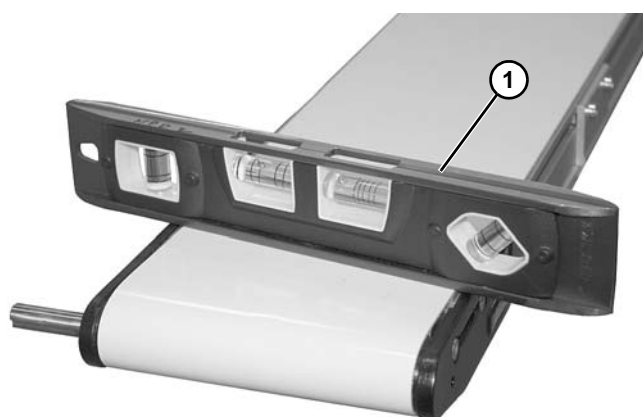


Figure 7

## Required Tools

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

## Recommended Installation Sequence

- Assemble conveyor (if required)
- Attach mounting brackets to conveyor
- Attach conveyor to stands
- Install return rollers on conveyor (optional)
- Mount gearmotor mounting package (See accessory instructions)
- Attach guides/accessories. (See “Service Parts” section beginning on page 60 for details.)

## Conveyors Up to 12 ft (3658 mm)

No assembly is required. Install mounting brackets and return rollers. Refer to “Mounting Brackets” on page 21 and “Return Rollers” on page 22.

## Conveyors Longer Than 12 ft (3658 mm)

1. Locate and arrange conveyor sections by section labels (Figure 8, item 1).

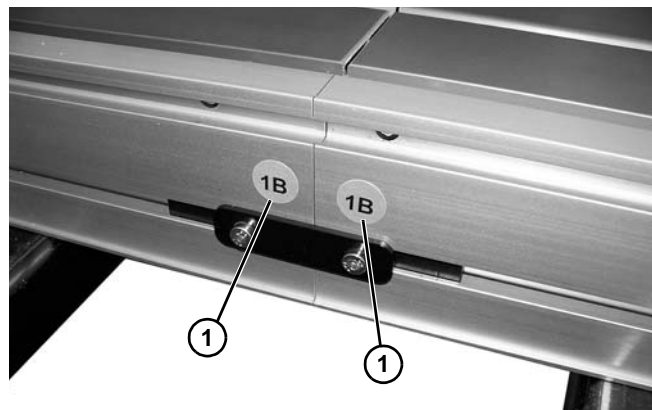



Figure 8

2. On tension end of the conveyor, identified with  a label (Figure 9, item 1), push in head plate assembly (Figure 9, item 2):
  - a. On both sides of conveyor, loosen and move cam tracking assemblies (Figure 9, item 3) (if equipped) away from head plates.
  - b. Loosen fastening screws (Figure 9, item 4) and push head plate assembly inward.

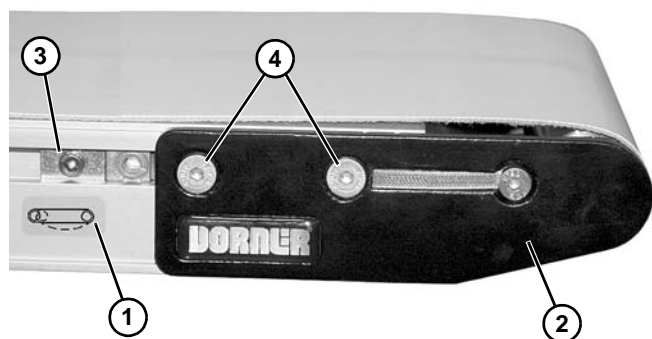
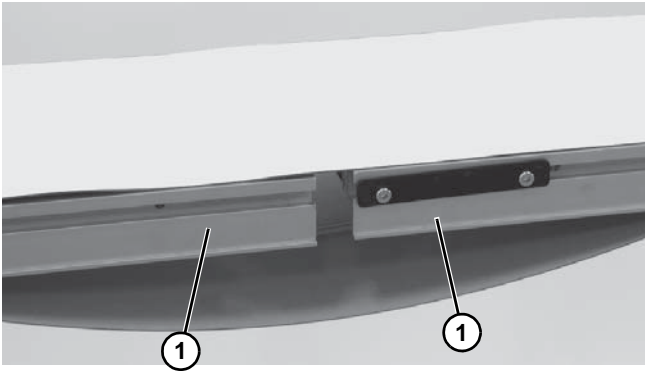


Figure 9

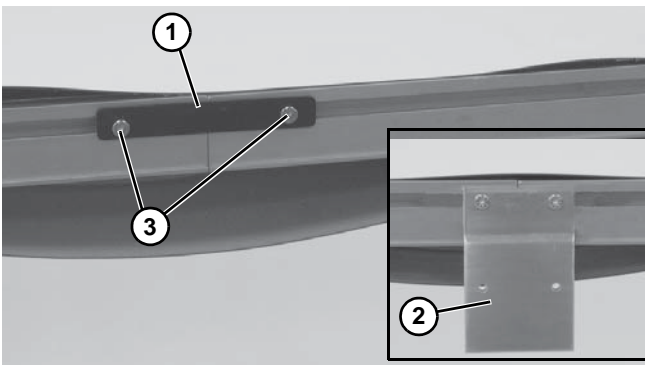
# Installation

3. Roll out conveyor belt and place conveyor frame sections (**Figure 10, item 1**) into belt loop.



**Figure 10**

4. Join conveyor sections and install frame connector plates (**Figure 11, item 1**) or connector/mount brackets (**Figure 11, item 2**) and screws (**Figure 11, item 3**) on both sides as indicated. Tighten screws to 60 in-lb (7 Nm).

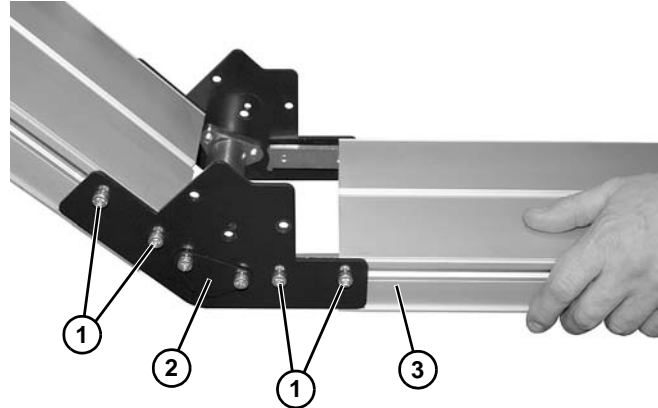


**Figure 11**

5. Tension conveyor belt. For proper tensioning, refer to “Conveyor Belt Tensioning” on page 42.
6. Install mounting brackets and return rollers. Refer to “Mounting Brackets” on page 21 and “Return Rollers” on page 22.
7. If equipped with cam tracking assemblies, reposition and adjust belt tracking. Refer to “Conveyor Belt Tracking” on page 44.

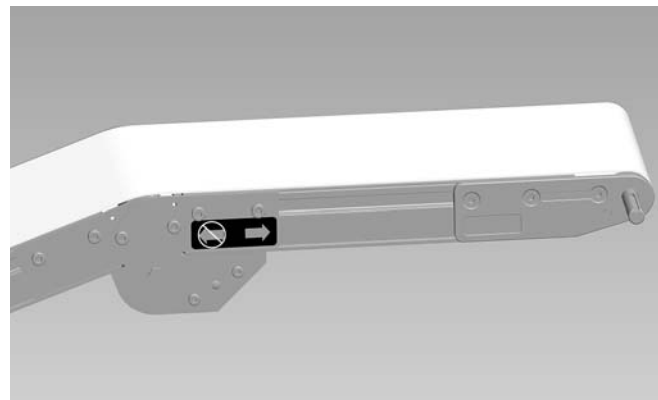
## Knuckles

1. Roll out conveyor belt. Loosen four screws (**Figure 12, item 1**) on both sides of knuckle (**Figure 12, item 2**). Slide frame (**Figure 12, item 3**) into knuckle (**Figure 12, item 2**). Tighten screws (**Figure 12, item 1**) to 60 in-lb (7 N-m) on both sides of conveyor.



**Figure 12**

2. Join conveyor sections and install frame connector plates (**Figure 11, item 1**) or connector/mount brackets (**Figure 11, item 2**) and screws (**Figure 11, item 3**) on both sides as indicated. Tighten screws to 60 in-lb (7 Nm).



**Figure 13**

### NOTE

*Upper knuckle must be assembled to conveyor with belt flow in direction of arrow.*

## Mounting Brackets

1. Locate brackets. Exploded views shown in Figure 14 & Figure 15.

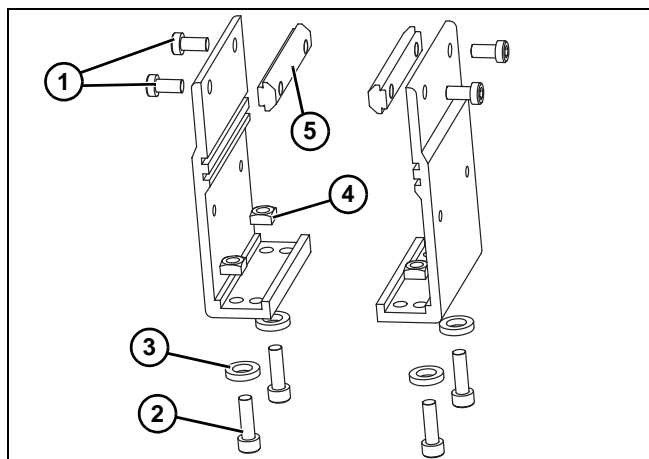


Figure 14

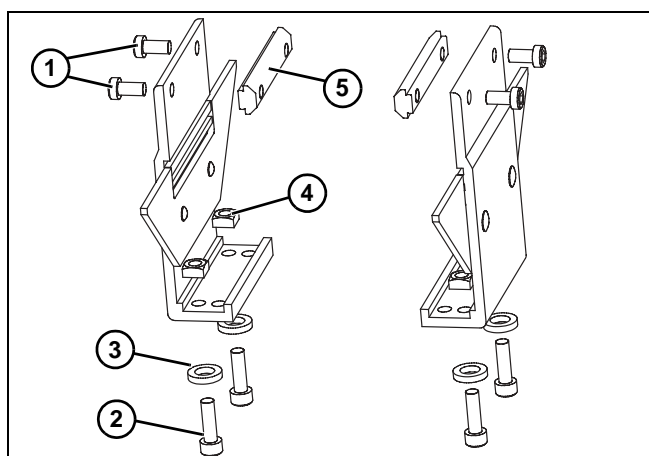


Figure 15

2. Remove screws (Figure 14, item 1 & 2) & (Figure 15, item 1 & 2), washers (Figure 14, item 3) & (Figure 15, item 3), nuts (Figure 14, item 4) & (Figure 15, item 4), and T-bars (Figure 14, item 5) & (Figure 15, item 5) from brackets.

3. Insert T-bars (Figure 14, item 5) & (Figure 15, item 5) into conveyor side slots (Figure 16, item 1). Fasten brackets (Figure 16, item 2) to conveyor with mounting screws (Figure 16, item 3).

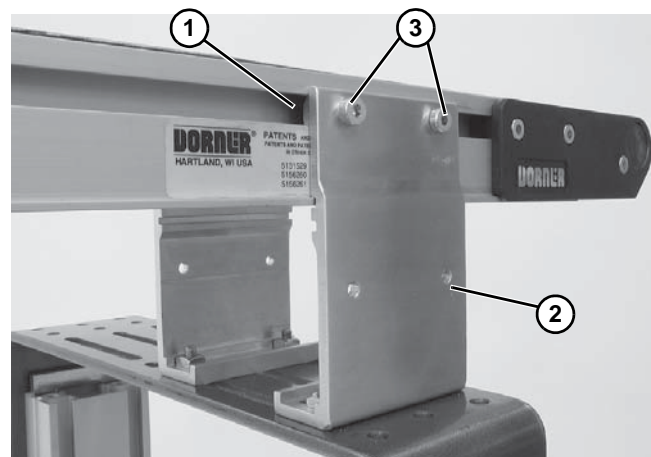


Figure 16

### NOTE

*Mounting brackets for flat belt conveyors shown.*

4. Fasten brackets to support stand with mounting screws (Figure 14, item 2), washers (Figure 14, item 3) and nuts (Figure 14, item 4).
5. Tighten all screws to 60 in-lb (7 Nm).

# Installation

## Return Rollers

### Cleated Belt and 2–6" (51–152 mm) Wide Flat Belt Conveyors

1. Locate return rollers. Exploded views shown in Figure 17 & Figure 18.

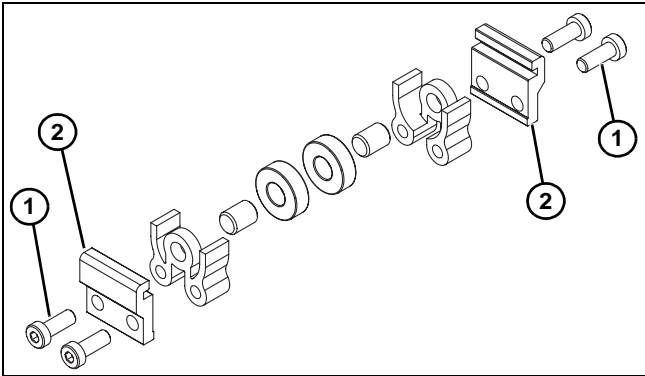


Figure 17

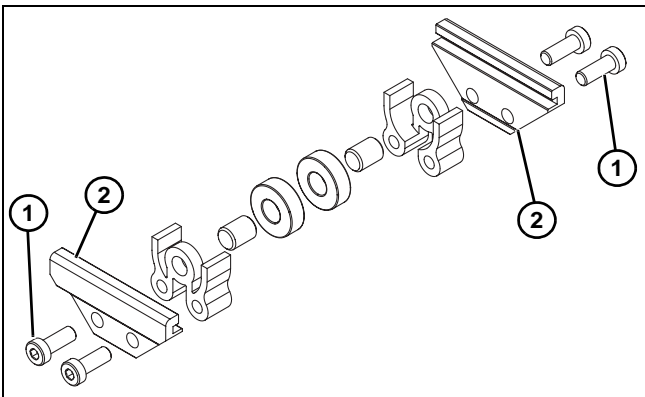


Figure 18

2. Remove screws (Figure 17, item 1) & (Figure 18, item 1) and clips (Figure 17, item 2) & (Figure 18, item 2) from roller assembly.
3. Install roller assemblies (Figure 19, item 1) as shown. Tighten screws (Figure 19, item 2) to 60 in-lb (7 Nm).

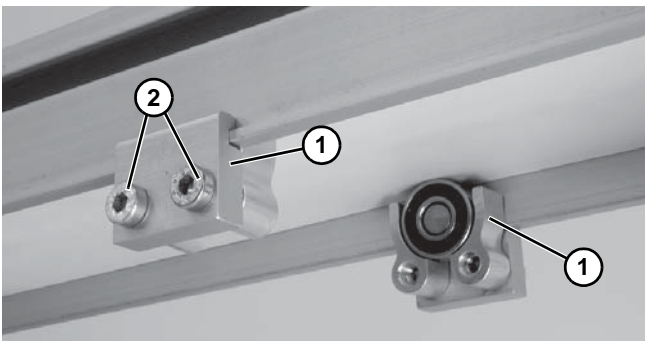


Figure 19

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

1. Locate return rollers. Exploded view shown in Figure 20.

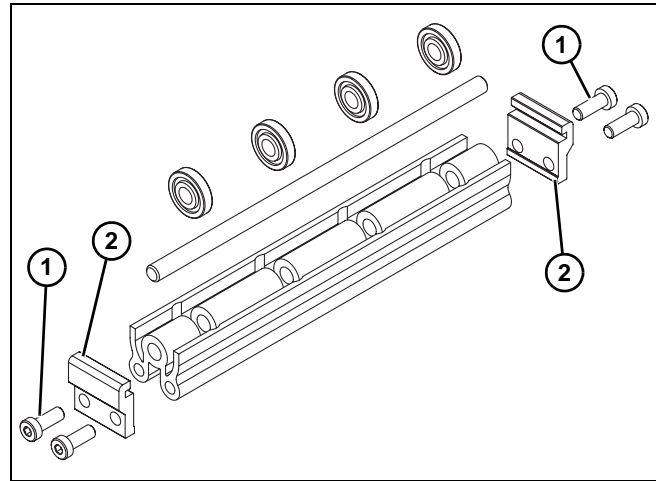


Figure 20

2. Remove screws (Figure 20, item 1) and clips (Figure 20, item 2) from roller assembly.
3. Install roller assembly as shown (Figure 21, item 1). Tighten screws (Figure 21, item 2) to 60 in-lb (7 Nm).

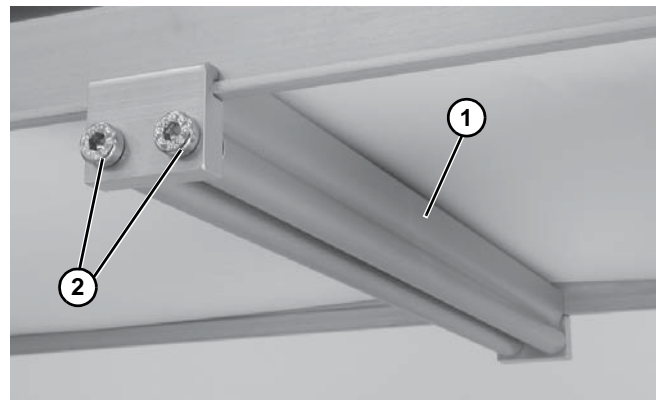



Figure 21

## iDrive Wiring

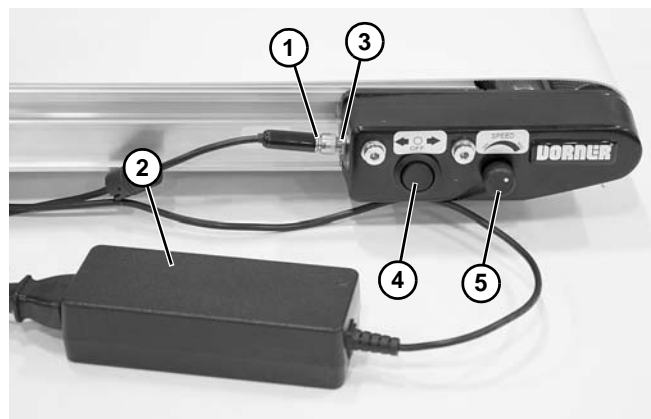
<b>⚠ WARNING</b>

<p><b>Motor will start immediately once power is supplied. Exposed moving parts can cause severe injury. LOCK OUT POWER before wiring to avoid accidental startup.</b></p>

The 2200 series iDrive is available in 2 models:

- A. Cover Mounted Controls
- B. Cover Mounted Controls with Remote Start/Stop Cable

### Cover Mounted Controls with 115 volt Power Supply

1. No wiring is required. Attach quick disconnect end (**Figure 22, item 1**) of power supply (**Figure 22, item 2**) to power jack (**Figure 22, item 3**).



**Figure 22**

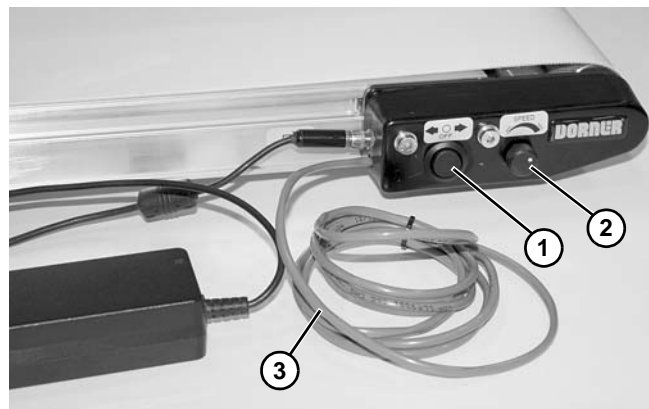
2. Select conveyor running direction with directional switch (**Figure 22, item 4**).
3. Select conveyor speed with speed control knob (**Figure 22, item 5**).

#### NOTE

1. *Start Stop Application: Maximum start stop cycles are 30 per minute.*
2. *Reversing Applications: Do not reverse the motor direction when running. Make sure the motor is stopped before reversing signal is given.*

### Cover Mounted Controls with Remote Start/Stop Cable

1. Connect power supply to cover. See previous section.
2. Select conveyor running direction with directional switch (**Figure 23, item 1**).



**Figure 23**

3. Select conveyor speed with speed control knob (**Figure 23, item 2**).
4. Remote start/stop cable (**Figure 23, item 3**) comes with wire nut over remote leads to allow test running conveyor.
5. Remove wire nut and connect red and black wires to switching device. Switching device minimum rating 1 amp @ 24 VDC.

#### NOTE

1. *Start Stop Application: Maximum start stop cycles are 30 per minute.*
2. *Reversing Applications: Do not reverse the motor direction when running. Make sure the motor is stopped before reversing signal is given.*

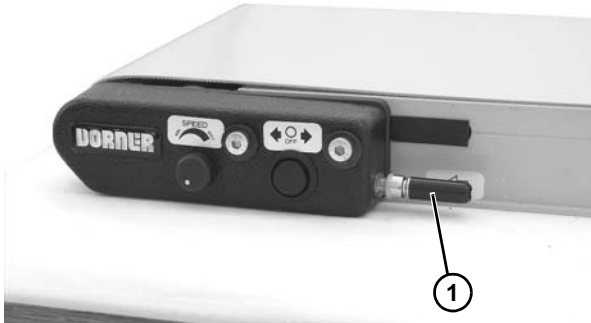
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# Installation

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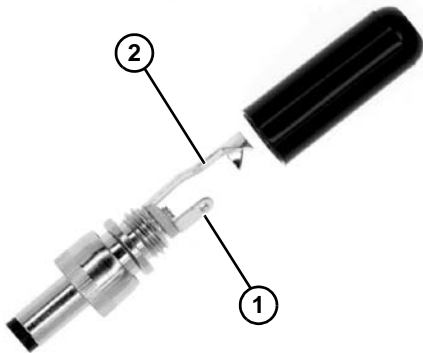
## Cover Mounted Controls with Customer Provided Power Supply

1. Locate the male disconnect plug (**Figure 24, item 1**) provided.



**Figure 24**

2. Wire and solder DC power to the two terminals of the provided DC power plug. Wire +VDC to the short lug (**Figure 25, item 1**) and -VDC to the long lug (**Figure 25, item 2**).

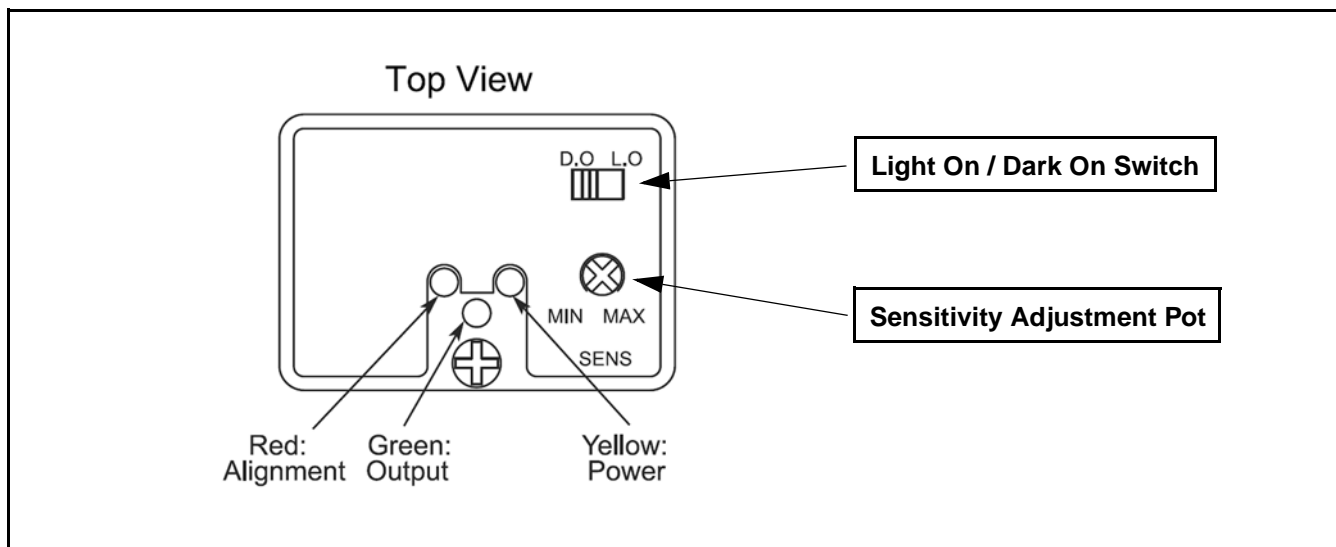


**Figure 25**

3. Required power is 24VDC, 2 amps minimum.



## Cover Mounted Controls with Photo Eye Option



**Figure 26**

1. Mount photo eye and reflector bracket to side of conveyor close to zone to be sensed.
2. Connect power supply to AC input power, photo eye plug, and to conveyor drive cover. Adjust conveyor running direction switch to off (center) position. Photo eye should have yellow LED lit.
3. Adjust reflector to align with red beam emitted from photo eye and be at a 90 degree +/- 15 degree angle to photo eye face. When reflector is properly aligned, photo eye will have yellow and red LED lit. Green LED indicates output relay is energized.
4. Adjust photo eye sensitivity by placing a sample object in the beam. Unscrew clear cover on photo eye top and slowly turn the gain adjustment clockwise (see caution below concerning pot adjustment) until the green (output) LED activates (assuming the sensor is in the light operate mode). Note the position and remove the sample object. Now continue turning the sensitivity setting clockwise to find the position where the green LED activates from the background reflection. Reset the sensitivity midway between the two positions.
5. Photo eye comes preset to Light-On operation which causes the conveyor to run when the sensed zone is clear and stop when the sensed zone is blocked. For Dark-On operation move selector to D.O. position (**Figure 26**).
6. Select conveyor running direction with directional switch (**Figure 23, item 1**). If Dark-On operation is selected, temporarily block photo eye to energize conveyor.
7. Select conveyor speed with speed control knob (**Figure 23, item 2**).

### **CAUTION**

**Adjustment pots are 3/4 turn devices. Any resistance encountered while adjusting these pots indicates you have reached the adjustment limit stop. Turning past stop will damage the sensor.**

# Installation

## Optional Dust Cover

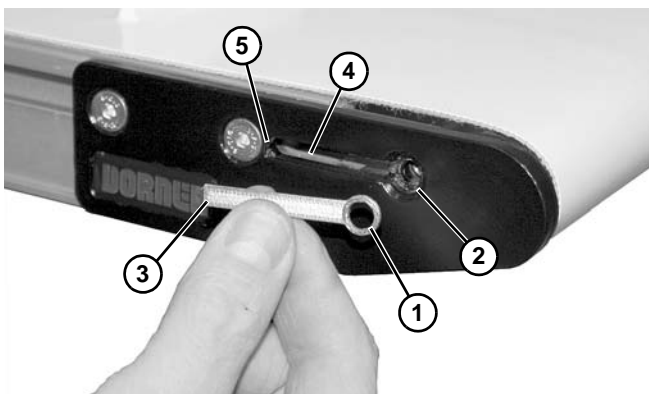
### Idler or Drive Tail

1. Remove screw (Figure 27, item 1).



**Figure 27**

2. Install round end (Figure 28, item 1) of dust cover into recessed screw hole (Figure 28, item 2).

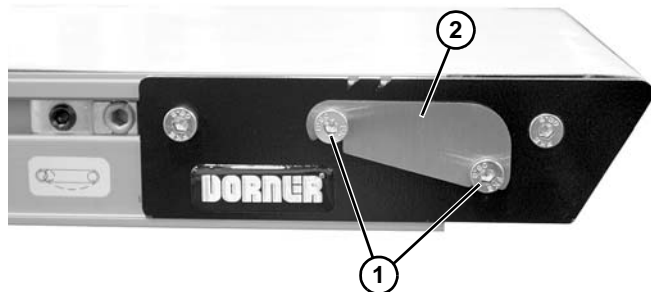


**Figure 28**

3. Insert flat end (Figure 28, item 3) of dust cover into access slot (Figure 28, item 4), making sure it rests against notch (Figure 28, item 5).
4. Install screw (Figure 27, item 1) and tighten.

### Nosebar Tails

1. Loosen screws (Figure 29, item 1).

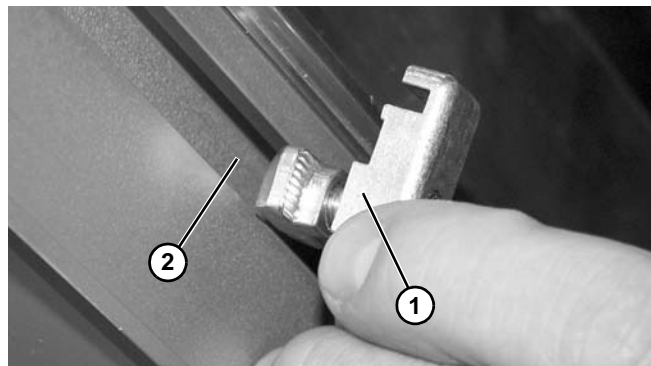


**Figure 29**

2. Install dust cover (Figure 29, item 2) behind screw heads and over access slot. Tighten screws (Figure 29, item 1).

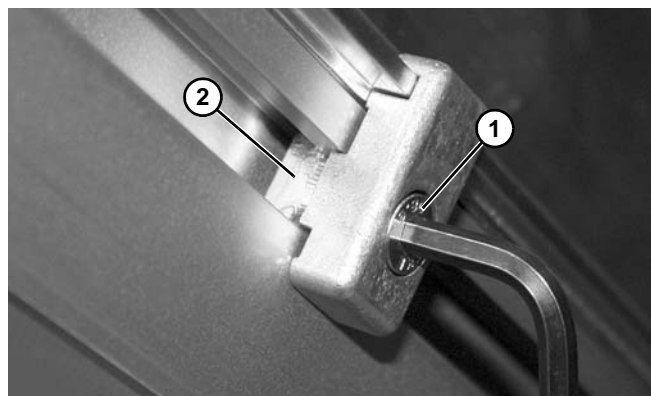
## Guide Clips

1. Install guide clip assembly (Figure 30, item 1) into conveyor t-slot (Figure 30, item 2) as shown.



**Figure 30**

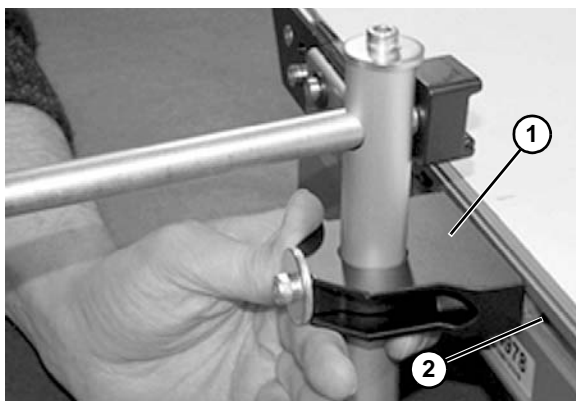
2. Tighten screw (Figure 31, item 1) making sure t-bar (Figure 31, item 2) rotates and engages inside of t-slot.



**Figure 31**

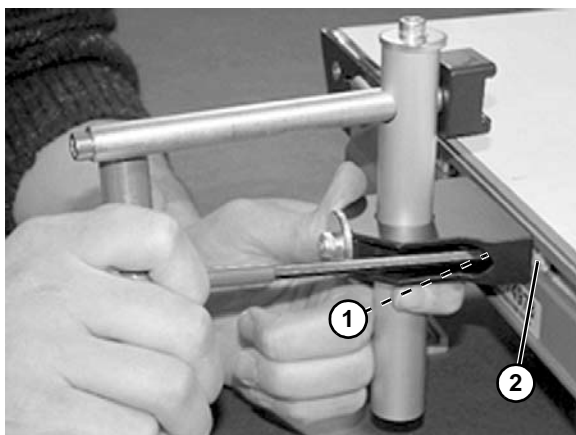
## Adjustable Guides

1. Install guide bracket assembly (**Figure 32, item 1**) into the conveyor t-slot (**Figure 32, item 2**).



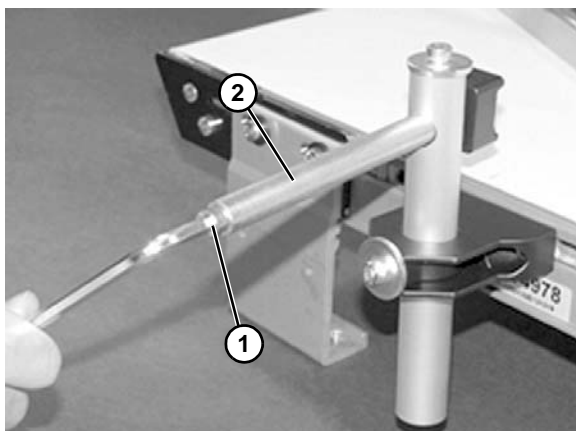
**Figure 32**

2. Tighten screws (**Figure 33, item 1**) making sure t-nut (**Figure 33, item 2**) rotates and engages inside of the t-slot.

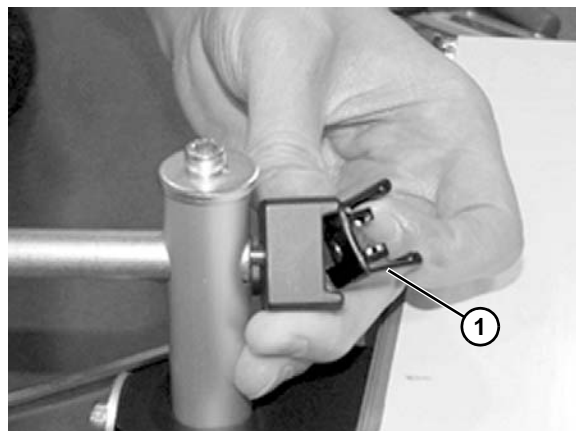


**Figure 33**

3. Loosen screw (**Figure 34, item 1**) on end of shaft (**Figure 34, item 2**) to remove clip (**Figure 35, item 1**).

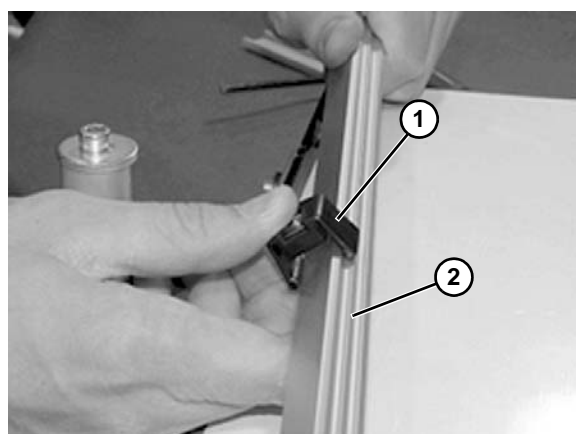


**Figure 34**



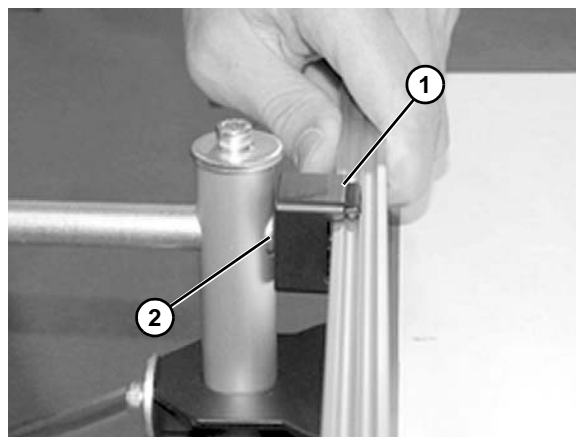
**Figure 35**

4. Snap clip (**Figure 36, item 1**) onto guide rail (**Figure 36, item 2**).



**Figure 36**

5. Reassemble clip (**Figure 37, item 1**) and attach to shaft (**Figure 37, item 2**). Tighten screw (**Figure 34, item 1**) on end of shaft.



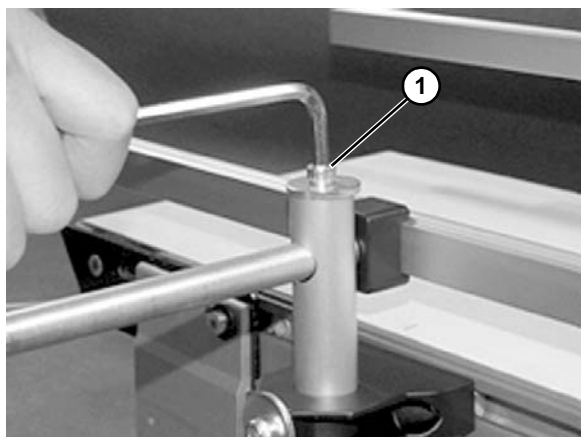
**Figure 37**

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# Installation

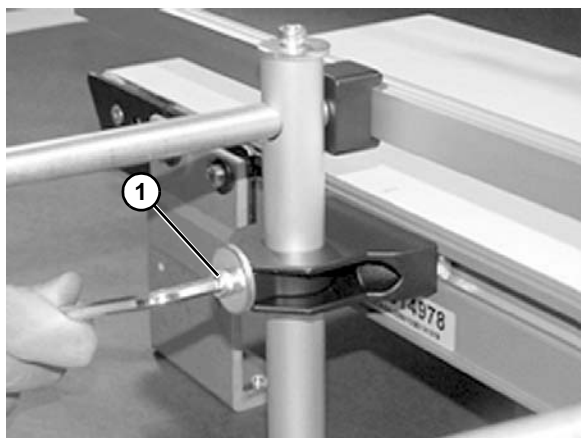
---

6. Adjust rail width with top screw (**Figure 38, item 1**).



**Figure 38**

7. Adjust rail height with lower screw (**Figure 39, item 1**).



**Figure 39**

---

# Preventive Maintenance and Adjustment

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## Required Tools

### Standard Tools

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

### Checklist

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

### Lubrication

No lubrication is required. Replace bearings if worn.

## Maintaining Conveyor Belt

### Troubleshooting

Inspect conveyor belt for:

- Surface cuts or wear
- Stalling or slipping
- Damage to V-guide

Surface cuts and wear indicate:

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

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

<b>⚠ WARNING</b>

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

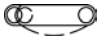
## Conveyor Belt Replacement Sequence

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

# Preventive Maintenance and Adjustment

## Belt Removal for End Drive and iDrive Conveyors

### Without Stands or Gearmotor Mounting Package

1. If equipped, remove return rollers and guiding and accessories from one side of conveyor.
2. On tension end of the conveyor, identified with  a label (**Figure 40, item 1**), push in head plate assembly (**Figure 40, item 2**):
  - a. On both sides of conveyor, loosen and move cam tracking assemblies (**Figure 40, item 3**) (if equipped) away from head plates.
  - b. Loosen fastening screws (**Figure 40, item 4**) and push head plate assembly inward.

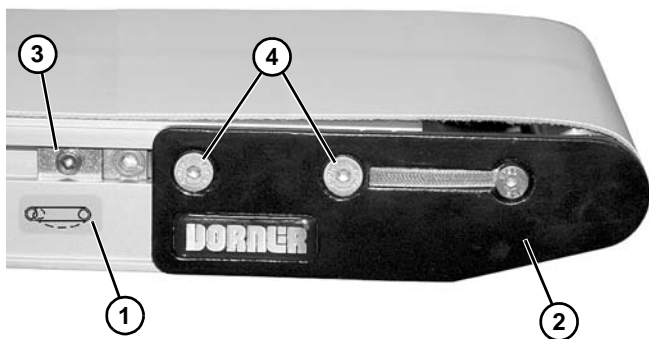


Figure 40

3. Remove conveyor belt.

### With Stands and Gearmotor Mounting Package

#### WARNING



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

1. Place temporary support stands (**Figure 41, item 1**) at both ends of the conveyor. Place an additional support stand (**Figure 41, item 2**) under the drive motor, if equipped. See WARNING.

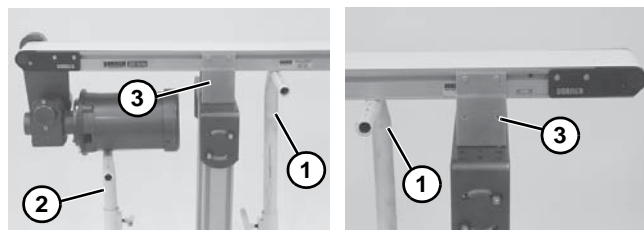


Figure 41

2. Remove mounting brackets (**Figure 41, item 3**) from one side of conveyor. (Reverse steps 3 & 4 of “Mounting Brackets” section beginning on page 21.) If equipped with heavy load drive package, remove brackets from side opposite drive cover (**Figure 42, item 1**).
3. If equipped, remove return rollers and guiding and accessories from side opposite drive cover (**Figure 42, item 1**).

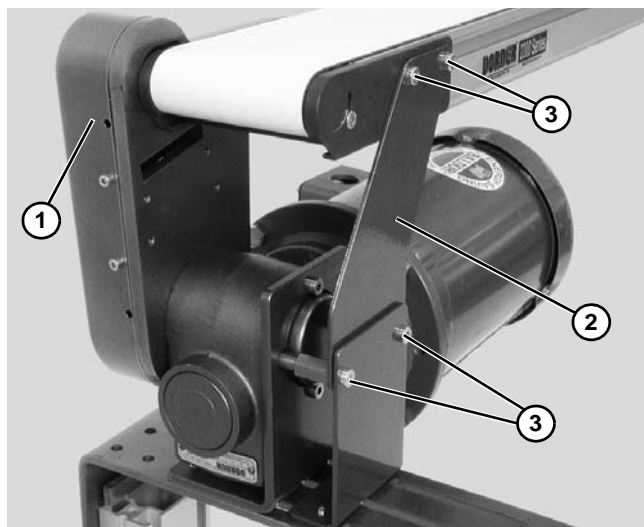



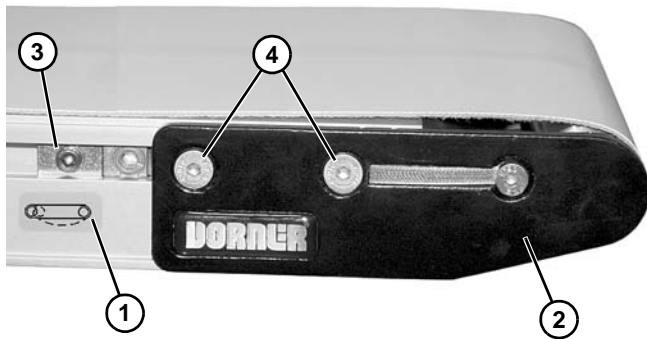
Figure 42

4. If equipped with heavy load drive package, remove drive support bracket (**Figure 42, item 2**): Remove bracket screws (**Figure 42, item 3**) then remove bracket (**Figure 42, item 2**).



# Preventive Maintenance and Adjustment

5. On tension end of the conveyor, identified with  a label (**Figure 43, item 1**), push in head plate assembly (**Figure 43, item 2**):
  - a. On both sides of conveyor, loosen and move cam tracking assemblies (**Figure 43, item 3**) (if equipped) away from head plates.
  - b. Loosen fastening screws (**Figure 43, item 4**) and push head plate assembly inward.



**Figure 43**

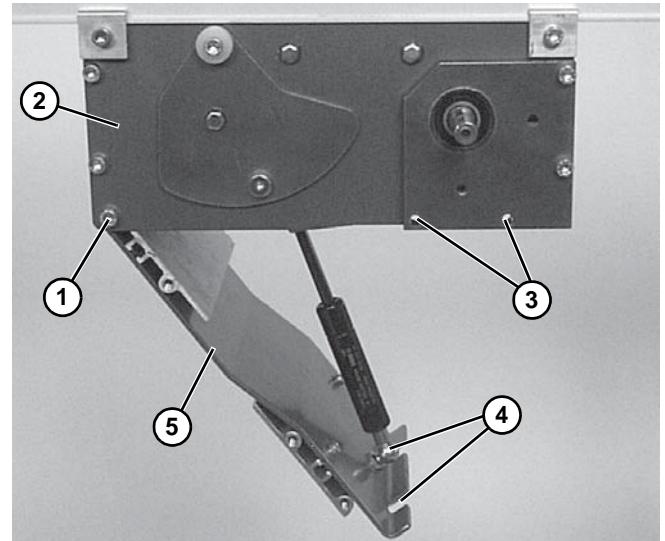
6. Remove belt (**Figure 44, item 1**) from conveyor.




**Figure 44**

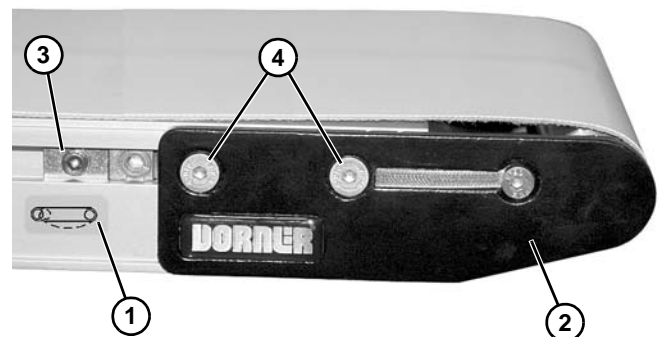
## Belt Removal for Center Drive Conveyors

1. If equipped, remove return rollers and guiding and accessories from one side of conveyor.
2. Loosen corner screws (**Figure 45, item 1**) on each side of the drive module (**Figure 45, item 2**).



**Figure 45**

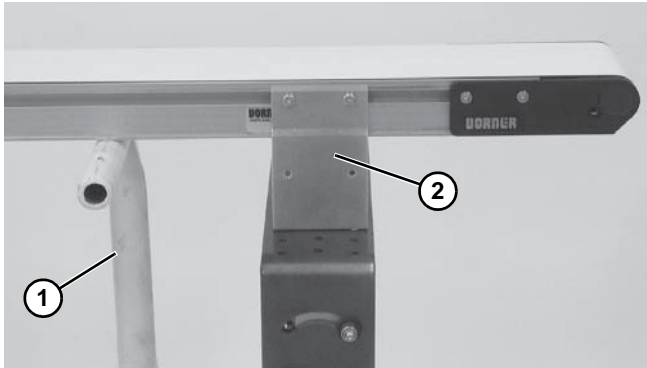
3. Remove tension door screws (**Figure 45, item 3**) on each side of the drive module.
4. Using finger grip holes (**Figure 45, item 4**), open the tension door (**Figure 45, item 5**) to release conveyor belt tension.
5. On tension end of the conveyor, identified with  a label (**Figure 46, item 1**), push in head plate assembly (**Figure 46, item 2**):
  - a. On both sides of conveyor, loosen and move cam tracking assemblies (**Figure 46, item 3**) (if equipped) away from head plates.
  - b. Loosen fastening screws (**Figure 46, item 4**) and push head plate assembly inward.



**Figure 46**

# Preventive Maintenance and Adjustment

6. If not equipped with stands, skip to step 9.
7. Place temporary support stands (**Figure 47, item 1**) at both ends of the conveyor.



**Figure 47**

8. Remove mounting brackets (**Figure 47, item 2**) from one side of conveyor. (Reverse steps 3 & 4 of "Mounting Brackets" on page 21.)
9. Remove conveyor belt from conveyor ends. See NOTE.

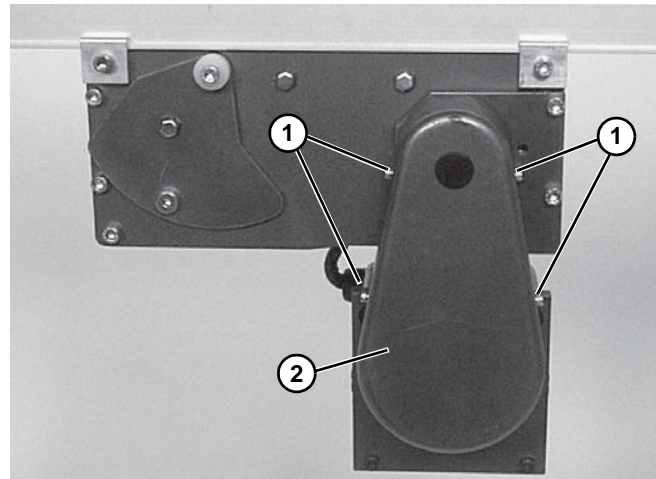
## NOTE

*On conveyors 4-ft (1219 mm) and shorter by 8" (203 mm) and wider, it is necessary to remove the drive module at the same time the conveyor belt is removed. See "Drive Module Removal" on page 33.*

10. Proceed to "Drive Module Removal" on page 33 and "Belt Removal from Drive Module" on page 34.

## Gearmotor Mounting Package Removal

1. Remove cover screws (**Figure 48, item 1**) and remove cover (**Figure 48, item 2**).

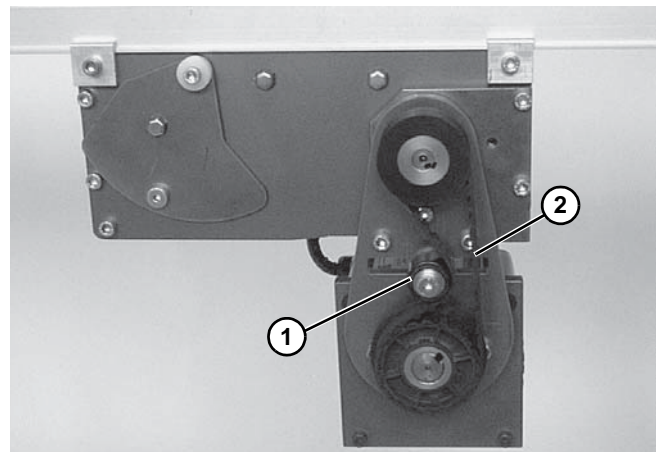


**Figure 48**

## NOTE

***Figure 37** shows a vertically mounted gearmotor. Horizontally mounted gearmotor is similar.*

2. Loosen belt tensioner (**Figure 49, item 1**) then remove timing belt (**Figure 49, item 2**).



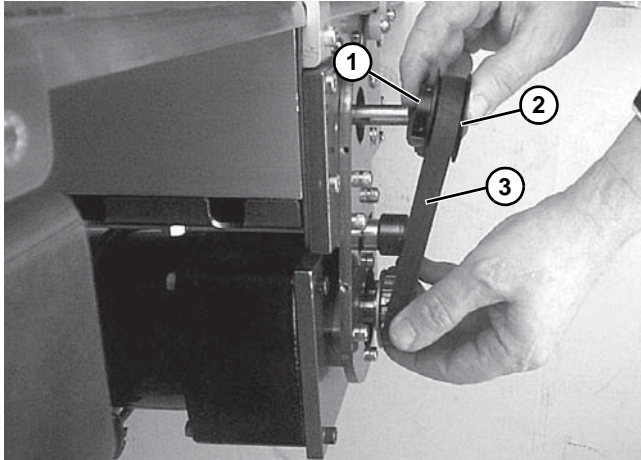
**Figure 49**



# Preventive Maintenance and Adjustment

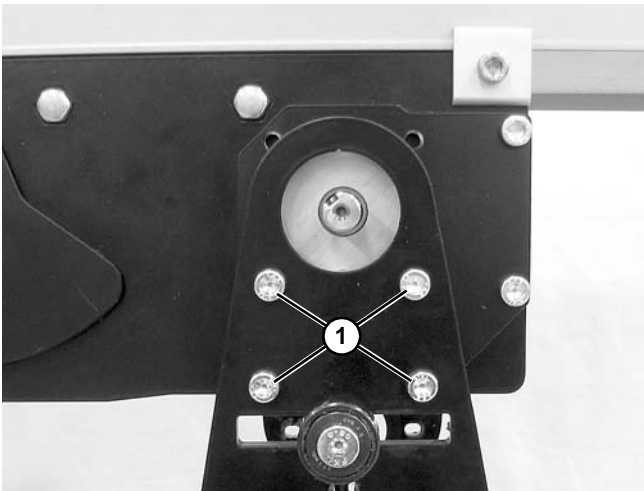
## NOTE

If the timing belt does not slide over the pulley flange, loosen the driven pulley set screws (**Figure 50, item 1**) and remove the pulley (**Figure 50, item 2**) with the belt (**Figure 50, item 3**).



**Figure 50**

3. Remove four mounting screws (**Figure 51, item 1**) and remove gearmotor.



**Figure 51**

## Drive Module Removal

### ⚠ WARNING



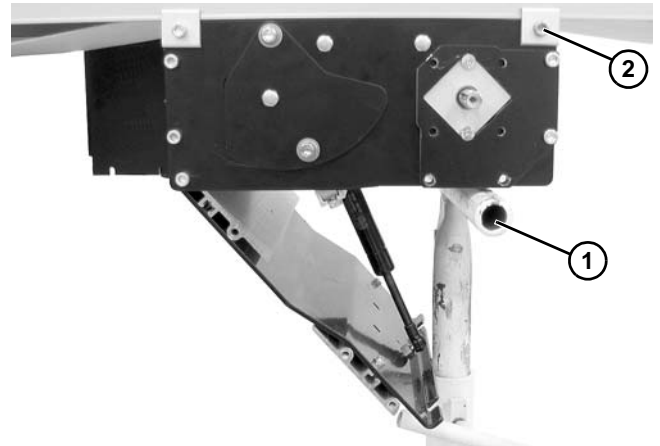
Removing drive module without support under the module may lead to personal injury.

**PROVIDE SUPPORT UNDERNEATH THE DRIVE MODULE BEFORE REMOVING THE MODULE.**

### NOTE

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

1. Place temporary support (**Figure 52, item 1**) underneath the drive module.



**Figure 52**

2. Loosen clamp screws (**Figure 52, item 2**) on each corner of the module. Remove the module.

# Preventive Maintenance and Adjustment

## Belt Removal from Drive Module

1. Remove screws (Figure 53, item 1) and remove spindle bearing block (Figure 53, item 2).

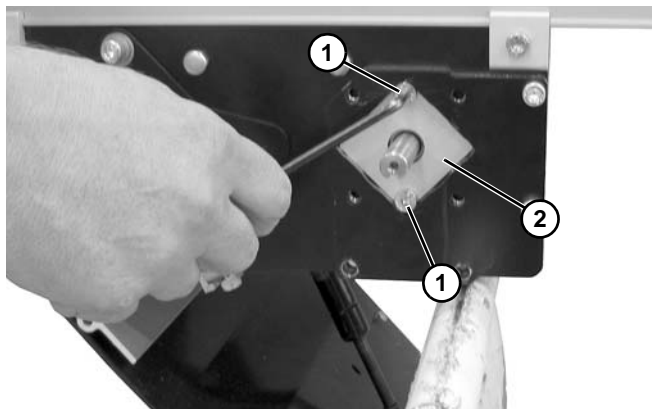


Figure 53

2. Remove drive pulley (Figure 54, item 1).

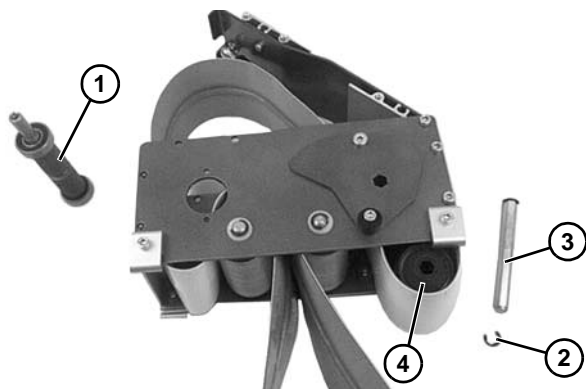


Figure 54



Figure 55

3. Remove grooved idler pulley:
  - a. For 2" (44 mm), 3" (70 mm) or 4" (95 mm) wide conveyor, detach E-ring clip (Figure 54, item 2). Remove pulley shaft (Figure 54, item 3) and remove pulley (Figure 54, item 4).
  - b. For 5" (127 mm) or wider conveyor, depress both sides of spring-loaded shaft and remove pulley (Figure 55, item 5).
4. Remove the conveyor belt.

## Belt Removal for Mid Drive Conveyors

### ⚠ WARNING



### SEVERE HAZARD!

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

1. Remove belt tension. See "Conveyor Belt Replacement" on page 29 for releasing belt tension.
2. Remove two screws (Figure 56, item 1) from bottom of mid drive assembly (Figure 56, item 2).

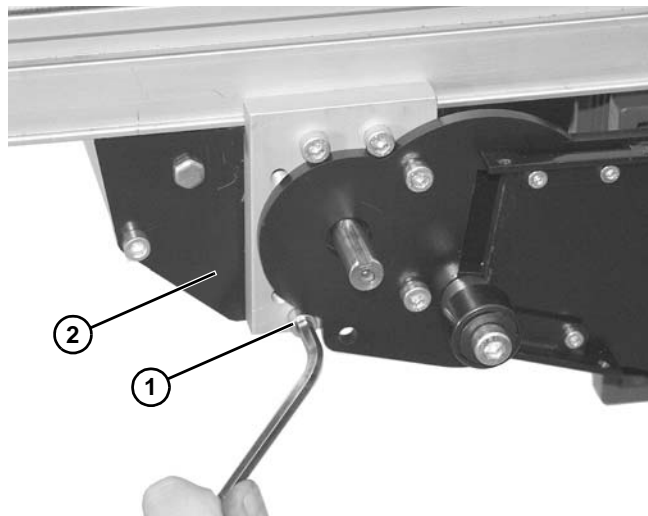


Figure 56

3. Lower and remove mid drive module (Figure 57, item 1) from belt (Figure 57, item 2).

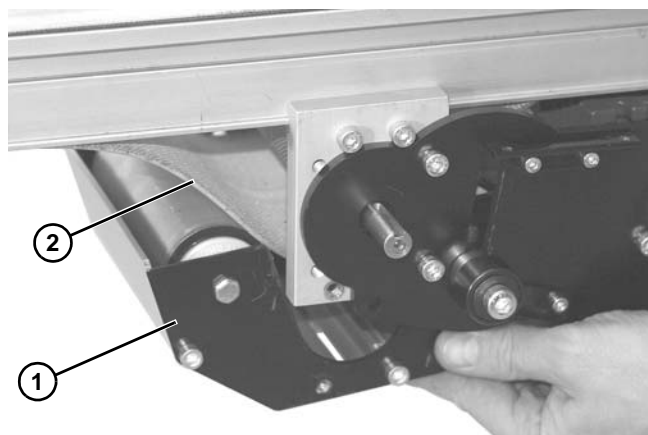


Figure 57

# Preventive Maintenance and Adjustment

- Remove belt (**Figure 58, item 1**) from conveyor frame.



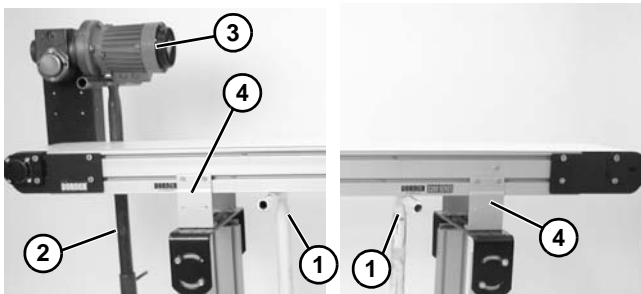
**Figure 58**

- Installation of new belt is the reverse order of removal.

## Belt Removal for LPZ Conveyors


<b>⚠ WARNING</b>
<p><b>Removing mounting brackets without support under gearmotor will cause conveyor to tip, causing severe injury. PROVIDE SUPPORT UNDERNEATH THE GEARMOTOR WHEN CHANGING THE BELT</b></p>

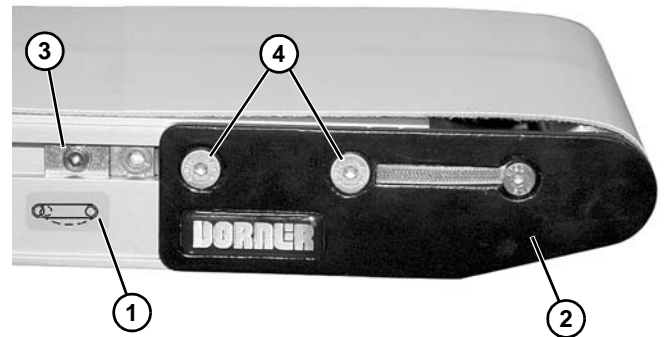
- Place temporary support stands (**Figure 59, item 1**) at both ends of the conveyor. Place an additional support stand (**Figure 59, item 2**) under the drive motor (**Figure 59, item 3**), if equipped. See WARNING.



**Figure 59**

- Remove mounting brackets (**Figure 59, item 4**) from one side of conveyor. (Reverse steps 2 & 3 of "Mounting Brackets" section on page 21).
- If equipped, remove return rollers and guiding and accessories from one side of conveyor.

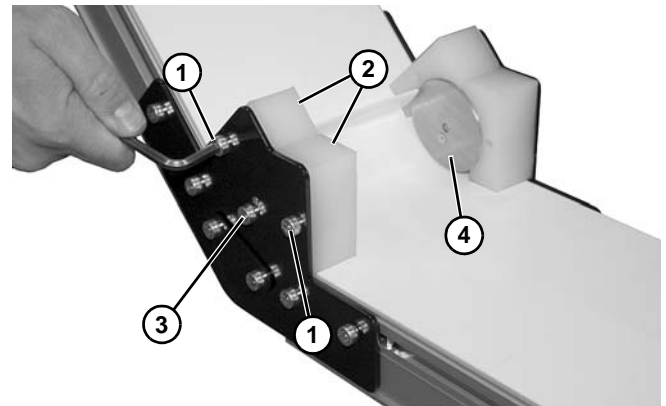
- On tension end of the conveyor, identified with  a label (**Figure 60, item 1**), push in head plate assembly (**Figure 60, item 2**):
  - On both sides of conveyor, loosen and move cam tracking assemblies (**Figure 60, item 3**) (if equipped) away from head plates.
  - Loosen fastening screws (**Figure 60, item 4**) and push head plate assembly inward.



**Figure 60**

## Cleated Belt Conveyors

- If equipped with a lower knuckle, remove screws (**Figure 61, item 1**) and remove guards (**Figure 61, item 2**) on both sides of knuckle.

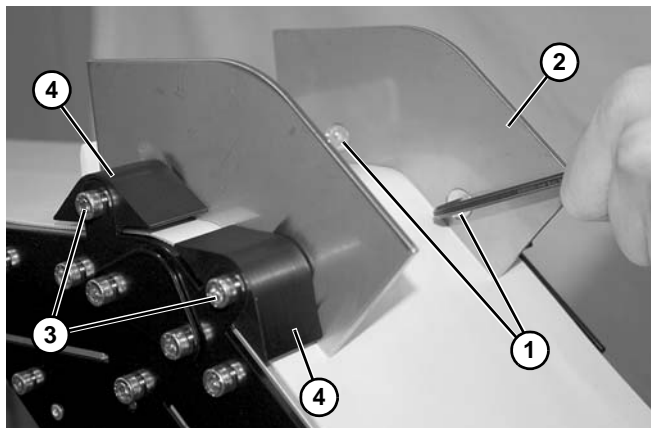


**Figure 61**

- Remove screws (**Figure 61, item 3**) and remove roller bearing assembly (**Figure 61, item 4**) on both sides of knuckle.

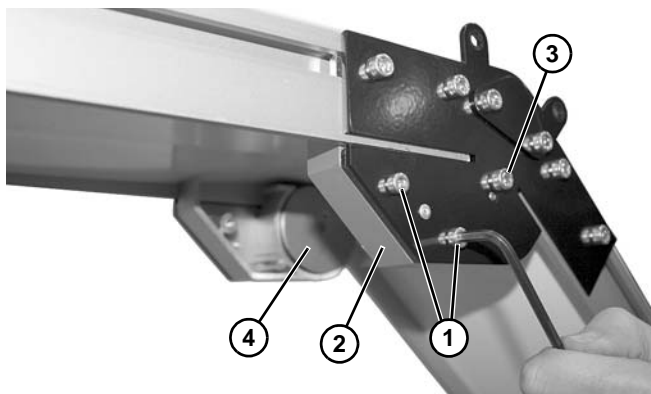
# Preventive Maintenance and Adjustment

3. If equipped with an upper knuckle, remove screws (**Figure 62, item 1**) and remove guard (**Figure 62, item 2**) on both sides of knuckle.



**Figure 62**

4. Remove screws (**Figure 62, item 3**) and remove spacers (**Figure 62, item 4**) on both sides of knuckle.
5. Remove screws (**Figure 63, item 1**) and remove guard (**Figure 63, item 2**) on both sides of knuckle.

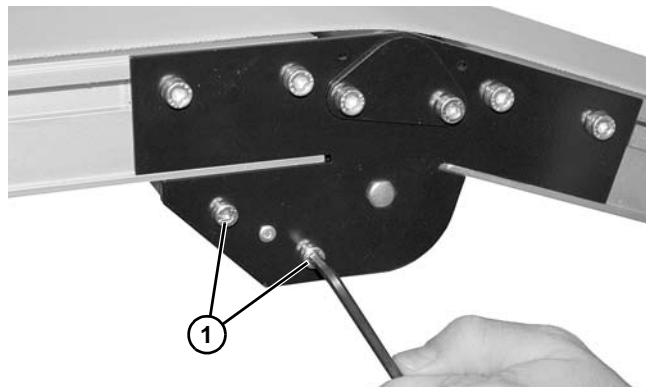


**Figure 63**

6. Remove screw (**Figure 63, item 3**) and remove roller bearing assembly (**Figure 63, item 4**) on both sides of knuckle.
7. Remove belt from conveyor.

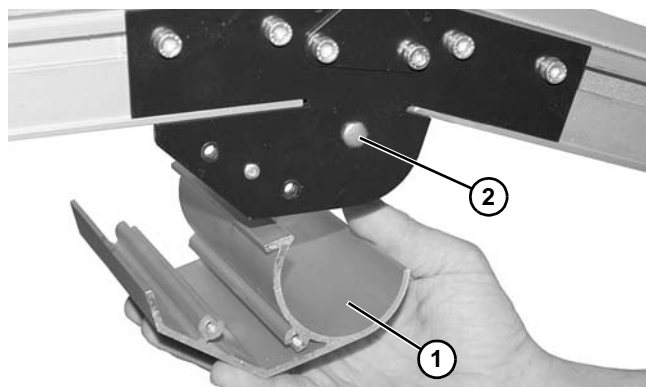
## Flat Belt Conveyors

1. Remove screws (**Figure 64, item 1**) on both sides of conveyor.



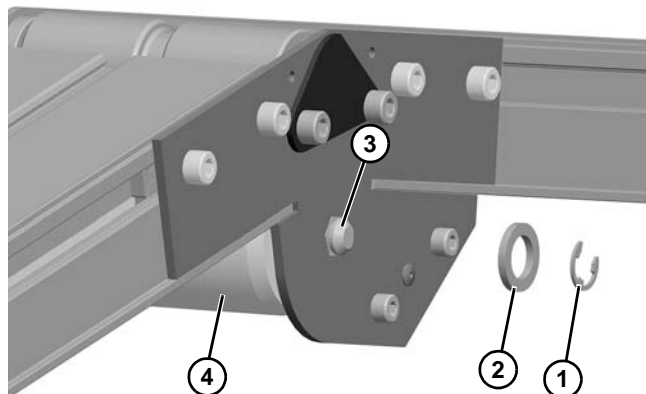
**Figure 64**

2. Remove guard (**Figure 65, item 1**).



**Figure 65**

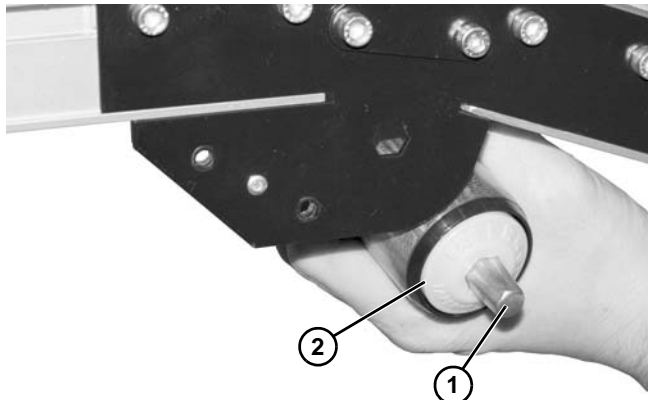
3. Remove idler pulley:
  - a. For 2" (44 mm) through 4" (95 mm) wide conveyors, remove E-ring clip (**Figure 66, item 1**) and washer (**Figure 66, item 2**) from one side. Remove pulley shaft (**Figure 66, item 3**) and pulley (**Figure 66, item 4**).



**Figure 66**

# Preventive Maintenance and Adjustment

- b. For 5" (127 mm) or wider conveyor, push spring-loaded shaft ends (**Figure 67, item 1**) inward. Remove roller (**Figure 67, item 2**).



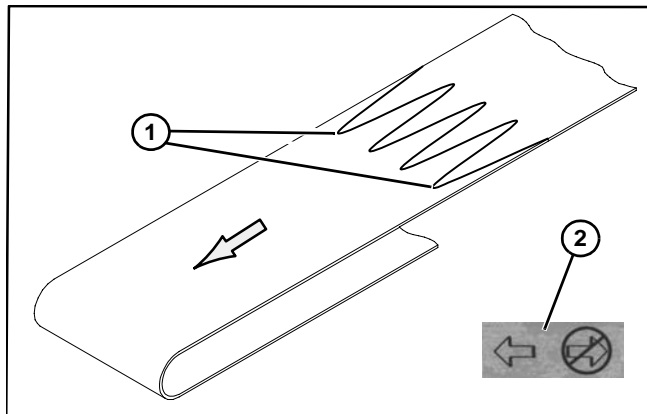
**Figure 67**

4. Remove belt from conveyor.

## Belt Installation for End Drive and iDrive Conveyors

### Without Stands or Gearmotor Mounting Package

1. Orient belt so splice leading fingers (**Figure 68, item 1**) point in the direction of belt travel as identified by the conveyor directional label (**Figure 68, item 2**).




**Figure 68**

2. Slide belt onto the conveyor frame assembly.
3. Tension belt. Refer to "Conveyor Belt Tensioning" on page 42.
4. If equipped, install return rollers and guiding.

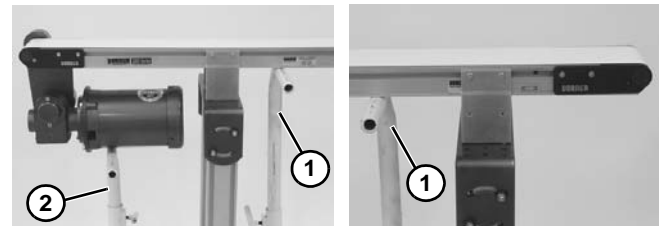
### With Stands and Gearmotor Mounting Package

**⚠ WARNING**



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

1. Ensure temporary support stands (**Figure 69, item 1**) are placed at both ends of the conveyor. Place an additional support stand under the drive motor (**Figure 69, item 2**), if equipped. See WARNING.



**Figure 69**

2. Orient belt so splice leading fingers (**Figure 68, item 1**) point in the direction of belt travel as identified by the conveyor directional label (**Figure 68, item 2**).
3. Install belt (**Figure 70, item 1**) on conveyor. Lift conveyor slightly to avoid pinching belt on temporary support stands.



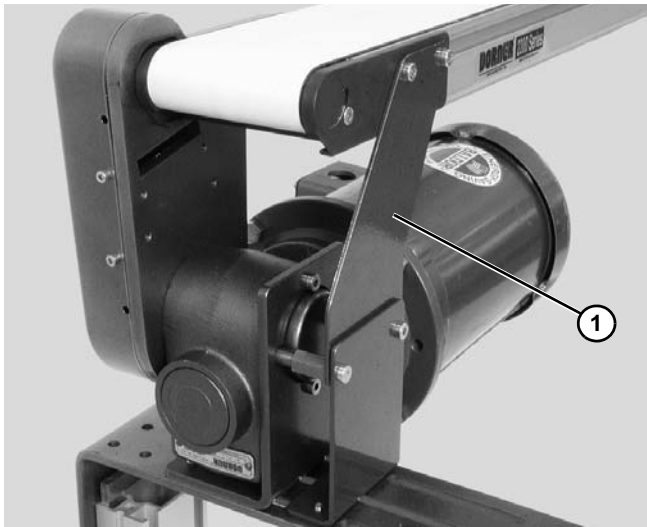
**Figure 70**

4. Re-install conveyor mounting brackets. Refer to "Mounting Brackets" beginning on page 21, steps 3 through 5.



# Preventive Maintenance and Adjustment

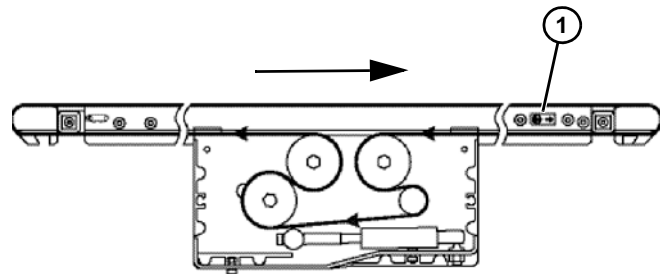
5. If equipped with a heavy load drive package, install drive support bracket (**Figure 71, item 1**).



**Figure 71**

6. Tension belt. Refer to “Conveyor Belt Tensioning” on page 42.
7. If equipped, install return rollers and guiding.

## Belt Installation for Center Drive Conveyors



**Figure 72**

### IMPORTANT

*On a center drive conveyors, belt travel direction is identified by an arrow decal on the side of the conveyor (**Figure 72, item 1**) & (**Figure 73, item 1**).*

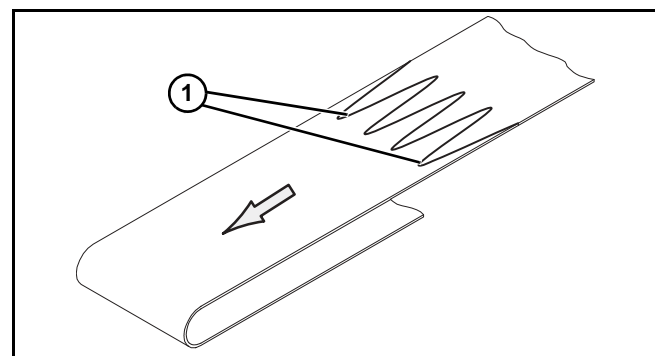


**Figure 73**

### NOTE

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

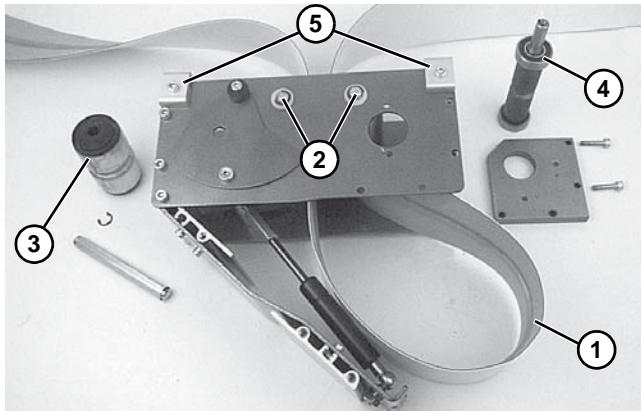
1. Orient the conveyor belt so that the splice leading fingers (**Figure 74, item 1**) point in the direction of belt travel, indicated by the label (**Figure 73, item 1**).



**Figure 74**

# Preventive Maintenance and Adjustment

2. Place loop of belt (**Figure 75, item 1**) into the drive module between top idler pulleys (**Figure 75, item 2**).



**Figure 75**

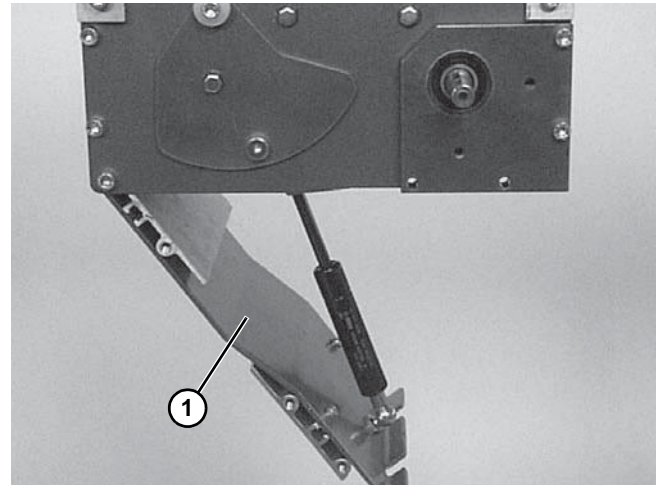
3. Place grooved idler pulley (**Figure 75, item 3**) into the belt loop and install it in the drive module. Refer to “Belt Removal from Drive Module” on page 34 and reverse step 3.
4. Place drive pulley (**Figure 75, item 4**) into the belt loop and install it in the drive module. Refer to “Belt Removal from Drive Module” on page 34 and reverse steps 1 and 2. Tighten screws (**Figure 53, item 1**) to 60 in-lb (6.8 Nm).
5. Install the drive module onto the conveyor and attach clamps (**Figure 75, item 5**) in each corner. Tighten screws to 60 in-lb (6.8 Nm).
6. Route and install the belt over both ends of the conveyor.
7. On conveyors with stands, re-install conveyor mounting brackets. Refer to “Mounting Brackets” on page 21, steps 3 through 5.
8. Adjust the conveyor tensioning end. See “Conveyor Belt Tensioning” on page 42.

## ⚠ WARNING



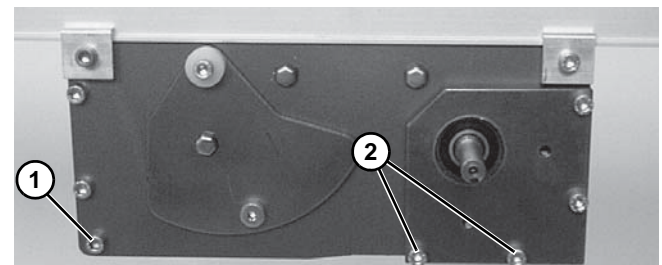
**Tension door closes quickly, may cause injury.  
KEEP FINGERS CLEAR OF TENSION DOOR.**

9. Carefully close the drive module tension door (**Figure 76, item 1**). See WARNING.



**Figure 76**

10. Tighten corner screws (**Figure 77, item 1**) on each side of the drive module to 80 in-lb (9 Nm).



**Figure 77**

11. If equipped, re-install the gearmotor mounting package. Reverse steps of “Gearmotor Mounting Package Removal” on page 32.
12. Re-install tension door screws (**Figure 77, item 2**) on each side of the module. Tighten screws to 60 in-lb (6.8 Nm).

## NOTE

*With vertically mounted gearmotors, tension door screws (**Figure 77, item 2**) are installed on one side when the gearmotor mounting package is installed.*

13. If equipped, replace guiding.

# Preventive Maintenance and Adjustment

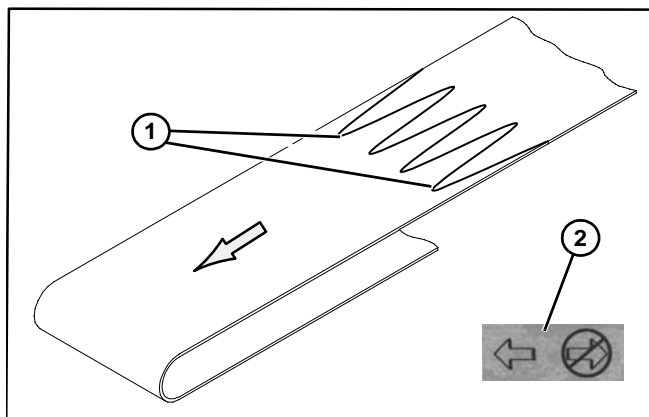
## Belt Installation for LPZ Conveyors

### **⚠ WARNING**



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

1. Ensure temporary support stands (**Figure 59, item 1**) are placed at both ends of the conveyor. Place an additional support stand (**Figure 59, item 2**) under the drive motor (**Figure 59, item 3**), if equipped. See WARNING.
2. Orient belt so splice leading fingers (**Figure 78, item 1**) point in the direction of belt travel as identified by the conveyor directional label (**Figure 78, item 2**).

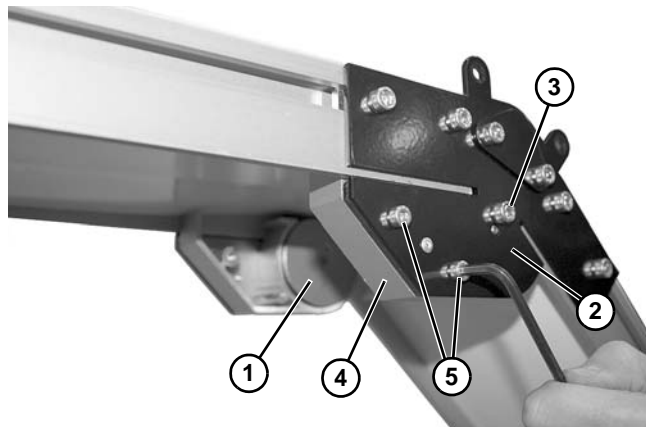


**Figure 78**

3. Slide belt onto the conveyor frame assembly.

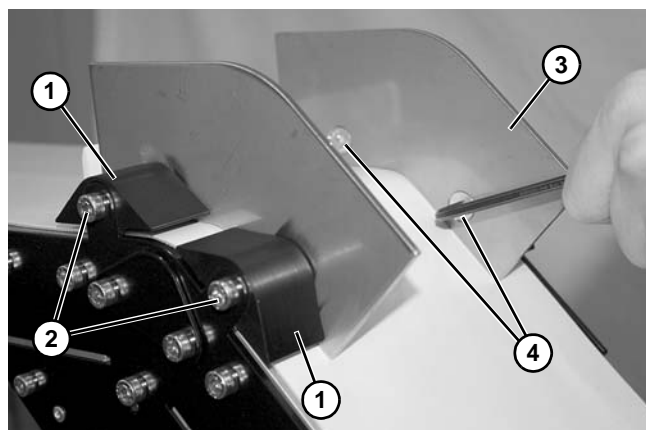
## Cleated Belt Conveyors

1. If equipped with an upper knuckle, install roller bearing assembly (**Figure 79, item 1**) into knuckle plate (**Figure 79, item 2**) with screws (**Figure 79, item 3**) on both sides of conveyor.



**Figure 79**

2. Install guard (**Figure 79, item 4**) on both sides of conveyor with screws (**Figure 79, item 5**). Tighten screws to 25 in-lb (3 Nm).
3. Install spacers (**Figure 80, item 1**) on both sides of conveyor with screws (**Figure 80, item 2**).



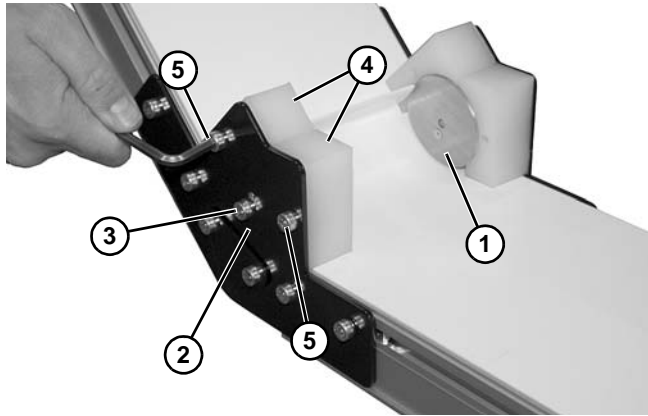
**Figure 80**

4. Install guard (**Figure 80, item 3**) on both sides of conveyor with screws (**Figure 80, item 4**).



# Preventive Maintenance and Adjustment

5. If equipped with a lower knuckle, install roller bearing assembly (**Figure 81, item 1**) into knuckle plate (**Figure 81, item 2**) with screws (**Figure 81, item 3**) on both sides of conveyor.

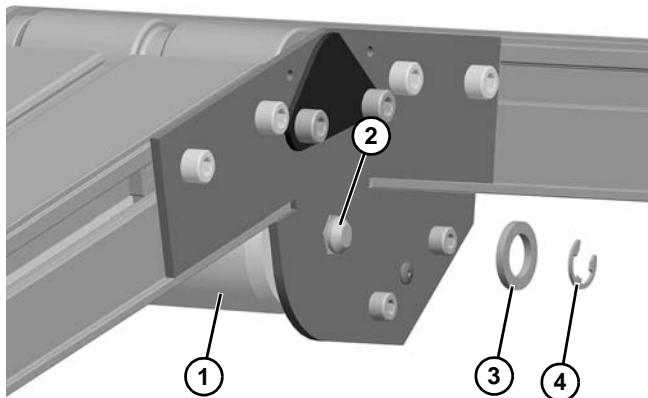


**Figure 81**

6. Install guards (**Figure 81, item 4**) with screws (**Figure 81, item 5**) on both sides of conveyor.
7. Tension belt. Refer to “Conveyor Belt Tensioning” on page 42.
8. If equipped, install return rollers and guiding.

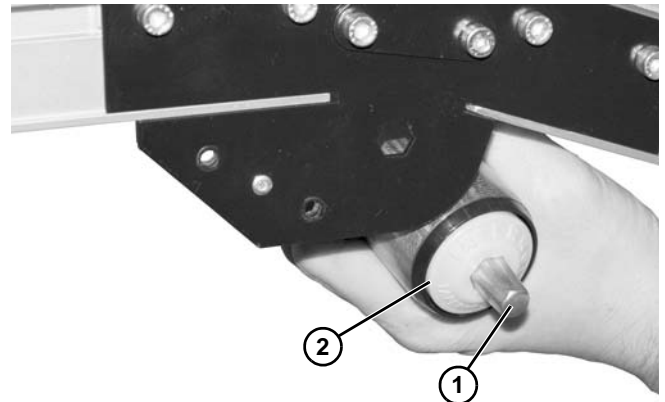
## Flat Belt Conveyors

1. Install idler pulley:
  - a. For 2" (44 mm) through 4" (95 mm) wide conveyors, install pulley (**Figure 82, item 1**) and pulley shaft (**Figure 82, item 2**). Install washer (**Figure 82, item 3**) and E-ring clip (**Figure 82, item 4**) on one side.



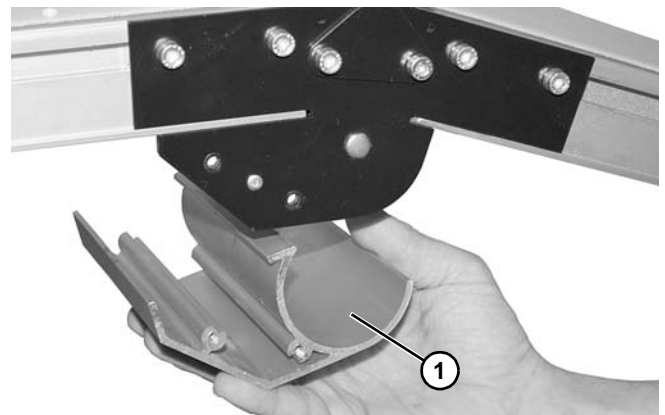
**Figure 82**

- b. For 5" (127 mm) or wider conveyor, push spring-loaded shaft ends (**Figure 83, item 1**) inward. Install roller (**Figure 83, item 2**).



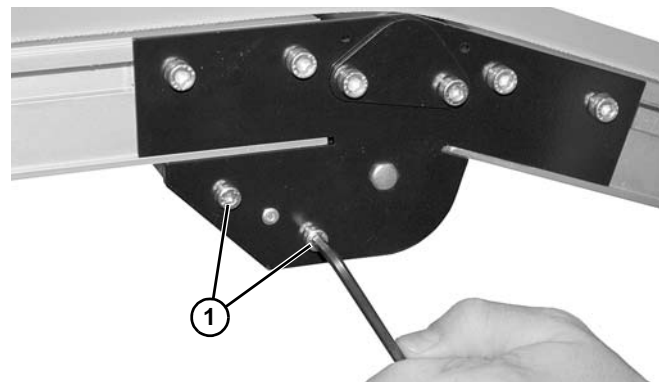
**Figure 83**

2. Position guard (**Figure 84, item 1**) between knuckle plates.



**Figure 84**

3. Install screws (**Figure 85, item 1**) on both sides of conveyor.



**Figure 85**

4. Tension belt. Refer to “Conveyor Belt Tensioning” on page 42.
5. If equipped, install return rollers and guiding.

# Preventive Maintenance and Adjustment


## Conveyor Belt Tensioning

### ⚠ WARNING



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

## Conveyors with 1.25" (32 mm) Diameter Pulleys

1. On tension end of the conveyor, identified with a  label (**Figure 86, item 1**), adjust head plate assembly (**Figure 86, item 2**):
  - a. If equipped with dust covers (**Figure 86, item 3**), remove screw (**Figure 86, item 4**) and dust cover on both sides of conveyor. Reinstall screw (**Figure 86, item 4**).
  - b. On both sides of conveyor, loosen fastening screws (**Figure 86, item 5**) and rotate pinion gear (**Figure 86, item 6**) to adjust head plate assembly.

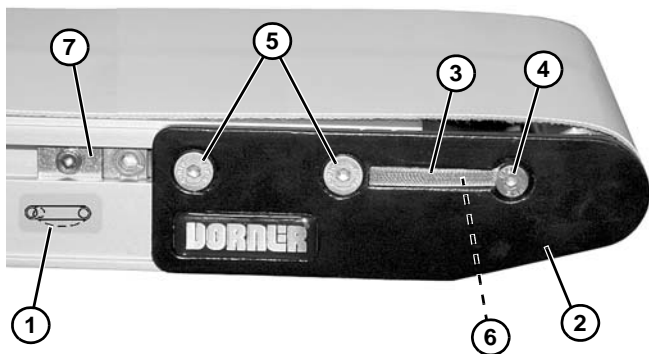


Figure 86

2. Adjust head plate assembly so end of conveyor frame aligns with or between the head plate tensioning marks (**Figure 87, item 1 & 2**). Replace belt if proper tensioning can not be obtained while aligning the end of the conveyor frame with or between the tensioning marks. See NOTE.

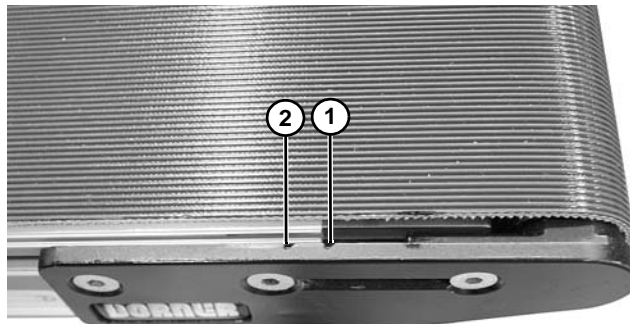


Figure 87

### NOTE

*On pinion gear, do not exceed a torque of 25 in-lb (2.8 Nm) for 2 – 12" (44 – 305 mm) wide conveyors and 50 in-lb (4.5 Nm) for an 18 – 24" (457 – 610 mm) wide conveyor. Over tensioning the conveyor belt could cause excessive pulley bearing load and early failure.*

3. After adjusting proper tensioning, tighten fastening screws (**Figure 86, item 5**) on both sides of conveyor to 60 in-lb (7 Nm).
4. If equipped, install dust covers (**Figure 86, item 3**).
5. If equipped with cam tracking assemblies (**Figure 86, item 7**), position against head plates and adjust belt tracking. Refer to "Conveyor Belt Tracking" on page 44.

# Preventive Maintenance and Adjustment

## Center Drive Conveyors

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

For a new belt, the tension plate (**Figure 88, item 1**) will be in position indicated below left. When the tension plate extends to position indicated below right, the conveyor belt must be replaced.

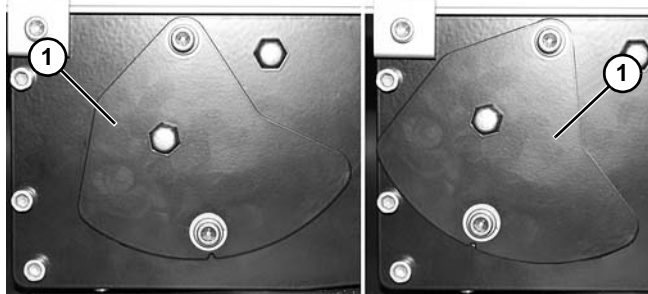


Figure 88

2. Adjust head plate assembly so end of conveyor frame aligns with or between the head plate tensioning marks (**Figure 90, item 1 & 2**). Replace belt if proper tensioning can not be obtained while aligning the end of the conveyor frame with or between the tensioning marks. See NOTE.

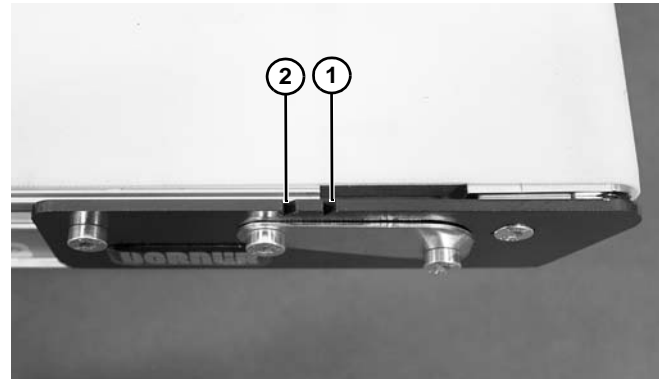



Figure 90

## Conveyors with Nose Bar Idlers

1. On tension end of the conveyor, identified with a  label (**Figure 89, item 1**), adjust head plate assembly (**Figure 89, item 2**):
  - a. On both sides of conveyor, loosen fastening screws (**Figure 89, item 3**).
  - b. If equipped with dust covers (**Figure 89, item 4**), loosen screw (**Figure 89, item 5**) and remove dust cover on both sides of conveyor. Tighten screw (**Figure 89, item 5**).
  - c. Rotate pinion gear (**Figure 89, item 6**) to adjust head plate assembly.

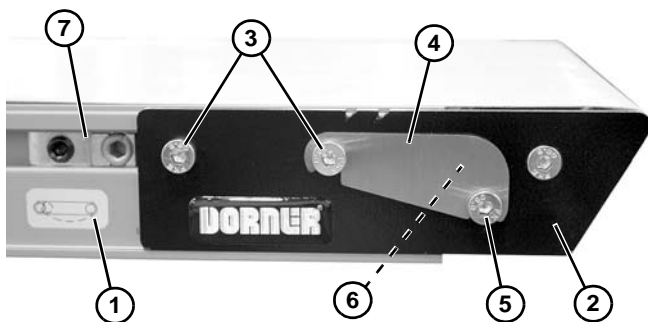


Figure 89

### NOTE

*On pinion gear, do not exceed a torque of 25 in-lb (2.8 Nm) for 2 – 12" (44 – 305 mm) wide conveyors and 50 in-lb (4.5 Nm) for an 18 – 24" (457 – 610 mm) wide conveyor. Over tensioning the conveyor belt could cause excessive pulley bearing load and early failure.*

3. After adjusting proper tensioning, tighten fastening screws (**Figure 89, item 3**) on both sides of conveyor to 60 in-lb (7 Nm).
4. If equipped, install dust covers (**Figure 89, item 4**).
5. If equipped with cam tracking assemblies (**Figure 89, item 7**) position against head plates and adjust belt tracking. Refer to "Conveyor Belt Tracking", next section.

# Preventive Maintenance and Adjustment

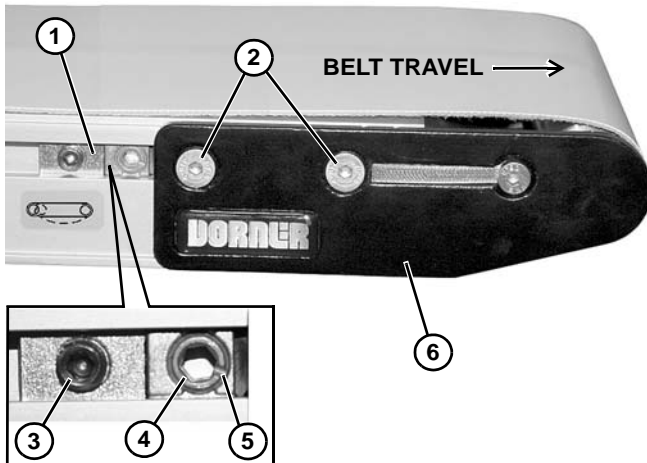
## Conveyor Belt Tracking

### V-Guided Belts

V-guided belts do not require tracking adjustment.

### Non V-Guided Belts

Non V-guided belt conveyors are equipped with belt tracking cam assemblies (**Figure 91, item 1**) for belt tracking adjustment.



**Figure 91**

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

1. Ensure head plate fastening screws (**Figure 91, item 2**) on both sides of conveyor are tightened.
2. On both sides of conveyor, loosen cam fastening screw (**Figure 91, item 3**). Adjust cams (**Figure 91, item 4**) until indicator slots (**Figure 91, item 5**) are horizontal and facing end of conveyor. Then slide cam assemblies against head plates (**Figure 91, item 6**) and re-tighten cam fastening screws (**Figure 91, item 3**) to 60 in-lb (7 Nm).
3. On the side toward which the belt is tracking, loosen head plate fastening screws (**Figure 91, item 2**).
4. With the conveyor running, use a 5 mm hex-key wrench to rotate the tracking cam (**Figure 91, item 4**) in small increments until the belt tracks in the center of the conveyor. Then while holding the cam in position, re-tighten the head plate fastening screws (**Figure 91, item 2**) with a 4 mm hex-key wrench to 60 in-lb (7 Nm).

## Pulley Replacement

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

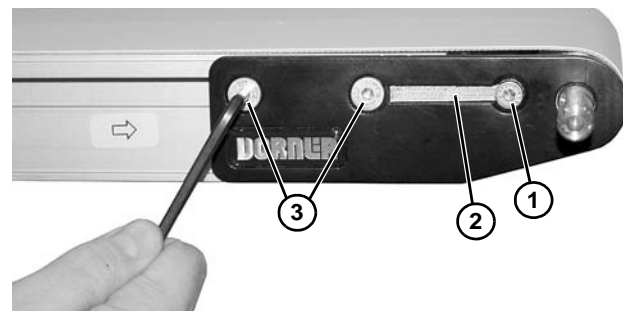
Unless instructed otherwise, leave belt in place to remove the desired pulley. Follow the corresponding instructions below:

- **A** – Drive Pulley Removal
- **B** – iDrive Pulley Removal
- **C** – Idler Pulley Removal
- **D** – 5/16" Nosebar Bearing Removal
- **E** – 5/8" Nosebar Pulley Removal
- **F** – Center Drive Module Pulley Removal
- **G** – Mid Drive Module Pulley Removal
- **H** – Knuckle Idler Pulley Removal

### A – Drive Pulley Removal

1. Remove belt tension.
2. On one side of the conveyor, remove screw (**Figure 92, item 1**) and remove dust cover (**Figure 92, item 2**), if installed.

<b>NOTE</b>
<i>To prevent damage to the head plates, be sure to remove them slowly because they are not attached to pulley.</i>



**Figure 92**

3. Remove two fastening screws (**Figure 92, item 3**).

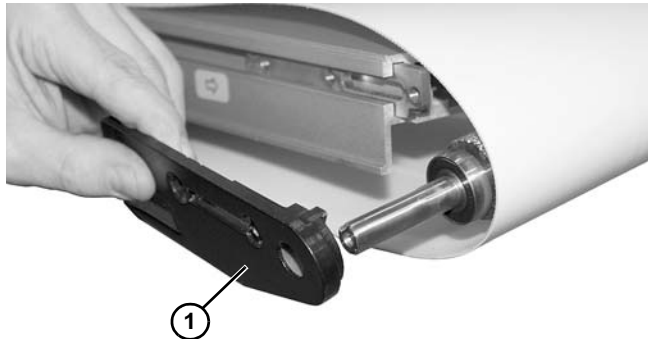
# Preventive Maintenance and Adjustment

## ⚠ WARNING



Drive shaft keyway may be sharp. **HANDLE WITH CARE.**

4. Remove the head plate (**Figure 93, item 1**) from the conveyor frame, holding spindle in place.



**Figure 93**

5. Slide the drive pulley out of the belt loop.
6. To replace the drive tail pulley, reverse the removal procedure.
7. Re-install belt on end of conveyor, then tension the belt. See “Conveyor Belt Tensioning” on page 42.
8. If installed, re-position the cam assemblies against the head plates and adjust belt tracking. See “Conveyor Belt Tracking” on page 44.

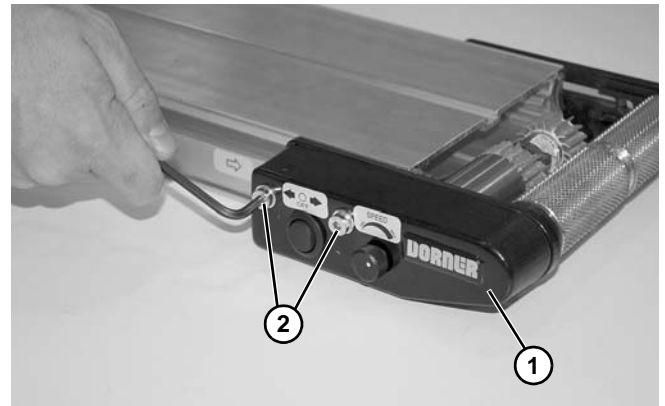
## B – iDrive Pulley Removal

1. Remove belt. Refer to “Belt Removal for End Drive and iDrive Conveyors” on page 30.

## NOTE

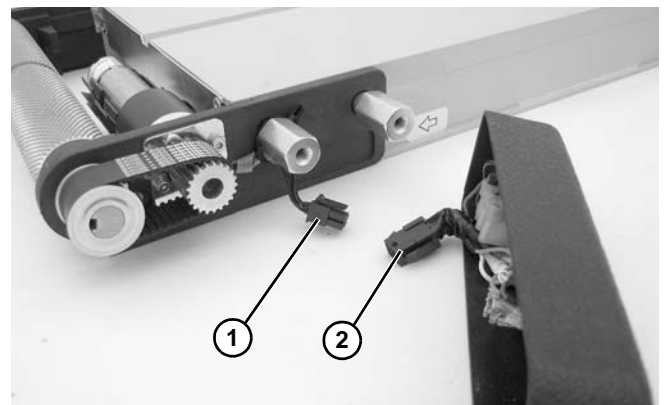
*To prevent damage to the head plates and spindle, be sure to remove them slowly because they are not attached to spindle.*

2. Remove drive side cover (**Figure 94, item 1**) by removing two iDrive cover screws (**Figure 94, item 2**).



**Figure 94**

3. Unplug motor connector (**Figure 95, item 1**) from cover wiring connector (**Figure 95, item 2**).



**Figure 95**



# Preventive Maintenance and Adjustment

4. Loosen four clamp plate screws (Figure 96, item 1).

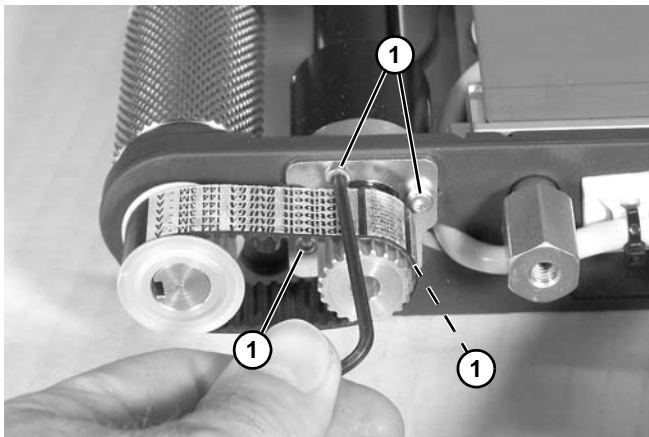


Figure 96

5. Loosen timing belt tension cam (Figure 97, item 1).

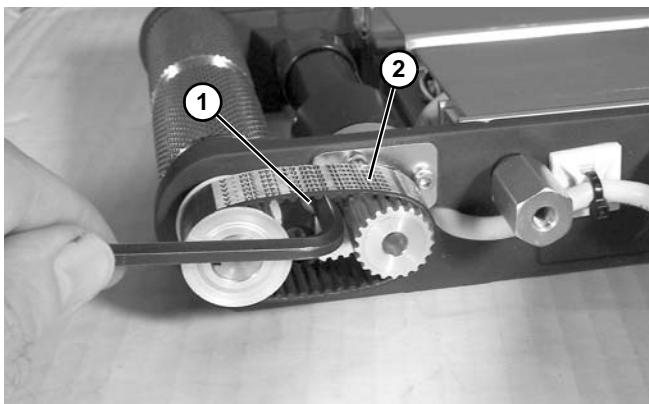


Figure 97

6. Remove timing belt (Figure 97, item 2).  
7. Remove two head plate fastening screws (Figure 98, item 1) from opposite side of conveyor.

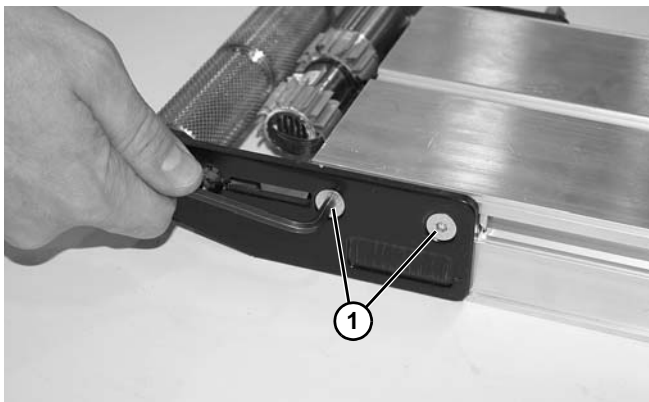


Figure 98

<b>⚠ WARNING</b>

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

8. Loosen two set screws (Figure 99, item 1) on driven pulley (Figure 99, item 2), and slide off shaft to remove.

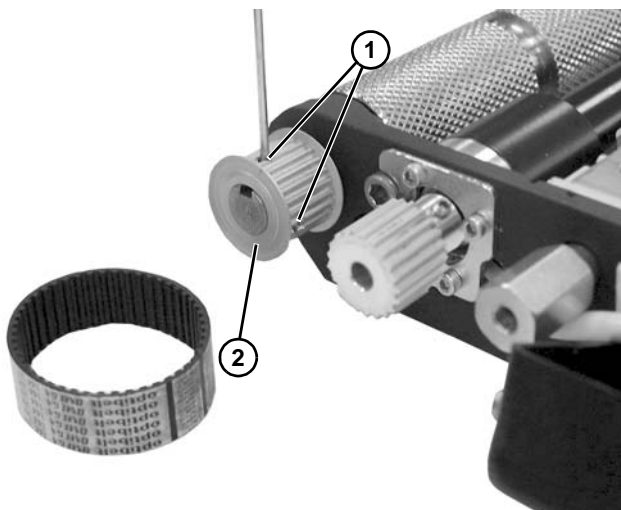


Figure 99

<b>⚠ CAUTION</b>
<b>Spindle can slide out.</b>

9. Remove head plate (Figure 100, item 1) from frame.

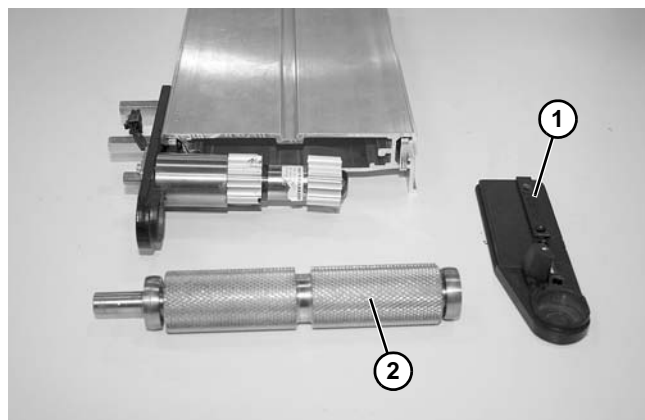


Figure 100

10. Remove and replace spindle (Figure 100, item 2).  
11. Re-install in the reverse order of removal.

# Preventive Maintenance and Adjustment

12. Tighten timing belt tension cam (Figure 101, item 1), making certain that pointer (Figure 101, item 2) on cam is pointing towards the motor drive spindle (Figure 101, item 3).

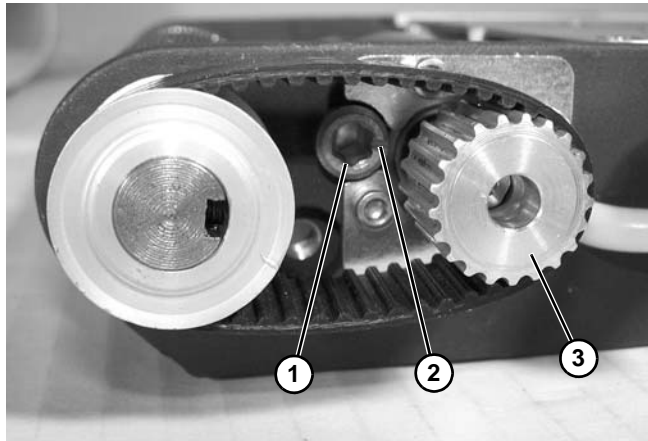


Figure 101

13. Rotate tension cam (Figure 101, item 1) to fully tension the timing belt (Figure 102, item 1). Tighten four clamp plate screws (Figure 102, item 2) to 15 in-lb (1.7 Nm) to secure position.

## CAUTION

Over tightening of timing belt will result in reduced gearmotor and timing belt life.

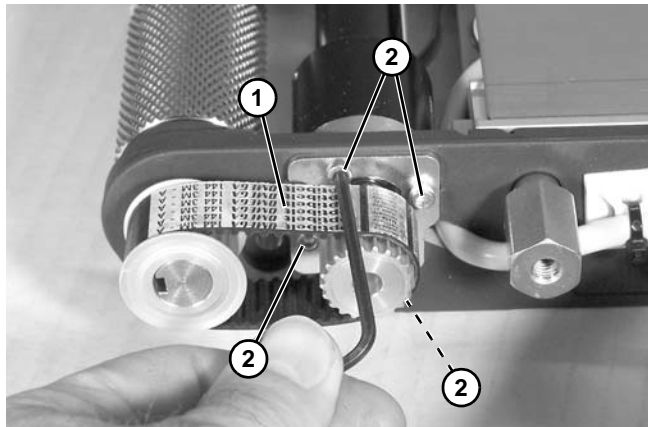


Figure 102

14. Re-install belt on end of conveyor, then tension the belt. See "Conveyor Belt Tensioning" on page 42.
15. If installed, re-position the cam assemblies against the head plates and adjust belt tracking. See "Conveyor Belt Tracking" on page 44.

## C – Idler Pulley Removal

1. On one side of the conveyor, remove screw (Figure 103, item 1) and remove dust cover (Figure 103, item 2), if installed.

### NOTE

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

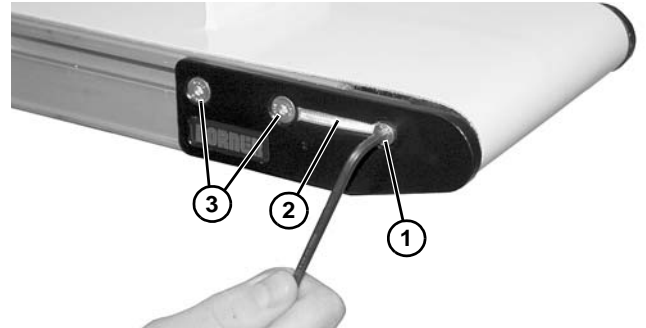


Figure 103

2. Remove two fastening screws (Figure 103, item 3).
3. Remove the head plate (Figure 104, item 1) from the conveyor frame, holding spindle in place.

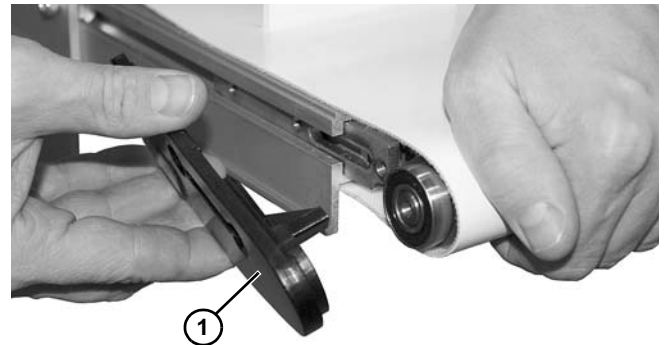


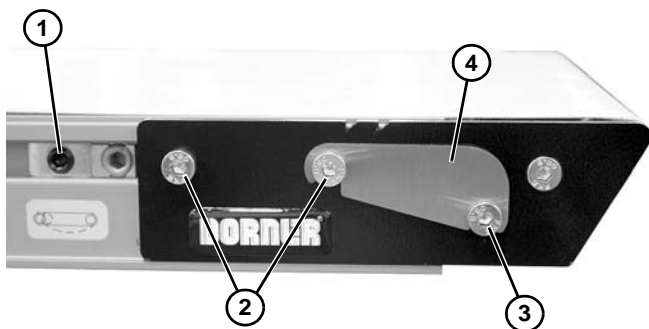
Figure 104

4. Slide spindle out of the belt loop.
5. To replace the idler tail pulley, reverse the removal procedure.
6. Re-install belt on end of conveyor, then tension the belt. See "Conveyor Belt Tensioning" on page 42.
7. If installed, re-position the cam assemblies against the head plates and adjust belt tracking. See "Conveyor Belt Tracking" on page 44.

# Preventive Maintenance and Adjustment

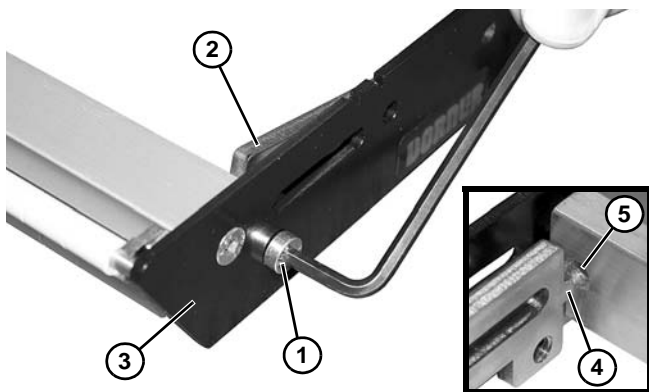
## D – 5/16" (8 mm) Tight Radius Nosebar Bearing Removal

1. On both sides of conveyor, loosen cam fastening screw (**Figure 105, item 1**) (if equipped) and slide cam assemblies toward the center of the conveyor.



**Figure 105**

2. On both sides of conveyor, loosen two fastening screws (**Figure 105, item 2**) to remove belt tension. Remove belt from end of conveyor.
3. On both sides of conveyor, loosen fastening screw (**Figure 105, item 3**) and remove dust cover (**Figure 105, item 4**) (if equipped).
4. Remove nosebar tail from the conveyor and place on an open work surface. On one side of nosebar tail, remove two fastening screws (**Figure 105, item 2**).
5. Remove lower screw (**Figure 106, item 1**) and remove tail nut bar (**Figure 106, item 2**) and side plate (**Figure 106, item 3**).

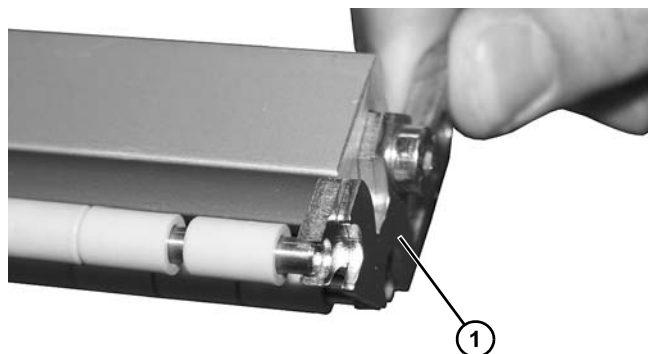


**Figure 106**

### NOTE

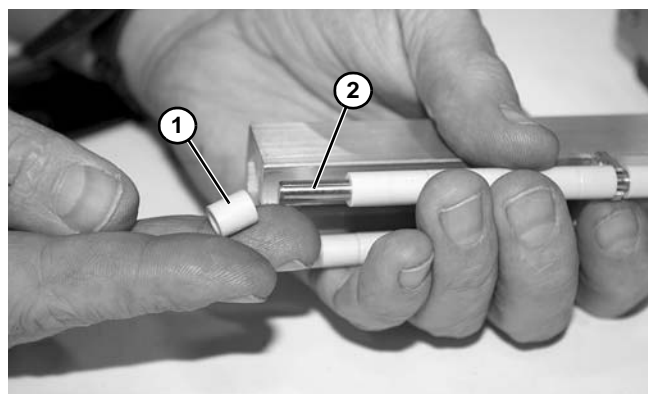
During reassembly, make certain that the tail nut bar nipple (**Figure 106, item 4**) is inserted into the support bar hole (**Figure 106, item 5**).

6. Remove outer and inner end plate (**Figure 107, item 1**).



**Figure 107**

7. Remove and replace bearings (**Figure 108, item 1**) and rods (**Figure 108, item 2**) as necessary.



**Figure 108**

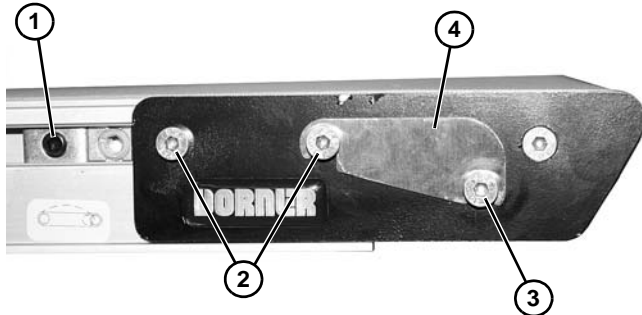
8. Assemble and install head plate in reverse order of removal. Use a hex-key wrench to tighten lower screw (**Figure 106, item 1**) to 30 in-lb (3.4 Nm). Leave two fastening screws (**Figure 105, item 2**) loose for belt tensioning.
9. Re-install belt on end of conveyor, then tension the belt. See "Conveyor Belt Tensioning" on page 42.
10. Re-position the cam assemblies (if equipped) against the head plates and adjust belt tracking. See "Conveyor Belt Tracking" on page 44.



# Preventive Maintenance and Adjustment

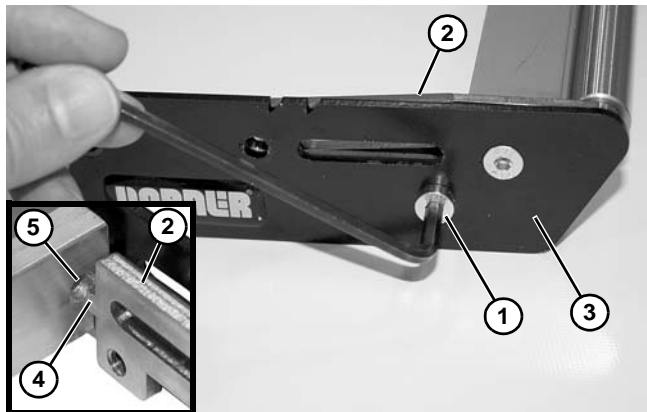
## E – 5/8" (16 mm) Nosebar Pulley Removal

1. On both sides of conveyor, loosen cam fastening screw (**Figure 109, item 1**) (if equipped) and slide cam assemblies toward the center of the conveyor.



**Figure 109**

2. On both sides of conveyor, loosen fastening screws (**Figure 109, item 2**) to remove belt tension. Remove belt from end of conveyor.
3. On both sides of conveyor, loosen fastening screw (**Figure 109, item 3**) and remove dust cover (**Figure 109, item 4**) (if equipped).
4. Remove nosebar tail from the conveyor and place on an open work surface. On one side of nosebar tail, remove two fastening screws (**Figure 109, item 2**).
5. Remove lower screw (**Figure 110, item 1**) and remove tail nut bar (**Figure 110, item 2**) and side plate (**Figure 110, item 3**).

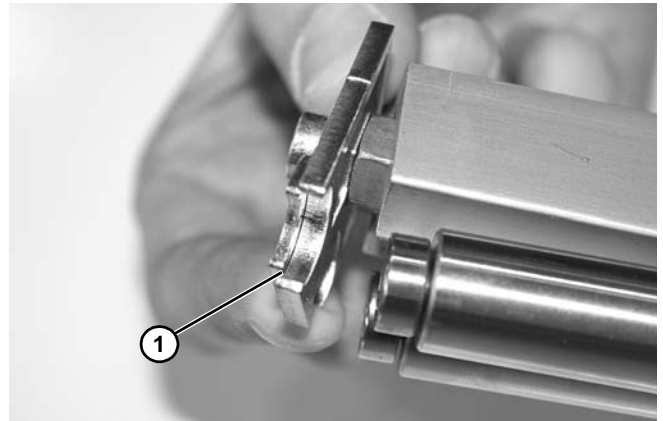


**Figure 110**

### NOTE

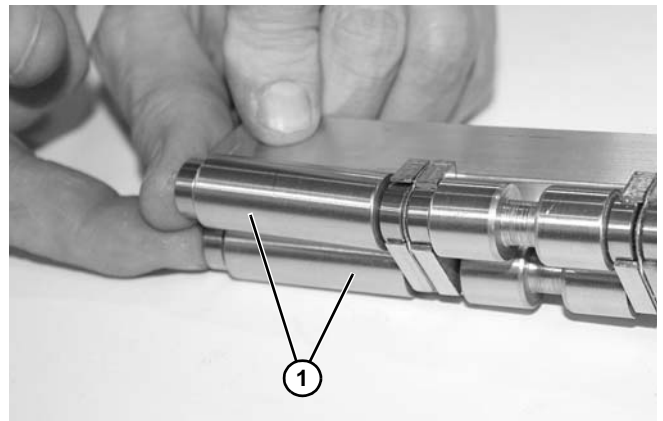
During reassembly, make certain that the tail nut bar nipple (**Figure 110, item 4**) is inserted into the support bar hole (**Figure 110, item 5**).

6. Remove outer and inner end plate (**Figure 111, item 1**).



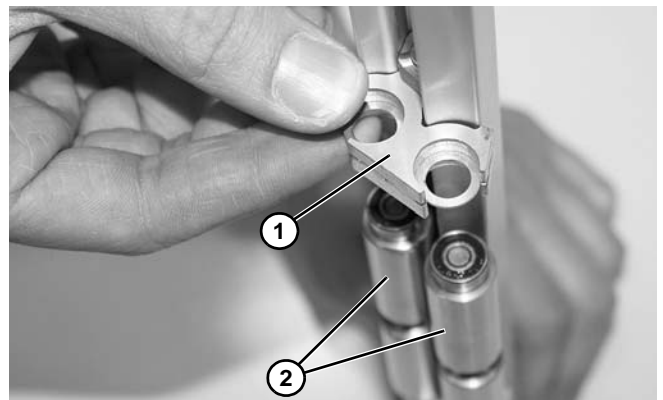
**Figure 111**

7. Remove spindles (**Figure 112, item 1**).



**Figure 112**

8. Remove bearing carrier (if installed) (**Figure 113, item 1**) and spindles (**Figure 113, item 2**).



**Figure 113**

9. Repeat step 8 for remaining spindles.
10. Assemble and install head plate in reverse order of removal. Use a 4 mm hex-key wrench to tighten lower screw (**Figure 110, item 1**) to 30 in-lb (3.4 Nm). Leave two fastening screws (**Figure 109, item 2**) loose for belt tensioning.

# Preventive Maintenance and Adjustment

11. Re-install belt on end of conveyor, then tension the belt. See "Conveyor Belt Tensioning" on page 42.
12. Re-position the cam assemblies (if equipped) against the head plates and adjust belt tracking. See "Conveyor Belt Tracking" on page 44.

## F – Center Drive Module Pulley Removal

Remove the conveyor belt to access the pulley(s). Refer to "Belt Removal for Center Drive Conveyors" on page 31, steps 1 through 10.

Perform one of the following procedures to remove desired pulley:

- Drive Module Drive Pulley Removal
- Drive Module Idler Pulley Removal

### Drive Module Drive Pulley Removal

1. Remove the gearmotor drive package. Refer to "Gearmotor Mounting Package Removal" on page 32.
2. Remove the drive module. Refer to "Drive Module Removal" on page 33.
3. Remove the drive pulley. Refer to "Belt Removal from Drive Module" on page 34, steps 1 and 2.
4. To replace the pulley, reverse the removal procedure.
5. Re-install belt on end of conveyor, then tension the belt. See "Conveyor Belt Tensioning" on page 42.
6. If installed, re-position the cam assemblies against the head plates and adjust belt tracking. See "Conveyor Belt Tracking" on page 44.

### Drive Module Idler Pulley Removal

1. Remove the gearmotor drive package. Refer to "Gearmotor Mounting Package Removal" on page 32.
2. Remove the drive module. Refer to "Drive Module Removal" on page 33.
3. Remove the grooved idler pulley. Refer to "Belt Removal from Drive Module" on page 34, step 3.
4. Remove smooth idler pulleys:
  - a. For 2" (44 mm), 3" (70 mm) or 4" (95 mm) wide conveyor, remove E-ring clips and washers (**Figure 114, item 1**). Remove pulley shafts (**Figure 114, item 2**) and pulleys (**Figure 114, item 3**).

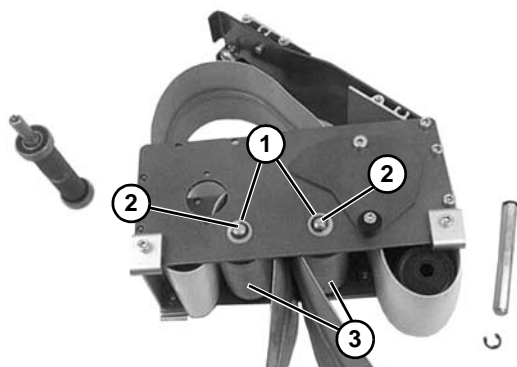


Figure 114

- b. For 5" (127 mm) or wider conveyor, depress both sides of each spring-loaded shaft (**Figure 115, item 1**). Remove pulleys (**Figure 115, item 2**).

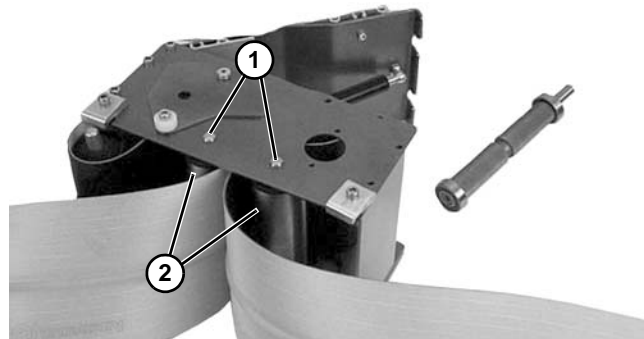



Figure 115

5. To replace the pulley, reverse the removal procedure.
6. Re-install belt on end of conveyor, then tension the belt. See "Conveyor Belt Tensioning" on page 42.
7. Re-position the cam assemblies (if equipped) against the head plates and adjust belt tracking. See "Conveyor Belt Tracking" on page 44.

## G – Mid Drive Module Pulley Removal

1. On tension end of the conveyor, identified with  a label (**Figure 116, item 1**), push in head plate assembly (**Figure 116, item 2**):
  - a. On both sides of conveyor, loosen and move cam tracking assemblies (**Figure 116, item 3**) (if equipped) away from head plates.
  - b. Loosen fastening screws (**Figure 116, item 4**) and push head plate assembly inward.

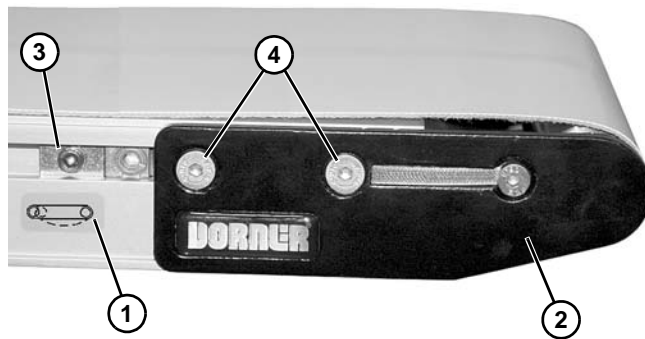
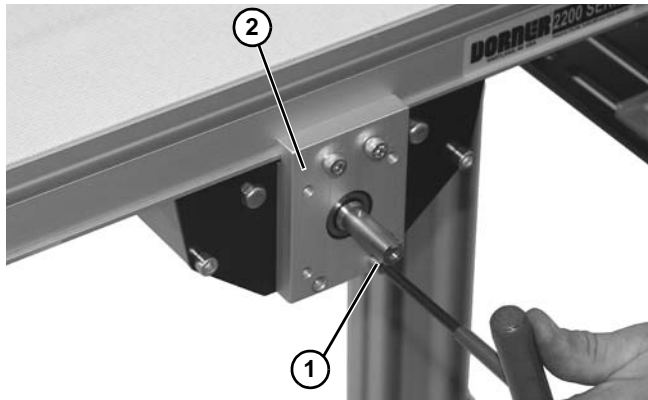


Figure 116

2. Remove drive package. See your appropriate Drive Package manual for removal procedure.

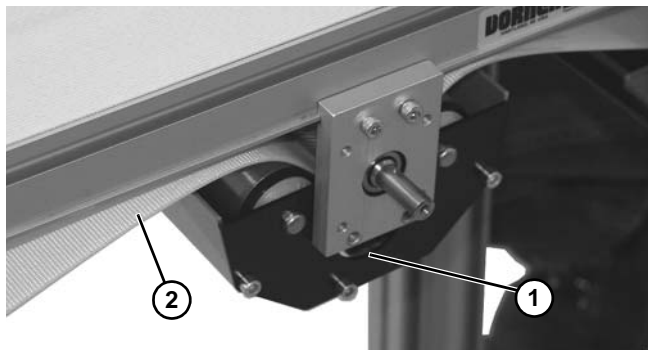
# Preventive Maintenance and Adjustment

3. Loosen one socket head screw (**Figure 117, item 1**) from each side of mounting block (**Figure 117, item 2**).



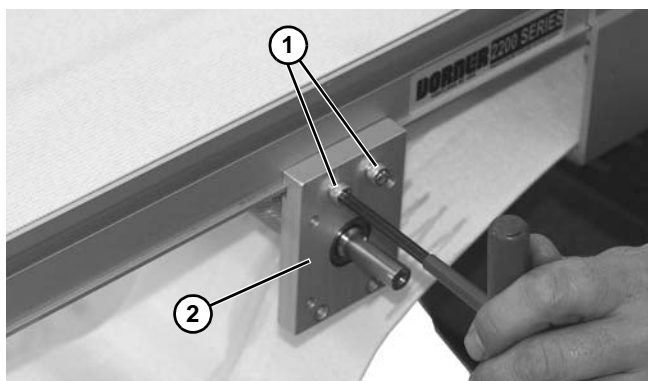
**Figure 117**

4. Lower and remove mid drive module (**Figure 118, item 1**) from belt (**Figure 118, item 2**).



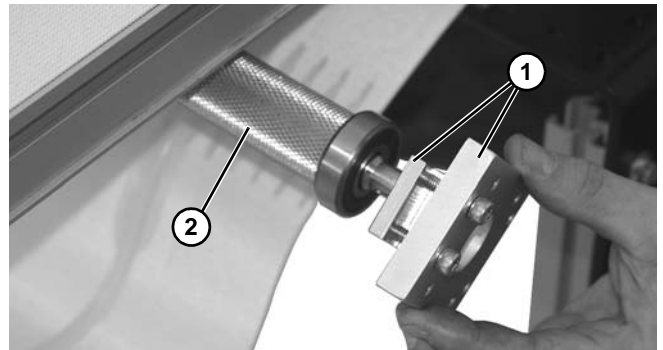
**Figure 118**

5. Loosen two socket head screws (**Figure 119, item 1**) from each side of mounting block (**Figure 119, item 2**).



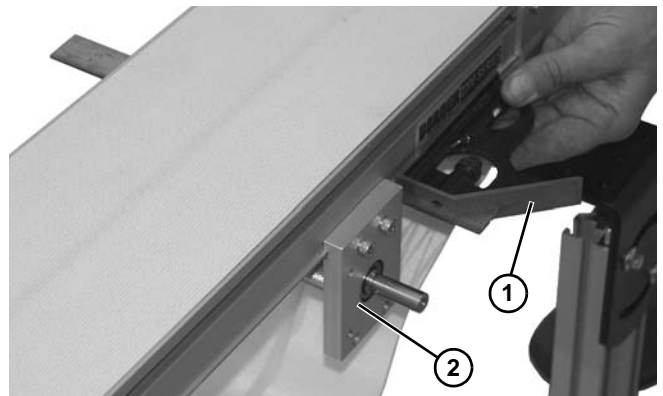
**Figure 119**

6. Separate mounting blocks (**Figure 120, item 1**) from spindle (**Figure 120, item 2**).



**Figure 120**

7. Replace spindle.
8. Install components, reverse order of removal.
9. Be certain to use a square (**Figure 121, item 1**) across mounting blocks (**Figure 121, item 2**), so blocks are aligned to one another, before tightening hardware.



**Figure 121**

10. Tighten socket head screws (**Figure 117, item 1**) and (**Figure 119, item 1**) to 60 in-lb (7 Nm).
11. Tension conveyor belt. See "Conveyor Belt Tensioning" on page 42.

# Preventive Maintenance and Adjustment

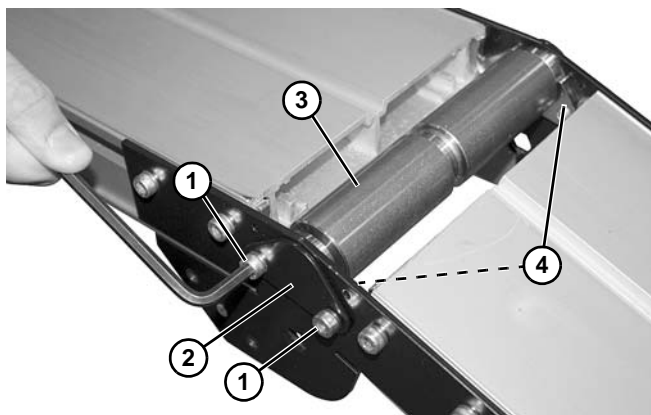
## H – Knuckle Idler Pulley Removal

1. Remove belt. See “Belt Removal for LPZ Conveyors” on page 35.
2. Temporarily support the knuckle idler pulley.

### NOTE

*The procedure shown is for a knuckle on a Flat Belt conveyor. The removal procedure for other knuckle types is the same.*

3. Remove two screws (**Figure 122, item 1**) and remove bearing cover (**Figure 122, item 2**) on both sides of knuckle.



**Figure 122**

4. Slide idler pulley (**Figure 122, item 3**) to one side of the conveyor, remove bearing housings (**Figure 122, item 4**), and then remove idler pulley from knuckle plates.

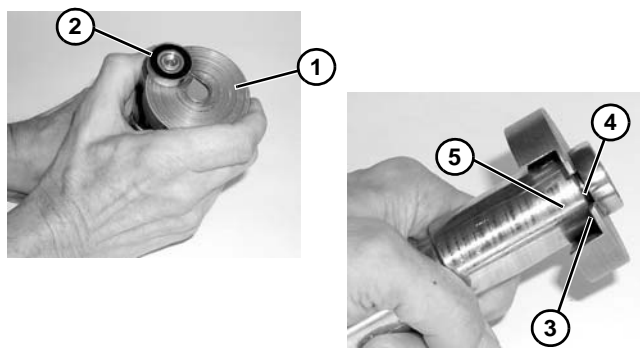
## Bearing Removal and Replacement

### Removal

### IMPORTANT

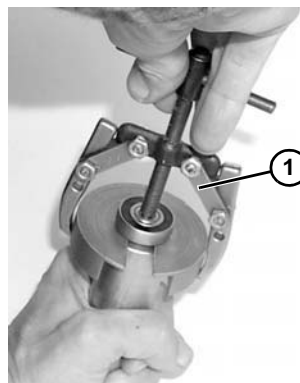
*Do not use any removed bearings. Replace them.*

1. Place bearing removal tool part #456063 (**Figure 123, item 1**) below bearing (**Figure 123, item 2**) with lip (**Figure 123, item 3**) located in gap (**Figure 123, item 4**) between bearing and spindle hub (**Figure 123, item 5**) as shown.



**Figure 123**

2. Using puller part #807-1716 (**Figure 124, item 1**), remove and discard bearing.



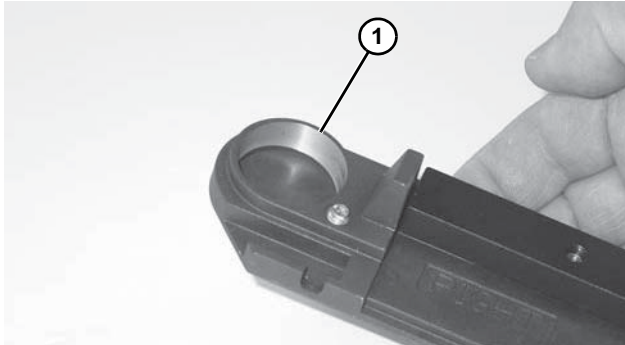
**Figure 124**



# Preventive Maintenance and Adjustment

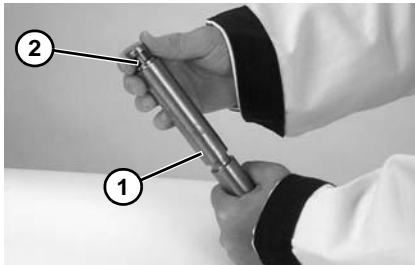
## Replacement

1. Inspect the head plates bearing seating surface (**Figure 125, item 1**). If they are worn or damaged, replace. See “Service Parts” on page 60.



**Figure 125**

2. Inspect spindle (**Figure 126, item 1**). Replace if worn.
3. Slide bearing (**Figure 126, item 2**) onto spindle.



**Figure 126**

4. Using an arbor press or similar device, press bearing onto pulley shaft (**Figure 127**).

### **WARNING**

Be certain that bearing and shaft is set onto press completely flush with press cylinder plate. If not, damage to bearing or shaft could result.

Keep hands and fingers away from press and components during procedure.

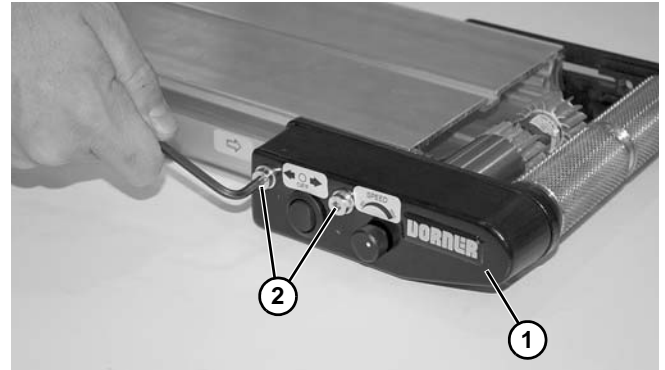


**Figure 127**

5. Repeat steps 1 through 4 for each bearing.

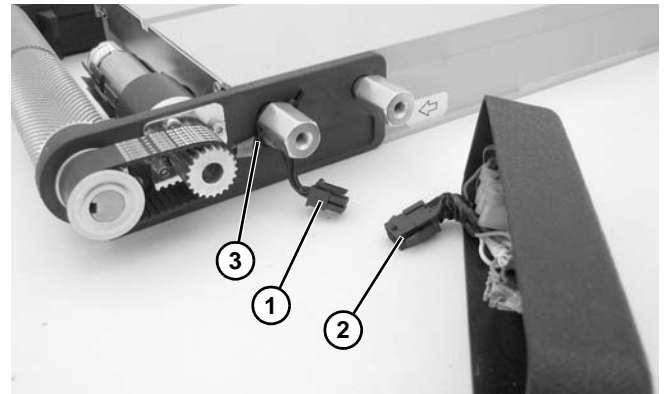
## iDrive Motor Replacement

1. Remove belt. Refer to “Belt Removal for End Drive and iDrive Conveyors” on page 30.
2. Remove inframe drive side cover (**Figure 128, item 1**) by removing two head plate fastening screws (**Figure 128, item 2**).



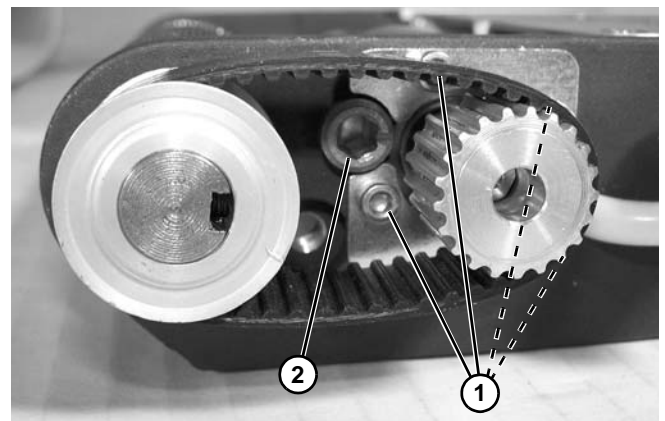
**Figure 128**

3. Unplug motor connector (**Figure 129, item 1**) from cover wiring connector (**Figure 129, item 2**), and cut cable tie (**Figure 129, item 3**) from conveyor.



**Figure 129**

4. Loosen four clamp plate screws (**Figure 130, item 1**).

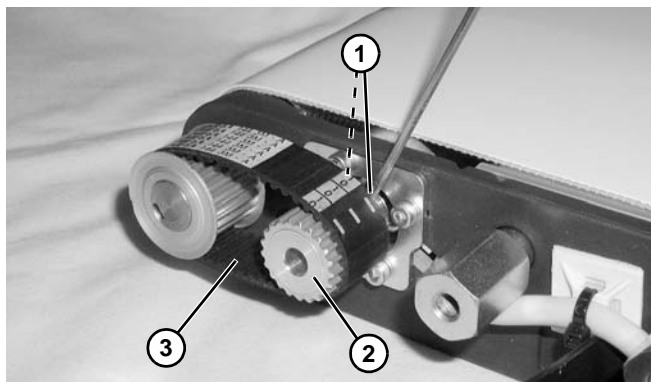


**Figure 130**

5. Loosen timing belt tension cam (**Figure 130, item 2**).

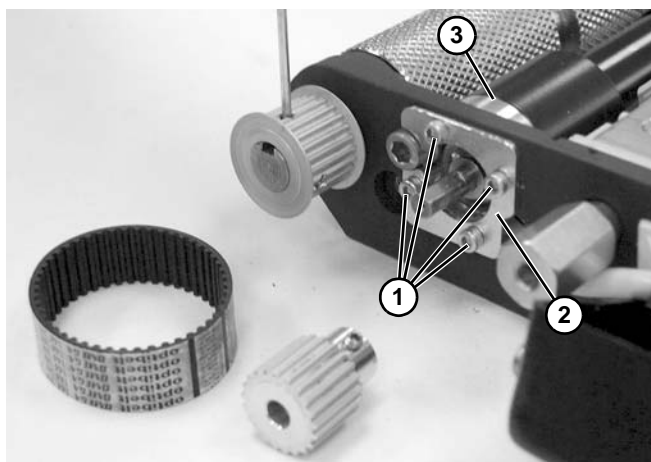
# Preventive Maintenance and Adjustment

6. Loosen two set screws (**Figure 131, item 1**) on drive pulley (**Figure 131, item 2**). Slide drive pulley outward off of gearmotor shaft and remove timing belt (**Figure 131, item 3**).



**Figure 131**

7. Remove four clamp plate screws (**Figure 132, item 1**) and clamp plate (**Figure 132, item 2**).



**Figure 132**

8. Remove and replace motor (**Figure 132, item 3**).

## NOTE

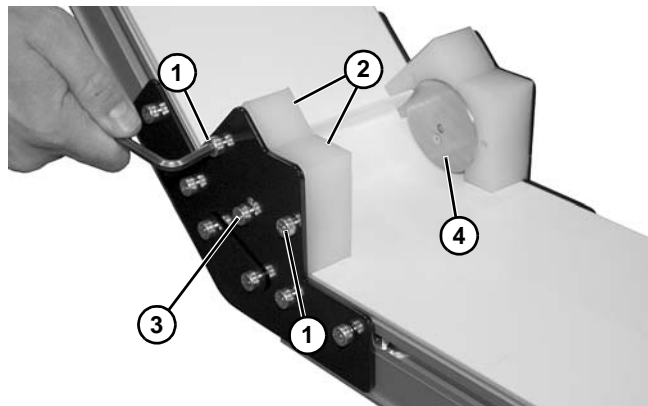
*When reassembling, make sure the pointer on the timing belt tension cam is pointing towards the motor.*

9. Reinstall in reverse order of removal. (Refer to steps 12 and 13 of “B – iDrive Pulley Removal” on page 45 for timing belt tensioning.)

## Knuckle Return Roller Replacement

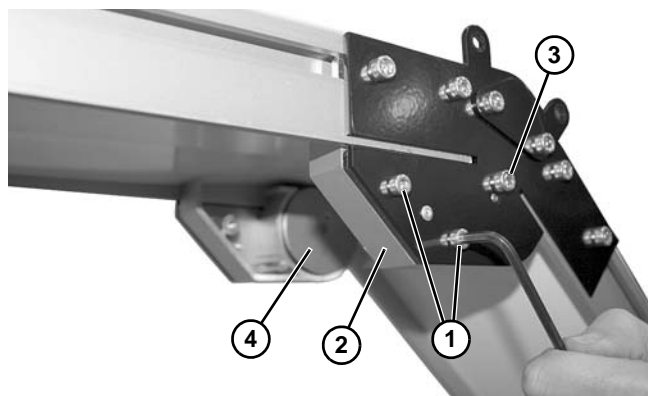
### Cleated Belt Conveyor

1. Remove belt tension.
2. If equipped with a lower knuckle, remove screws (**Figure 133, item 1**) and remove guards (**Figure 133, item 2**) on both sides of knuckle.



**Figure 133**

3. Remove screws (**Figure 133, item 3**) and remove roller bearing assembly (**Figure 133, item 4**) on both sides of knuckle.
4. If equipped with an upper knuckle, remove screws (**Figure 134, item 1**) and remove guard (**Figure 134, item 2**) on both sides of knuckle.



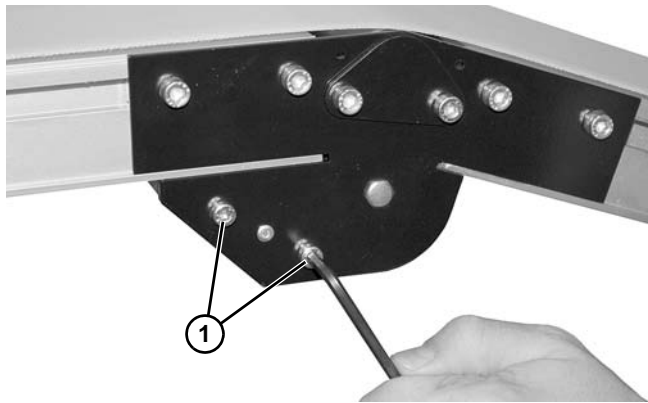
**Figure 134**

5. Remove screw (**Figure 134, item 3**) and remove roller bearing assembly (**Figure 134, item 4**) on both sides of knuckle.

# Preventive Maintenance and Adjustment

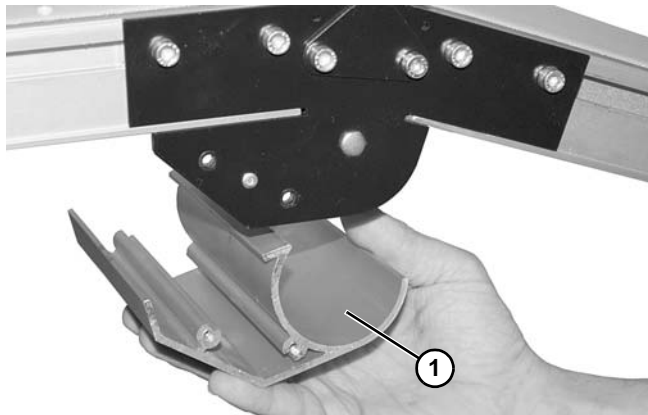
## Flat Belt Conveyor

1. Remove screws (**Figure 135, item 1**) on both sides of conveyor.



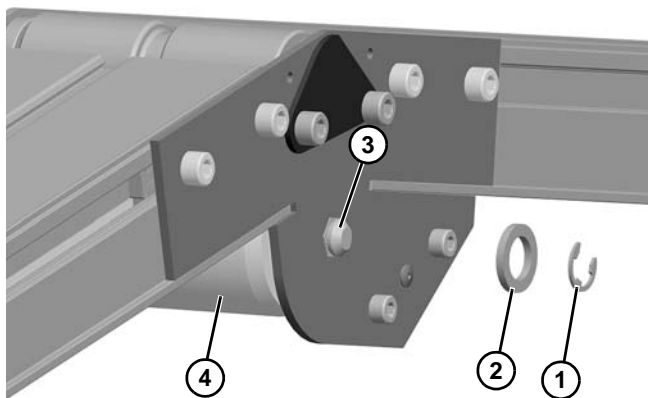
**Figure 135**

2. Remove guard (**Figure 136, item 1**).



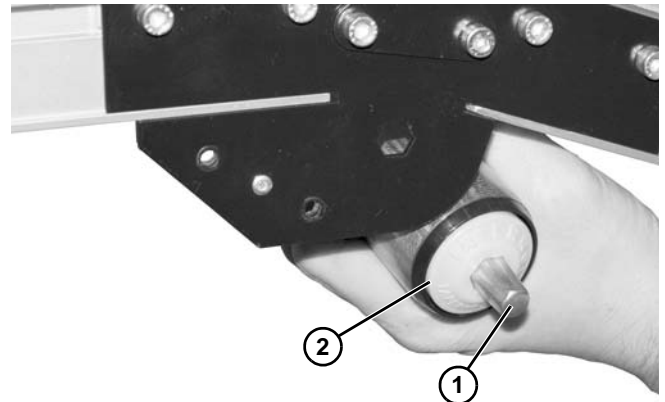
**Figure 136**

3. Remove idler pulley:
  - a. For 2" (44 mm) through 4" (95 mm) wide conveyors, remove E-ring clip (**Figure 137, item 1**) and washer (**Figure 137, item 2**) from one side. Remove pulley shaft (**Figure 137, item 3**) and pulley (**Figure 137, item 4**).



**Figure 137**

- b. For 5" (127 mm) or wider conveyor, push spring-loaded shaft ends (**Figure 138, item 1**) inward. Remove roller (**Figure 138, item 2**).

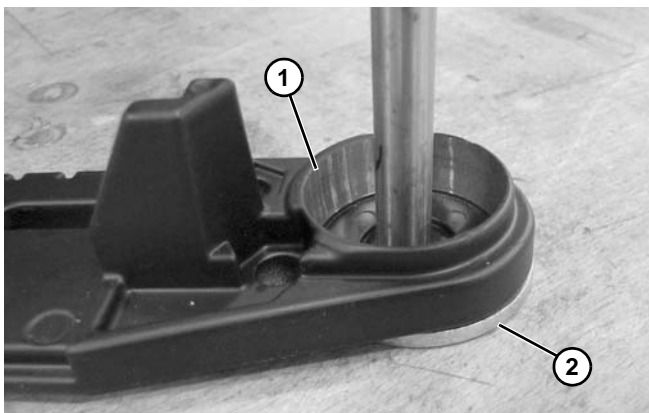


**Figure 138**

# Preventive Maintenance and Adjustment

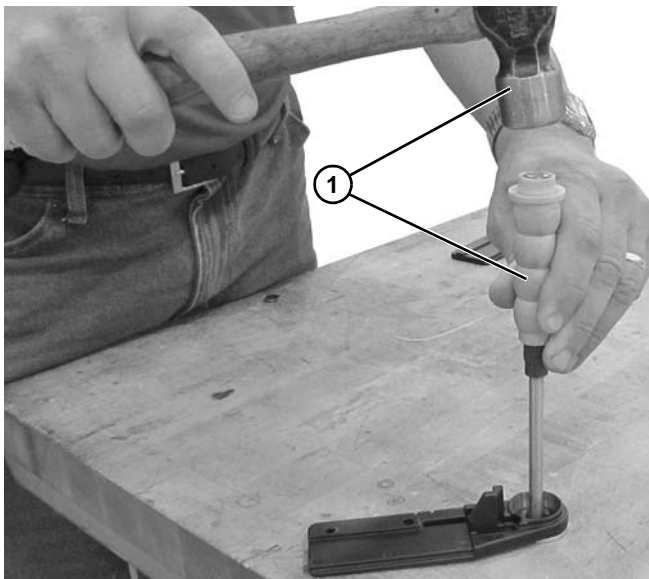
## Tail Plate Shaft Knockout Removal

1. Determine which tail plate(s) require the hole knockout slug to be removed for the drive shaft.
  - Position A or B = 205370-LH
  - Position C or D = 205370-RH
2. Set tail plate (**Figure 139, item 1**) flat side down over washer (**Figure 139, item 2**) or hole in workbench that has a minimum diameter of 5/8".

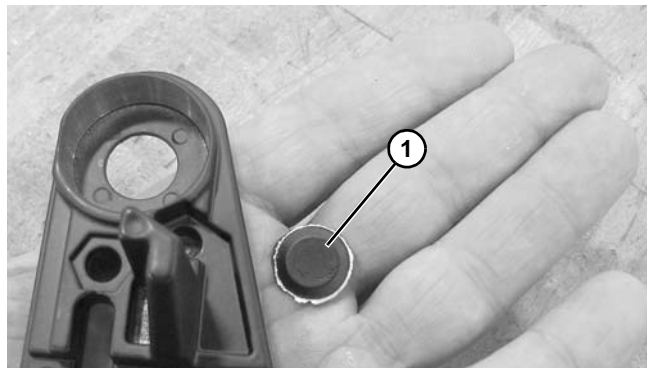


**Figure 139**

3. Use a hammer and punch (1/4" - 1/2" dia) (**Figure 140, item 1**) or long bolt to knock out slug (**Figure 141, item 1**) for shaft backing up tail plate with washer.

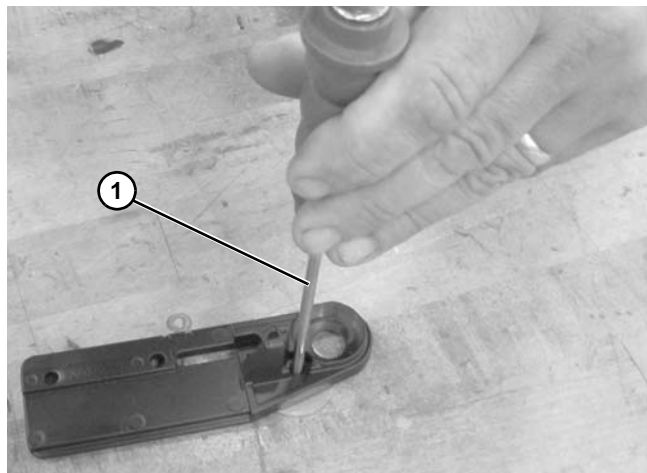


**Figure 140**

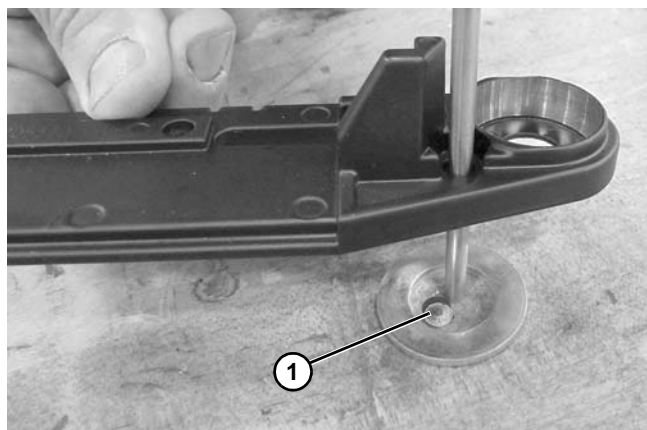


**Figure 141**

4. Repeat the same operation to knockout (**Figure 143, item 1**) for alignment screw hole using 1/8" - 3/16" punch (**Figure 142, item 1**) or M5 - M6 bolt.



**Figure 142**



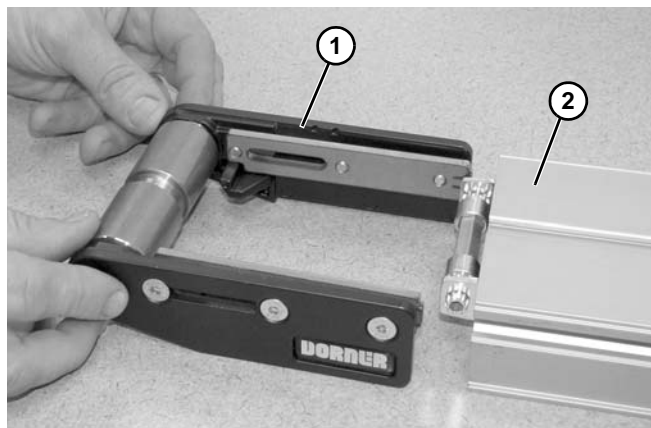
**Figure 143**



# Preventive Maintenance and Adjustment

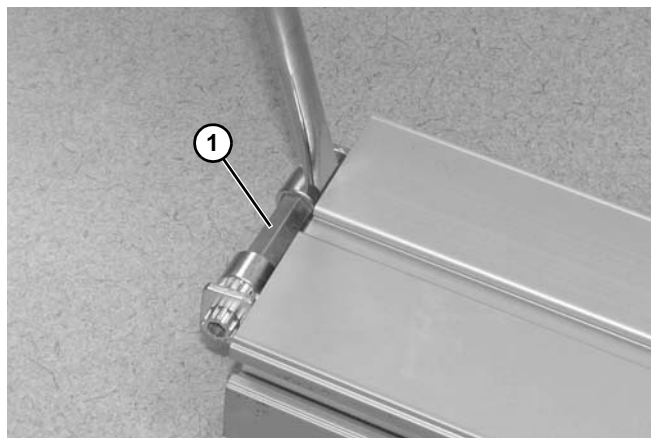
## Pinion Replacement

1. Remove conveyor belt. See “Conveyor Belt Replacement” section on page 29.
2. Remove idler tail (**Figure 144, item 1**) by sliding off of the conveyor (**Figure 144, item 2**).



**Figure 144**

3. Pry pinion assembly (**Figure 145, item 1**) from conveyor frame by alternating sides.



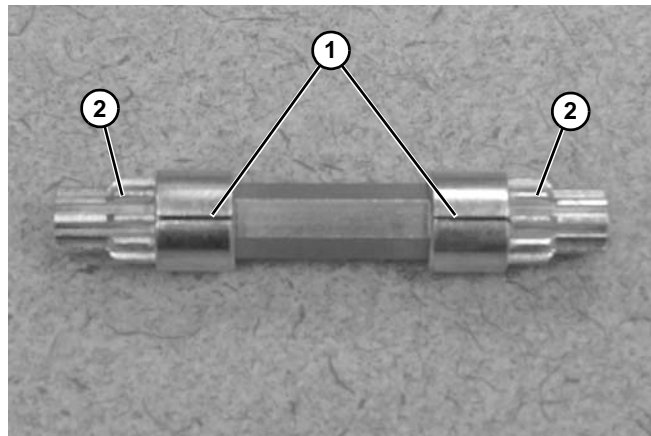
**Figure 145**

4. Replace worn components.



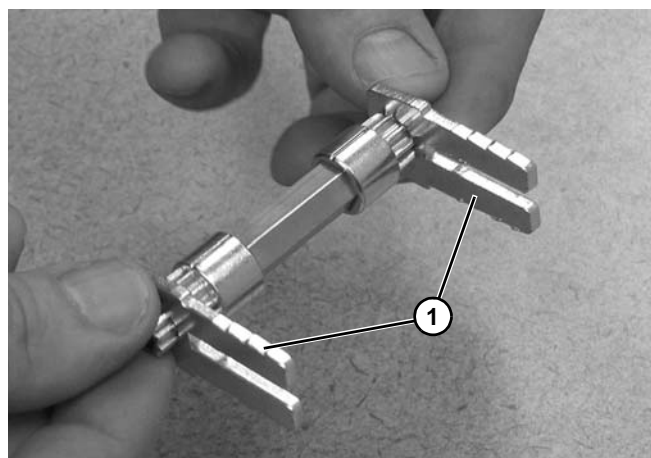
**Figure 146**

5. To reassemble, make sure that the lines (**Figure 147, item 1**) on the pinion end gears (**Figure 147, item 2**) are aligned.



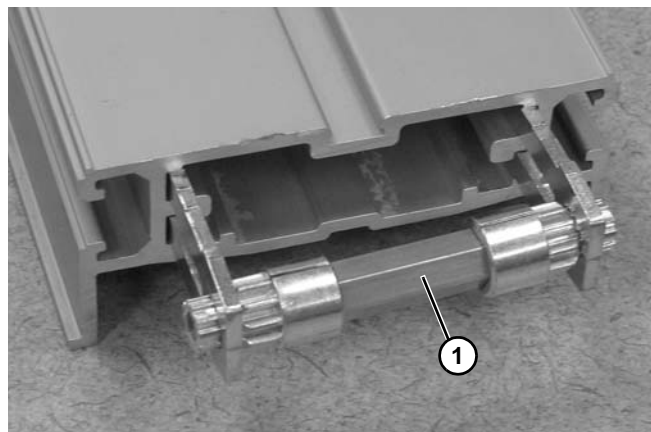
**Figure 147**

6. Slide on retaining plates (**Figure 148, item 1**).



**Figure 148**

7. Insert pinion assembly (**Figure 149, item 1**) into conveyor frame.



**Figure 149**

# Preventive Maintenance and Adjustment

8. Tap alternating retaining plates (**Figure 150, item 1**) and (**Figure 151, item 1**) with a hammer until fully assembled onto conveyor frame.

## ⚠ CAUTION

Do not hit pinion gear with hammer. It may cause damage to the pinion teeth.

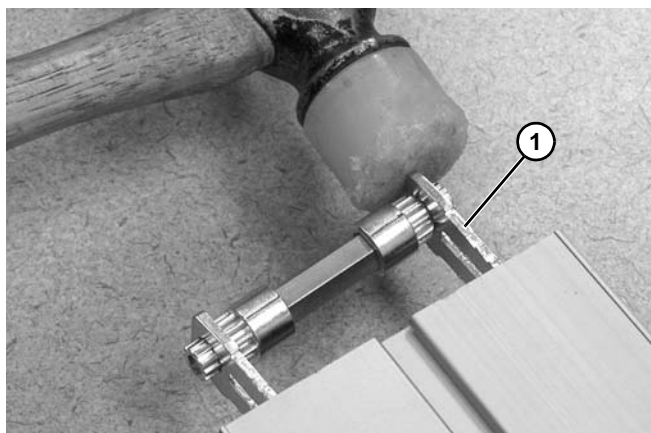


Figure 150

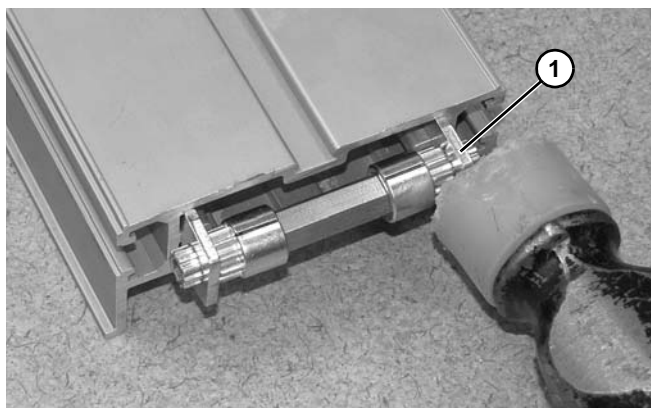


Figure 151

9. Insert both gear racks (**Figure 152, item 1**) into conveyor frame.

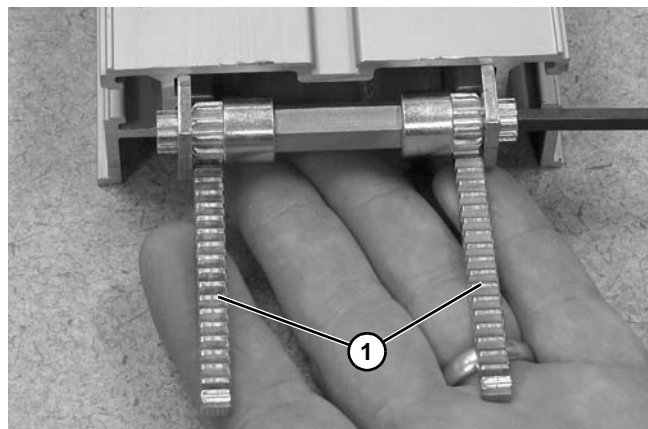


Figure 152

## NOTE

Make sure the bent end (**Figure 153, item 1**) of the gear rack is NOT assembled into the conveyor frame.

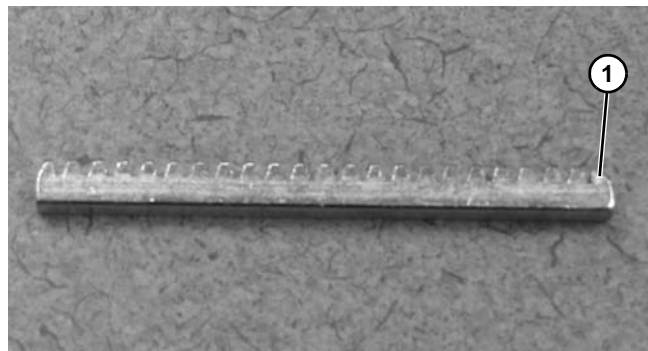
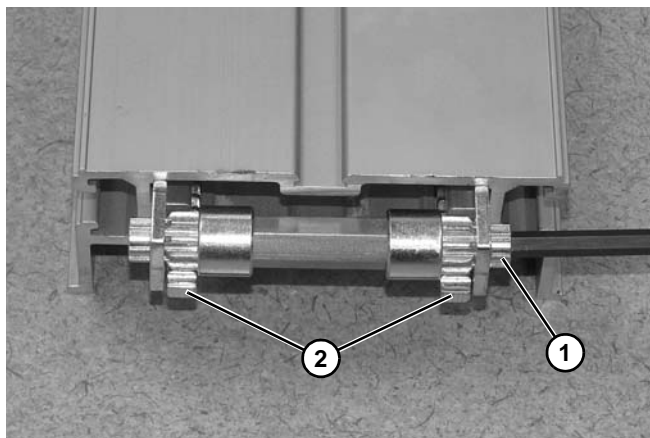


Figure 153

## Preventive Maintenance and Adjustment

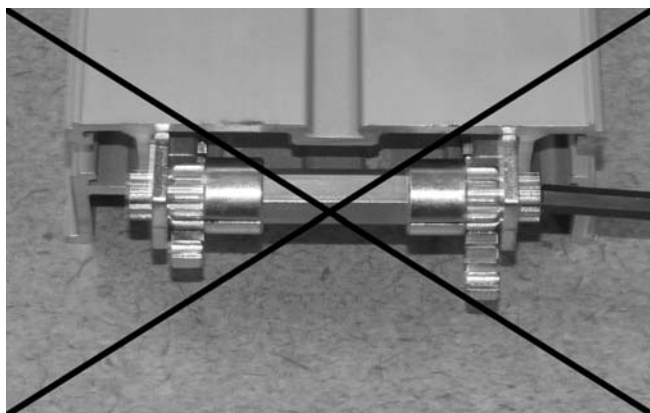
10. Rotate pinion (**Figure 154, item 1**) with hex wrench until gear racks (**Figure 154, item 2**) are fully collapsed.



**Figure 154**

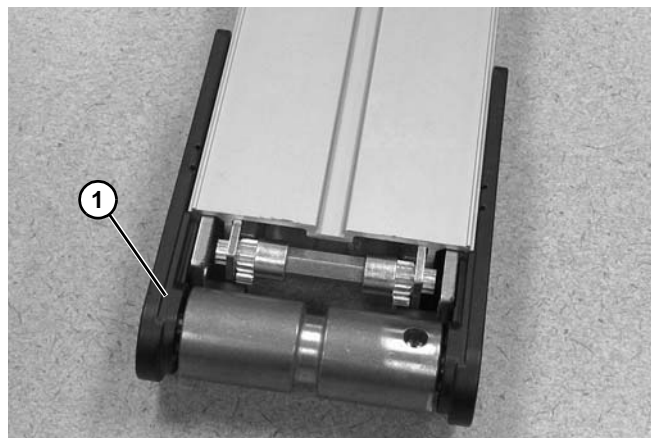
### NOTE

*The gear racks must be aligned with each other, as shown above. Example of misaligned gear racks shown below.*



**Figure 155**

11. Reinstall idler tail by sliding tail assembly (**Figure 156, item 1**) fully back onto conveyor frame.




**Figure 156**

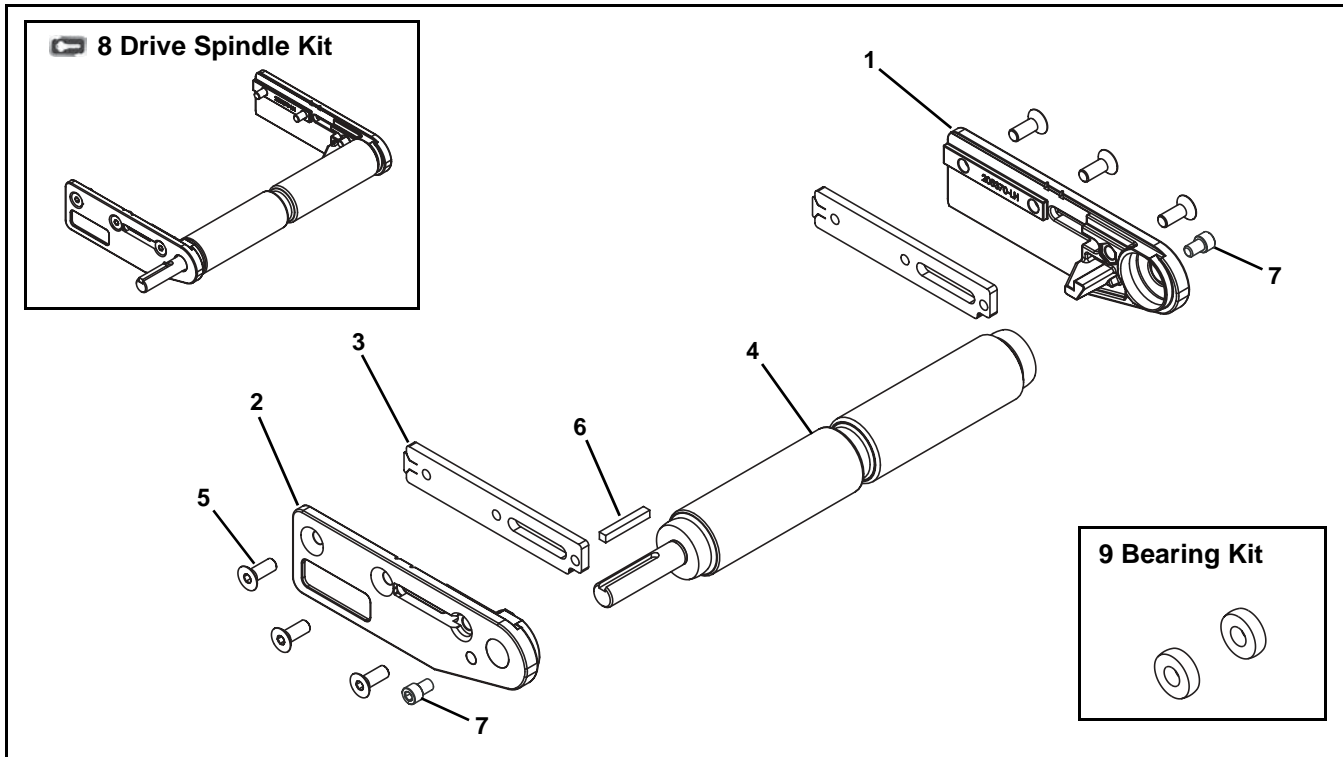
12. Reinstall belt on end of conveyor, then tension the belt. See “Conveyor Belt Tensioning” on page 42.

# 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.

## End Drive Tail



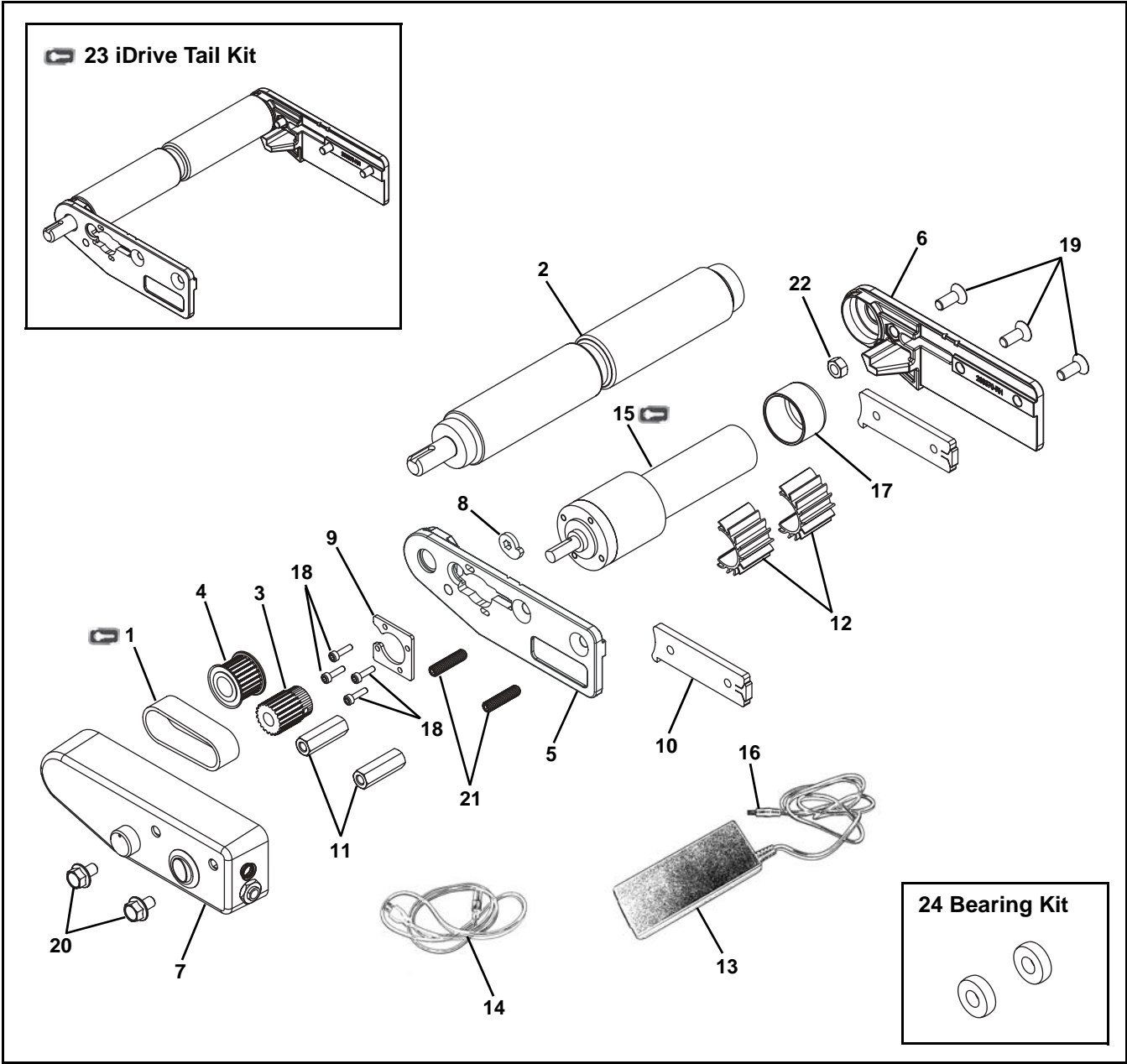
# Service Parts

Item	Part Number	Description
1	205370-LH	Head Plate, Left Hand
2	205370-RH	Head Plate, Right Hand
3	206006	Tail Nut Bar
4	203713- <u>WW</u>	Knurled Spindle Assembly (One Keyed Shaft)
	203714- <u>WW</u>	Dual Shaft Knurled Spindle Assembly (Two Keyed Shafts)
	203717- <u>WW</u>	Common Drive - Knurled Conveyor Spindle Assembly (Keyed Shaft & Stub Shaft)
	203716- <u>WW</u>	Common Drive - Knurled Mid Conveyor Spindle Assembly (Two Stub Shafts)
	203715- <u>WW</u>	Common Drive - Knurled End Conveyor Spindle Assembly (One Stub Shaft)
	203723- <u>WW</u>	Lagged Drive Spindle (One Keyed Shaft)
	203724- <u>WW</u>	Lagged Dual Shaft Drive Spindle (Two Keyed Shafts)
	203727- <u>WW</u>	Lagged Common Drive - Drive Conveyor Spindle (Keyed Shaft & Stub Shaft)
	203726- <u>WW</u>	Lagged Common Drive - Mid Conveyor Spindle (Two Stub Shafts)
	203725- <u>WW</u>	Lagged Common Drive - End Conveyor Spindle (One Stub Shaft)
5	930614M	Flat Head Screw, M6-1.00 x 10.7 mm
6	980428M	Square Key, 4 mm x 28 mm
7	807-2979	Socket Head Screw, 1/4-28 x .375"

Item	Part Number	Description
8	22V2FO- <u>WW</u>	Knurled Spindle Kit (One Keyed Shaft) (Includes Items 1, 2, 4, 5 and 6)
	22V2FK- <u>WW</u>	Dual Shaft Knurled Spindle Kit (Two Keyed Shafts) (Includes Items 1, 2, 4, 5 and 6)
	22V2FS- <u>WW</u>	Common Drive - Knurled Conveyor Spindle Kit (Keyed Shaft & Stub Shaft) (Includes Items 1, 2, 4, 5 and 6)
	22V2FE- <u>WW</u>	Common Drive - Knurled End Conveyor Spindle Kit (One Stub Shaft) (Includes Items 1, 2, 4, 5 and 6)
	22V2FC- <u>WW</u>	Common Drive - Knurled Mid Conveyor Spindle Kit (Two Stub Shafts) (Includes Items 1, 2, 4, 5 and 6)
	22V2FLO- <u>WW</u>	Lagged Drive Spindle Kit (One Keyed Shaft) (Includes Items 1, 2, 4, 5 and 6)
	22V2FLK- <u>WW</u>	Lagged Dual Shaft Drive Spindle Kit (Two Keyed Shafts) (Includes Items 1, 2, 4, 5 and 6)
	22V2FLS- <u>WW</u>	Lagged Common Drive - Drive Conveyor Spindle Kit (Keyed Shaft & Stub Shaft) (Includes Items 1, 2, 4, 5 and 6)
	22V2FLE- <u>WW</u>	Lagged Common Drive - End Conveyor Spindle Kit (One Stub Shaft) (Includes Items 1, 2, 4, 5 and 6)
	22V2FLC- <u>WW</u>	Lagged Common Drive - Mid Conveyor Spindle Kit (Two Stub Shafts) (Includes Items 1, 2, 4, 5 and 6)
9	22BK2	Bearing Kit (2 Pack)
	22BK4	Bearing Kit (4 Pack)
<u>WW</u> = Conveyor width reference: 02, 03, 04, 05, 06, 08, 10, 12, 14, 16, 18, 20, 22, & 24		

# Service Parts

## iDrive Tail





# Service Parts

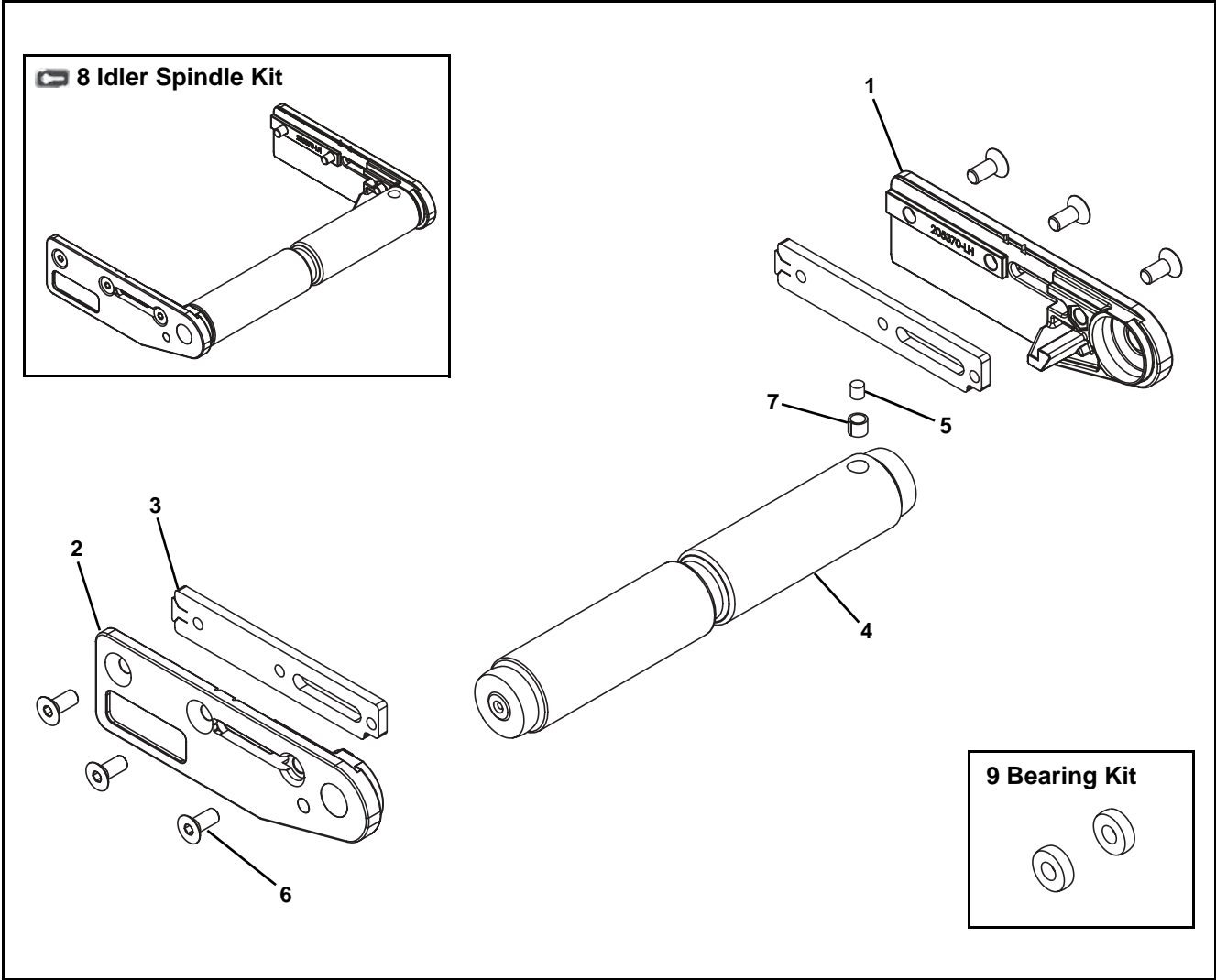
Item	Part Number	Description
1	814-450	Timing Belt, 3 mm x 50 teeth
2	201272- <u>WW</u>	Drive Spindle Assembly
	201278- <u>WW</u>	Lagged Drive Spindle Assembly
3	201330	Drive Pulley - 17 Tooth
	201331	Drive Pulley - 21 Tooth
4	203203	Driven Pulley - 24 Tooth
	203204	Driven Pulley - 28 Tooth
5	206795-LH	Head Plate, A position
	206795-RH	Head Plate, D position
6	206799-LH	Non-Drive Head Plate, for 2" - 4" wide A position
	206799-RH	Non-Drive Head Plate, for 2" - 4" wide D position
	205370-LH	Non-Drive Head Plate, for 5" wide and wider A position
	205370-RH	Non-Drive Head Plate, for 5" wide and wider D position
7	22FDEAA	Electrical Assembly, with speed direction control for A position
	22FDEAD	Electrical Assembly, with speed direction control for D position
	22FDC6A	Electrical Assembly, with customer wired control for A position, 6' cable
	22FDC6D	Electrical Assembly, with customer wired control for D position, 6' cable
	22FDC30A	Electrical Assembly, with customer wired control for A position, 30' cable
	22FDC30D	Electrical Assembly, with customer wired control for D position, 30' cable
	22FDR6A	Electrical Assembly, with speed, direction, and 6' remote start/stop cable for A position
	22FDR6D	Electrical Assembly, with speed, direction, and 6' remote start/stop cable for D position
	22FDR30A	Electrical Assembly, with speed, direction, and 30' remote start/stop cable for A position
	22FDR30D	Electrical Assembly, with speed, direction, and 30' remote start/stop cable for D position
8	203729	Timing Belt Tension Cam
9	206045	Clamp Plate
10	203639	Nut Bar
11	807-983	Hex Standoff
12	807-1982	Heat Sink
13	831-139	Power Supply
14	818-164	Cord, 115V
15	22FDGM023	Gearmotor, 23:1
	22FDGM066	Gearmotor, 66:1
16	805-1316	Plug
17	807-2006	Motor Cap, for 2"-3" wide
18	920312M	Socket Head Screw, M3-.50 x 12 mm
19	930616M	Flat Head Screw, M6-1.00 x 16 mm
20	960681M	Flange Head Hex Screw, M6-1.00 x 10 mm

Item	Part Number	Description
21	970625MSS	Set Cup Screw, M6-1.00 x 25 mm
22	990601M	Hex Nut
23	22V2FDKA- <u>WW</u>	iDrive Tail Kit for A position with Knurled Spindle (Includes Items 2, 5, 6, 19 and 22)
	22V2FDKD- <u>WW</u>	iDrive Tail Kit for D position with Knurled Spindle (Includes Items 2, 5, 6, 19 and 22)
	22V2FDLA- <u>WW</u>	iDrive Tail Kit for A position with Lagged Spindle (Includes Items 2, 5, 6, 19 and 22)
	22V2FDLD- <u>WW</u>	iDrive Tail Kit for D position with Lagged Spindle (Includes Items 2, 5, 6, 19 and 22)
24	22BK2	Bearing Kit (2 Pack)
	22BK4	Bearing Kit (4 Pack)


WW = Conveyor width reference: 02, 03, 04, 05, 06, 08, 10, 12, 14, 16 & 18

# Service Parts

## Idler Tail

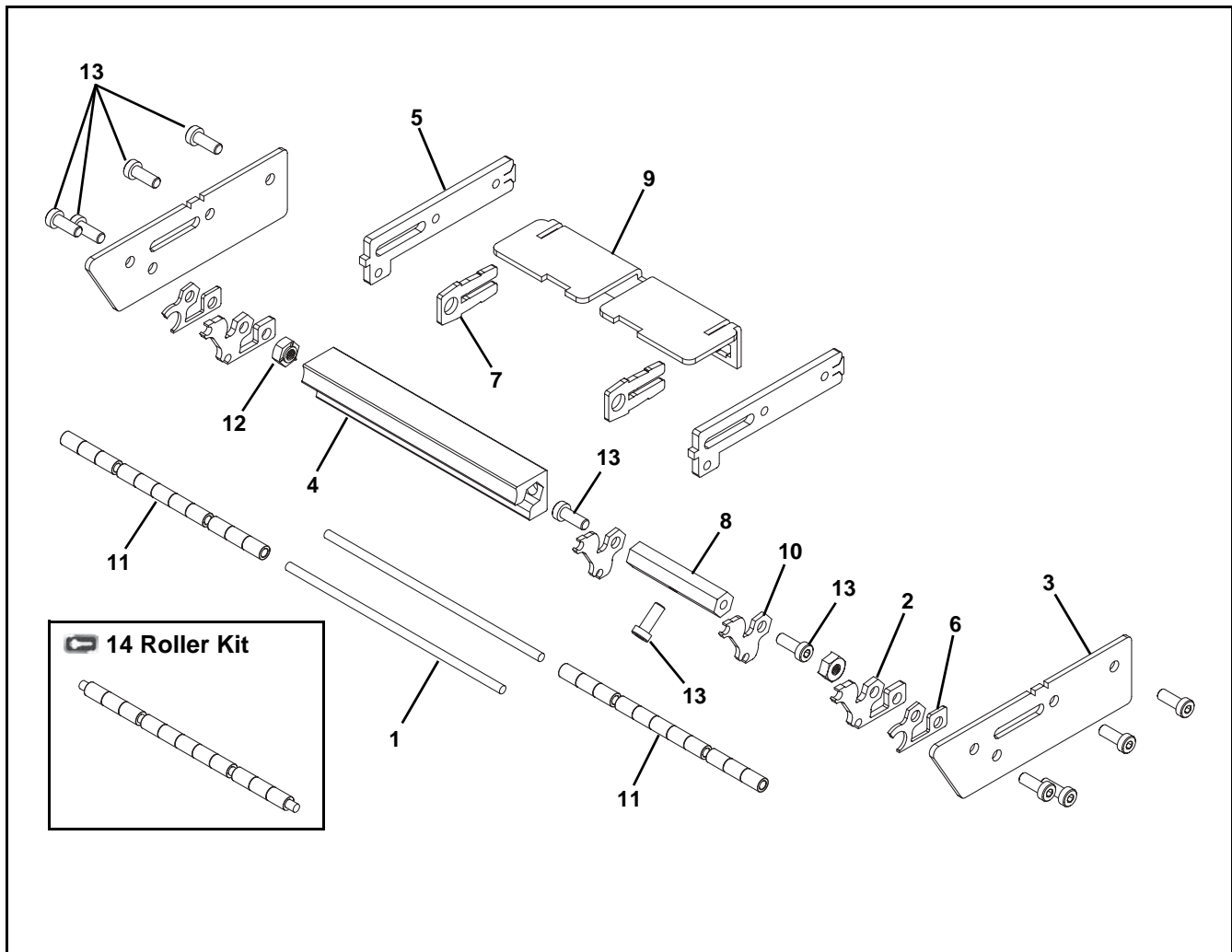




Item	Part Number	Description
1	205370-LH	Head Plate, Left Hand
2	205370-RH	Head Plate, Right Hand
3	206006	Tail Nut Bar
4	201273- <u>WW</u>	Standard Spindle Assembly
	203715- <u>WW</u>	Spindle with One Stub Shaft Assembly
	203713- <u>WW</u>	Spindle with Auxiliary Keyed Shaft Assembly
5	808-020	Magnet (Optional)
6	930614M	Flat Head Screw, M6-1.00 x 10.7 mm
7	450226SSP	Magnet Sleeve (Optional)
8 	22V2TO- <u>WW</u>	Standard Idler Spindle Kit (Includes Items 1, 2, 4, and 6)
	22V2TM- <u>WW</u>	Idler Spindle Kit with Magnet (Includes Items 1, 2, 4, 5, 6, and 7)
	22V2TS- <u>WW</u>	Idler Spindle Kit with One Stub Shaft (Includes Items 1, 2, 4, and 6)
	22V2TK- <u>WW</u>	Idler Spindle Kit with One Keyed Shaft (Includes Items 1, 2, 4, and 6)
9	22BK2	Bearing Kit (2 Pack)
	22BK4	Bearing Kit (4 Pack)
<u>WW</u> = Conveyor width reference: 02, 03, 04, 05, 06, 08, 10, 12, 14, 16, 18, 20, 22, & 24		

# Service Parts

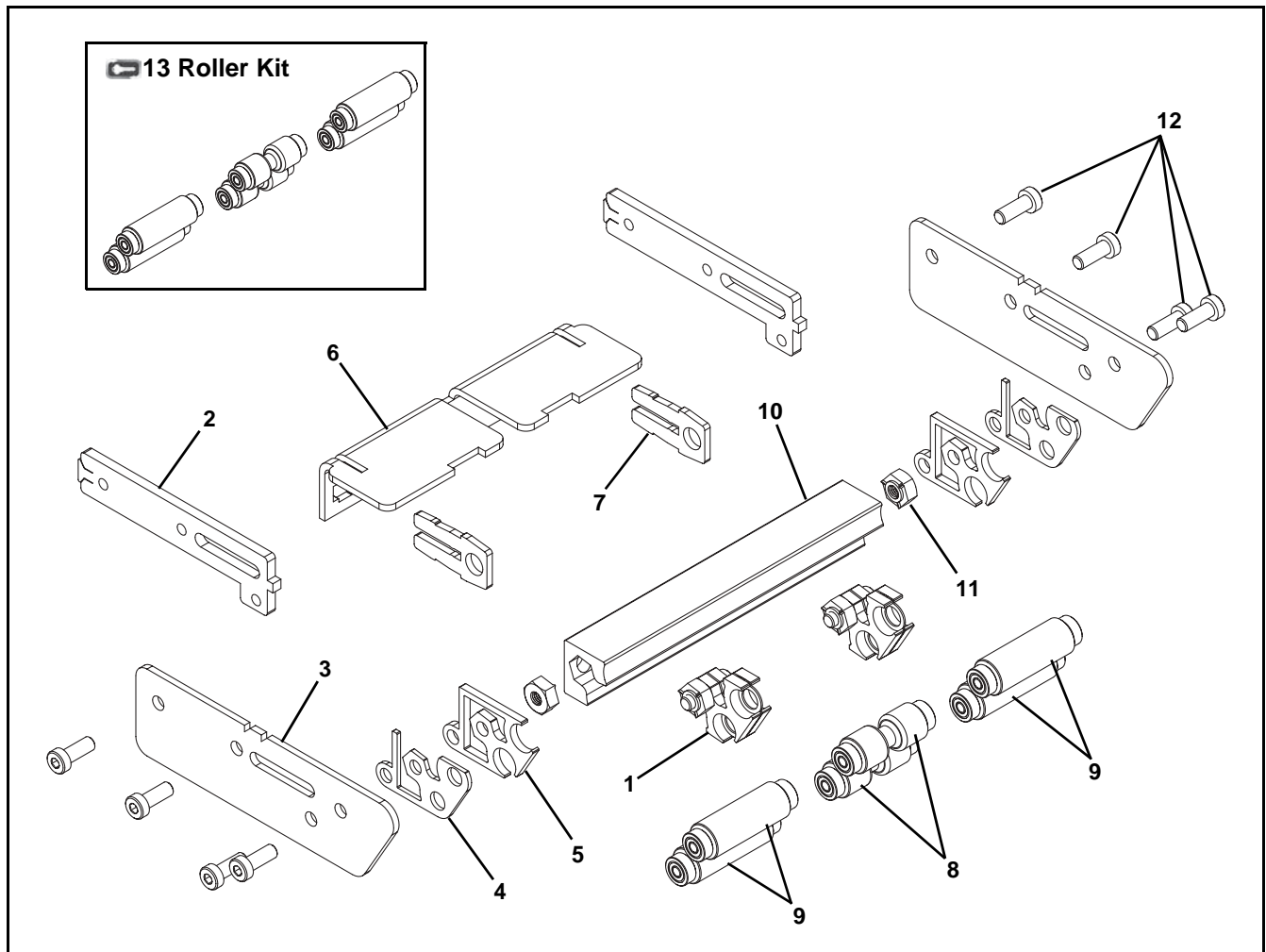
## 5/16" (8 mm) Tight Radius Nosebar Tail



Item	Part Number	Description
1	2413 <del>WW</del>	Rod
2	206778	Inner End Plate
3	206777	Side Plate
4	206005- <del>WW</del>	Support Bar
5	206007	Tail Nut Bar
6	206010	Outer End Plate
7	205450	Retaining Plate
8	See Chart	Hex Rod
9	206061- <del>WW</del>	Support Bracket (for 3" - 24" wide conveyors)
10	206779	Rod Carrier Plate
11	801-180	Bearing
12	807-2873	Weld Nut
13	950616M	Low Head Cap Screw, M6-1.00 x 16 mm
14	22V2L- <del>WW</del>	Roller Kit (Includes Items 1 and 11)
<del>WW</del> = Conveyor width reference: 02, 03, 04, 05, 06, 08, 10, 12, 14, 16, 18, 20, 22, & 24		

Item #8 Hex Rod		
Width	Part Number	Quantity
02	N/A	0
03	N/A	0
04	206060	1
05	206059	1
06	206059	1
08	206059	1
10	206060	2
12	206059	2
14	206060	3
16	206060	3
18	206060	4
20	206060	4
22	206059	4
24	206059	4

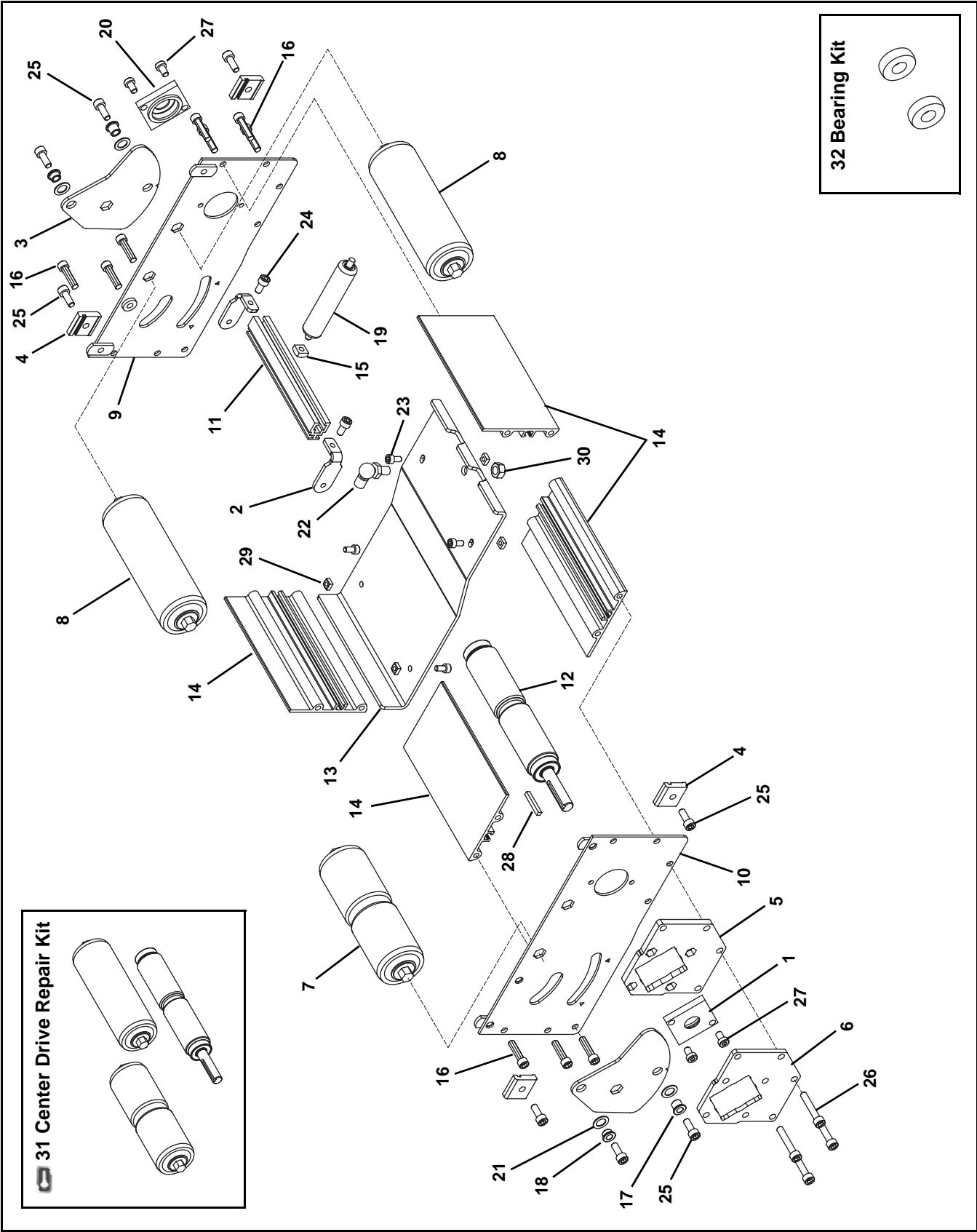
## 5/8" (16 mm) Nosebar Tail



Item	Part Number	Description
1	205523	Carrier Bearing (for conveyors 5" wide and wider)
2	206007	Tail Nut Bar
3	206009	Tail Plate
4	206010	Outer End Plate
5	206011	Inner End Plate
6	206061- <u>WW</u>	Support Bracket (for 3" - 24" wide conveyors)
7	205450	Retaining Plate
8	205526- <u>WW</u>	V-Groove Spindle Assembly
9	205527- <u>WW</u>	Smooth Spindle Assembly (for conveyors 5" wide and wider)
10	206005- <u>WW</u>	Support Bar
11	807-2873	Weld Nut
12	950616M	Low Head Cap Screw, M6-1.00 x 16 mm
13	22V2H- <u>WW</u>	Roller Kit (Includes Items 8 and 9)
<u>WW</u> = Conveyor width reference: 02, 03, 04, 05, 06, 08, 10, 12, 14, 16, 18, 20, 22, & 24		


# Service Parts

## Center Drive Module



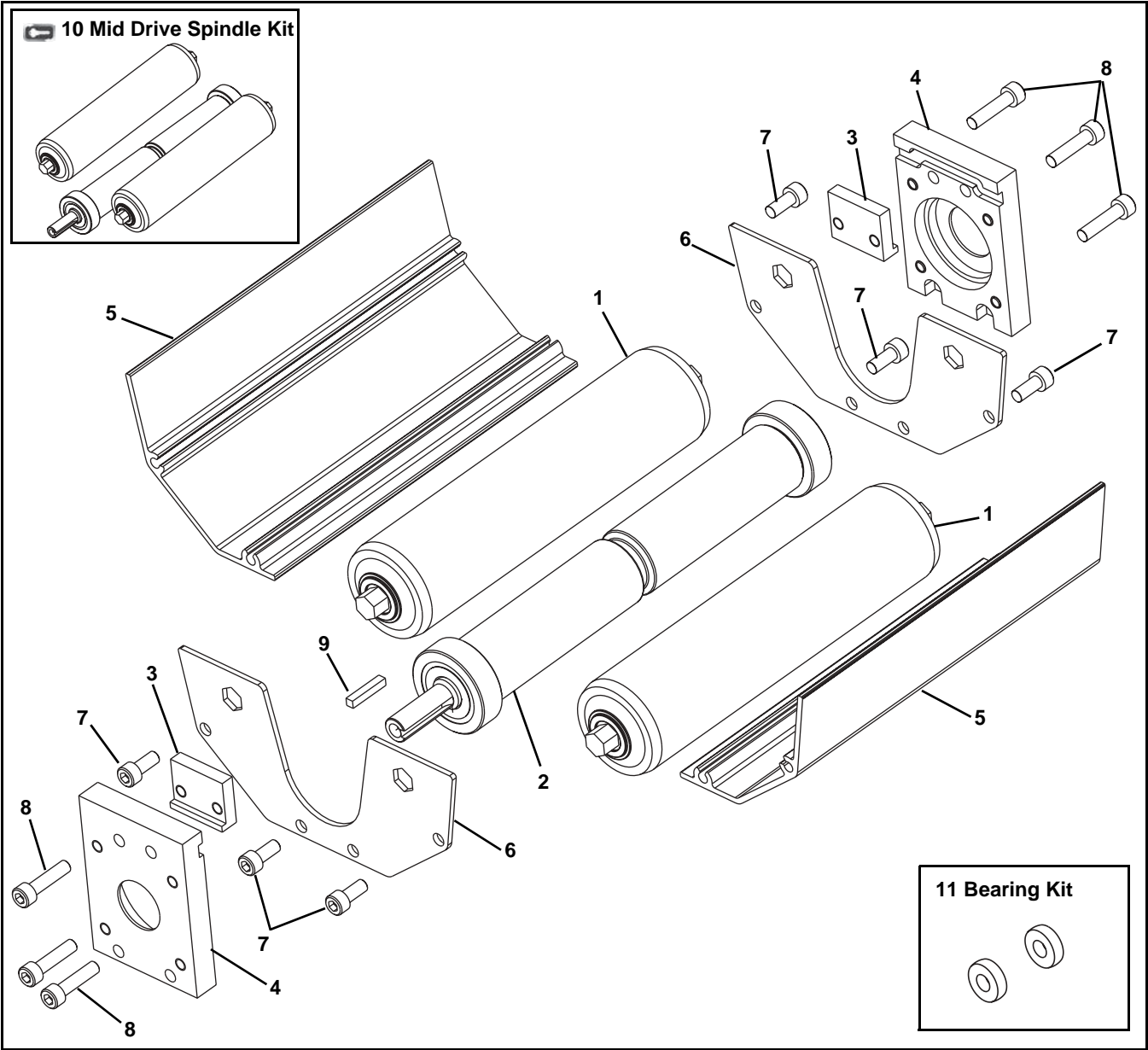
# Service Parts


Item	Part Number	Description
1	203628	Bearing Mounting Block w/Hole
2	203632	Tensioner Bar Tab, for 4" - 24" wide conveyors
3	203681	Pivot Tension Plate
4	204566	Mounting Clip
5	205446	Inside Mounting Plate
6	205447	Outside Mounting Plate
7	463037	Grooved Roller, for 2" wide Conveyor
	463038	Grooved Roller, for 3" wide Conveyor
	463039	Grooved Roller, for 4" wide Conveyor
	203633- <u>WW</u>	Grooved Roller, for 5"- 24" wide Conveyors
8	463040	Smooth Roller, for 2" wide Conveyor
	463041	Smooth Roller, for 3" wide Conveyor
	463042	Smooth Roller, for 4" wide Conveyor
	203635- <u>WW</u>	Smooth Roller, for 5"- 24" wide Conveyors
9	202633M	Side Plate, Left Hand
10	202634M	Side Plate, Right Hand
11	203631- <u>WW</u>	Tensioner Rail
	463302	Tensioner Rail, for 2" wide Conveyor
	463303	Tensioner Rail, for 3" wide Conveyor
12	203713- <u>WW</u>	Drive Spindle Assembly
	203714- <u>WW</u>	Dual Shaft Drive Spindle Assembly
	203723- <u>WW</u>	Lagged Drive Spindle
	203724- <u>WW</u>	Lagged Dual Shaft Drive Spindle
13	4632 <u>WW</u> M	Bottom Cover, for 2"- 14" & 18" wide Conveyors
	463208M	Bottom Cover, for 16" wide Conveyors (qty. 2)
	463210M	Bottom Cover, for 20" wide Conveyors (qty. 2)
	463212M	Bottom Cover, for 22" wide Conveyors
	463205M	Bottom Cover, for 22" wide Conveyors (qty. 2)
	463212M	Bottom Cover, for 24" wide Conveyors (qty. 2)
14	4638 <u>WW</u>	Support Rail
15	674175MP	Square Nut, M6
16	708180P	Trilobe Screw, M6-1.00 x 25 mm
17	801-138	Bearing
18	801-173	Bearing
19	807-1040	Gas Spring, for 2" wide Conveyor
	807-986	Gas Spring, for 3" wide Conveyor
	807-985	Gas Spring, for 4"- 6" & 12"- 24" wide Conveyors
	807-984	Gas Spring, for 8"- 10" wide Conveyors
20	203728	Bearing Mounting Block
21	807-2885	Washer
22	807-987	Steel Ball Joint M6 x M8
23	920510M	Socket Head Screw, M5-.80 x 10 mm

Item	Part Number	Description
24	920612M	Socket Head Screw, M6-1.00 x 12 mm
25	920616M	Socket Head Screw, M6-1.00 x 16 mm
26	920635M	Socket Head Screw, M6-1.00 x 35 mm
27	950610M	Low Head Cap Screw, M6-1.00 x 10 mm
28	980428M	Square Key, 4mm x 28 mm
29	990503M	Square Nut, M5
30	990801M	Hex Nut, M8
31 	22V2CDKO- <u>WW</u>	Center Drive Repair Kit (Includes Items 7, 8, & 12)
	22V2CDKE- <u>WW</u>	Center Drive Repair Kit for Dual Shaft Spindle (Includes Items 7, 8, & 12)
	22V2CDLO- <u>WW</u>	Center Drive Repair Kit for Lagged Drive Spindle (Includes Items 7, 8, & 12)
	22V2CDLE- <u>WW</u>	Center Drive Repair Kit for Lagged Dual Shaft Spindle (Includes Items 7, 8, & 12)
32	22BK2	Bearing Kit (2 Pack)
	22BK4	Bearing Kit (4 Pack)
<u>WW</u> = Conveyor width ref.: 02, 03, 04, 05, 06, 08, 10, 12, 14, 16, 18, 20, 22, & 24		

# Service Parts

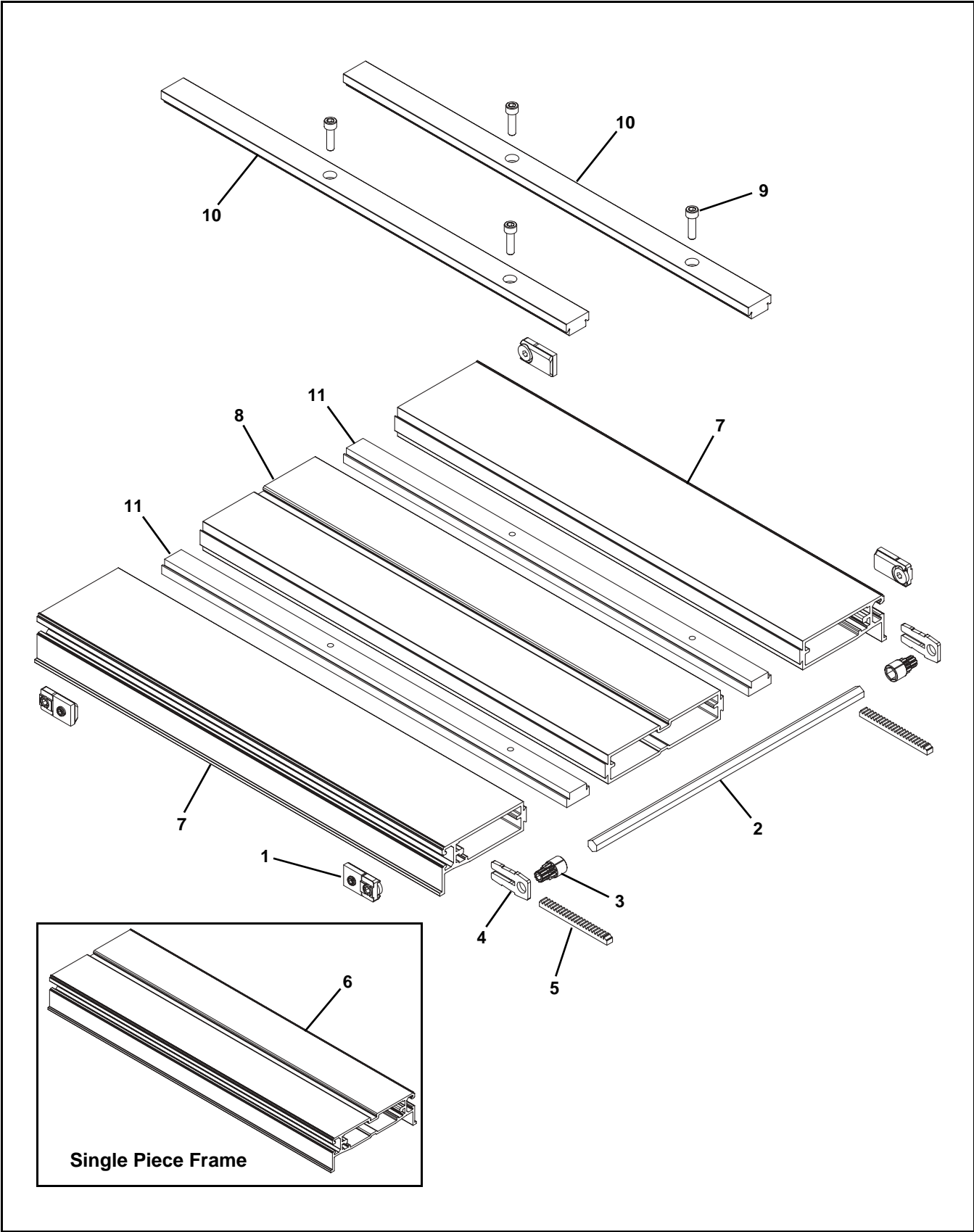
## Mid Drive Module



Item	Part Number	Description
1	463040	Idler Roller Assembly for 2" wide Conveyor
	463041	Idler Roller Assembly for 3" wide Conveyor
	463042	Idler Roller Assembly for 4" wide Conveyor
	203635- <u>WW</u>	Idler Roller Assembly for 5" wide and wider Conveyors
2	203713- <u>WW</u>	Knurled Spindle Assembly
	203714- <u>WW</u>	Knurled Spindle Assembly - Dual Shaft
	203723- <u>WW</u>	Lagged Spindle Assembly
	203724- <u>WW</u>	Lagged Spindle Assembly - Dual Shaft
3	202353	Clamp Block
4	203637	Mounting Block
5	202455- <u>WW</u>	Bottom Guard
6	202456	Side Plate
7	920614M	Socket Head Screw, M6-1.00 x 14 mm
8	920625M	Socket Head Screw, M6-1.00 x 25 mm
9	980428M	Square Key 4 mm x 28 mm
10 	22V2MDKO- <u>WW</u>	Mid Drive Spindle Kit for Knurled Spindle (includes items 1 and 2)
	22V2MDKE- <u>WW</u>	Mid Drive Spindle Kit for Knurled Spindle - Dual Shaft (includes items 1 and 2)
	22V2MDLO- <u>WW</u>	Mid Drive Spindle Kit for Lagged Spindle (includes items 1 and 2)
	22V2MDLE- <u>WW</u>	Mid Drive Spindle Kit for Lagged Spindle - Dual Shaft (includes items 1 and 2)
11	22BK2	Bearing Kit (2 Pack)
	22BK4	Bearing Kit (4 Pack)
<u>WW</u> = Conveyor Width Reference: 02, 03, 04, 05, 06, 08, 10, 12, 14, 16, 18, 20, 22, & 24		

# Service Parts

## Frame Assembly

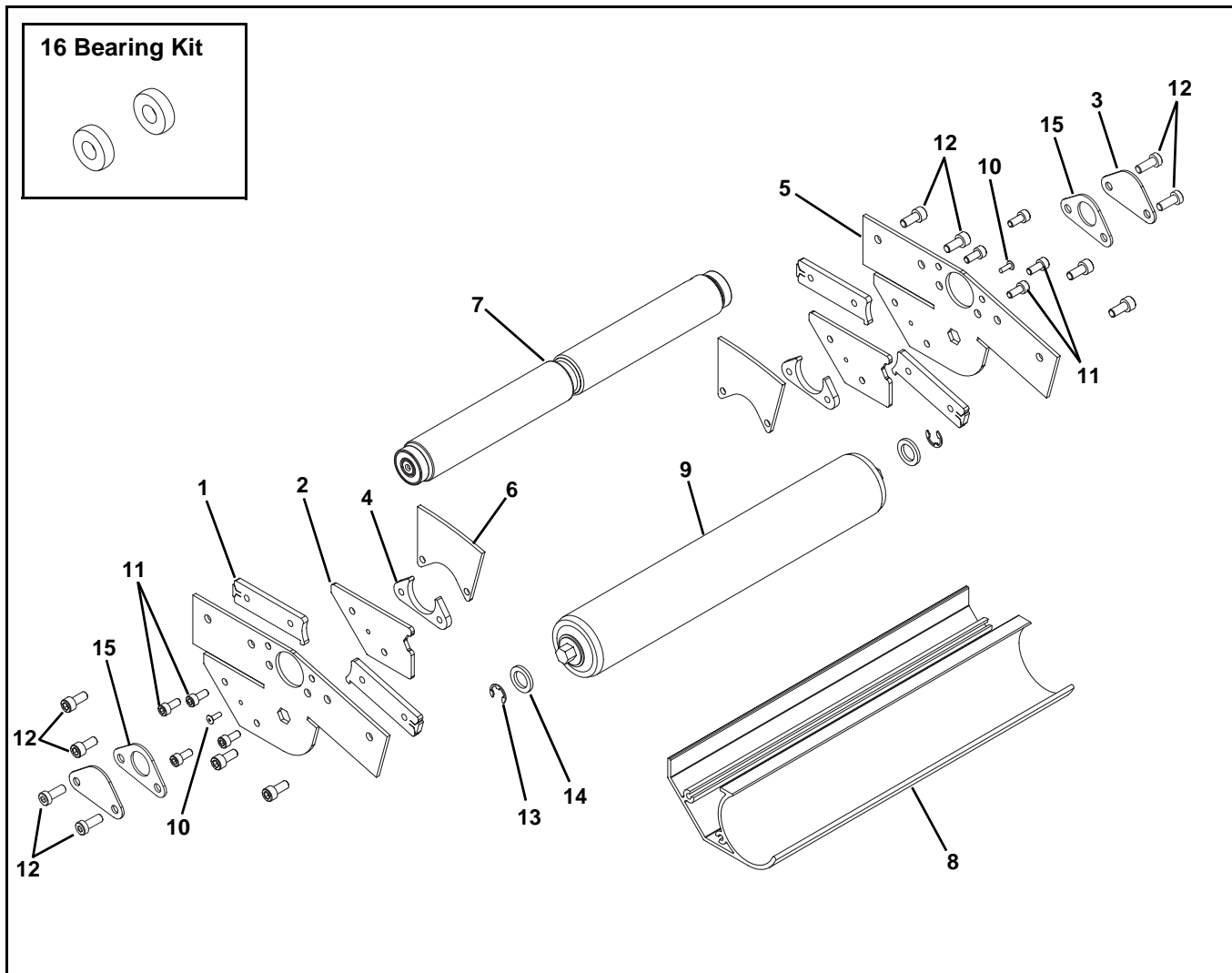




Item	Part Number	Description
1	203597	Tracking Block Assembly
2	205469- <u>WW</u>	Hex Pinion, for 3"- 24" wide Conveyors
3	207145	Pinion End Gear, for 2" wide Conveyors
	205383	Pinion End Gear, for 3"- 24" wide Conveyors
4	205450	Retaining Plate
5	203596	Gear Rack
6	203629- <u>WW-LLLL</u>	Single Piece Frame, for 2"- 12" wide Conveyors
	207365- <u>WW-LLLL</u>	Single Piece Frame, for Cleated Belt LPZ Conveyors Only
7	205393- <u>LLLL</u>	Outside Frame, for Multi Piece 14" & 20" wide Conveyors (Qty. 2)
	207366- <u>LLLL</u>	Outside Frame, for Cleated Belt LPZ 14" & 20" wide Conveyors Only (Qty. 2)
	205394- <u>LLLL</u>	Outside Frame, for Multi Piece 16" & 22" wide Conveyors (Qty. 2)
	207367- <u>LLLL</u>	Outside Frame, for Cleated Belt LPZ 16" & 22" wide Conveyors Only (Qty. 2)
	205395- <u>LLLL</u>	Outside Frame, for Multi Piece 18" & 24" wide Conveyors (Qty. 2)
	207368- <u>LLLL</u>	Outside Frame, for Cleated Belt LPZ 18" & 24" wide Conveyors Only (Qty. 2)
8	205396- <u>LLLL</u>	Mid Frame, for Multi Piece 14" - 18" wide Conveyors
	207369- <u>LLLL</u>	Mid Frame, for Cleated Belt LPZ 14" - 18" wide Conveyors Only
	205398- <u>LLLL</u>	Mid Frame, for Multi Piece 20" - 24" wide Conveyors
	207370- <u>LLLL</u>	Mid Frame, for Cleated Belt LPZ 20" - 24" wide Conveyors Only
9	920622M	Socket Head Screw, M6-1.00 x 22 mm
10	206505- <u>LLLL</u>	Upper Connecting Strip
	207371- <u>LLLL</u>	Upper Connecting Strip, for Cleated Belt LPZ Conveyors Only
11	206506- <u>LLLL</u>	Lower Connecting Strip
<u>WW</u> = Conveyor width reference: 02, 03, 04, 05, 06, 08, 10, 12, 14, 16, 18, 20, 22, & 24		
<u>LLLL</u> = part length in inches with 2 decimal places		
Example: Part length = 35.25" <u>LLLL</u> = 03525		

# Service Parts

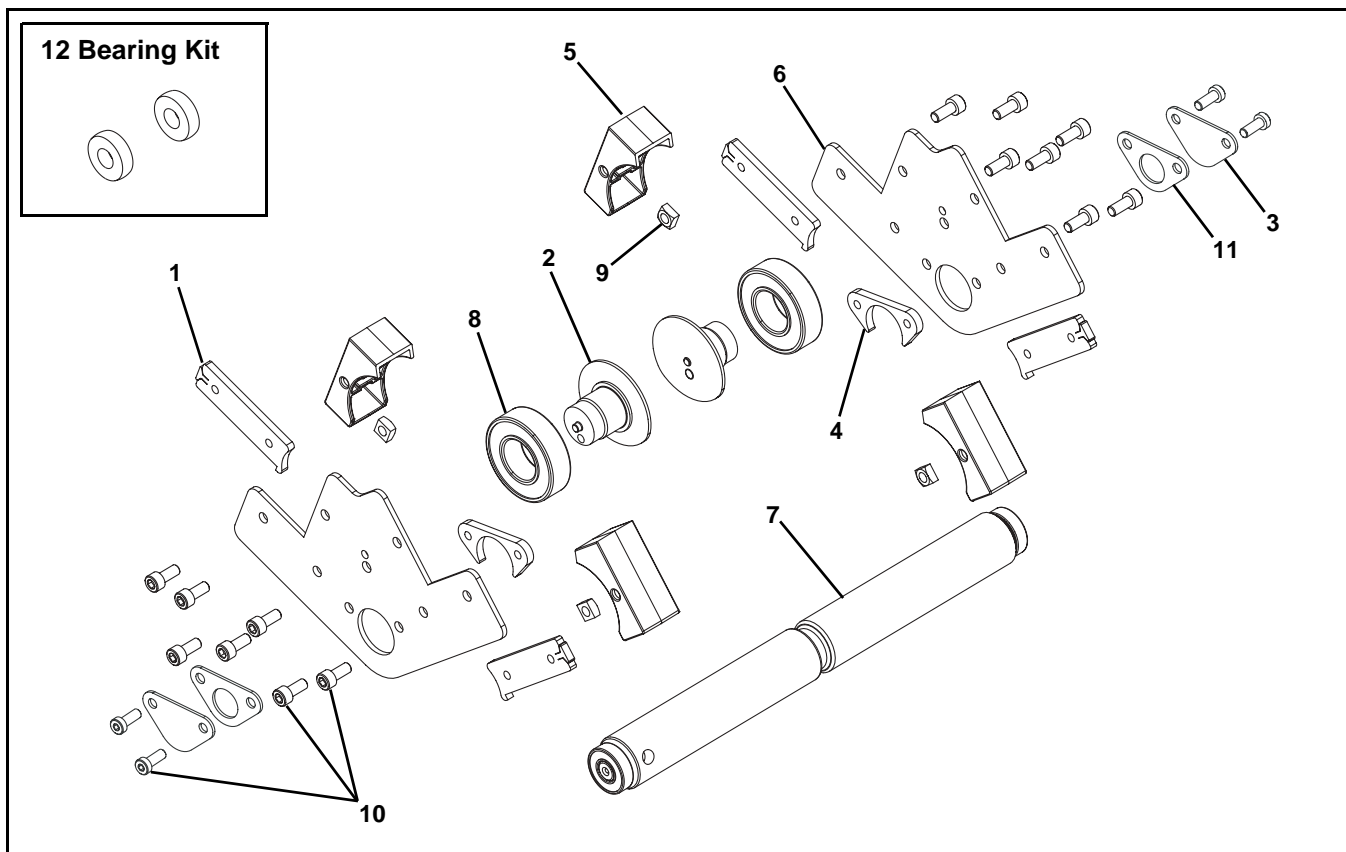
## Flat Belt Knuckle



Item	Part Number	Description
1	203639	Nut Bar
2	206394	Spacer
3	206690	Bearing Cover
4	206691	Bearing Housing
5	206393-AA	Outer Plate
6	206688-AA	Knuckle Guide for # 04 Profiles only
	206689-AA	Knuckle Guide for # 05 Profiles only
7	201273-WW	Spindle Assembly
8	207221-WW	Return Roller Cover
9	463040	Roller Assembly for 2" wide Conveyor
	463041	Roller Assembly for 3" wide Conveyor
	463042	Roller Assembly for 4" wide Conveyor
	203635-WW	Roller Assembly for 5" wide and wider Conveyors
10	914-005	Rivet
11	920512M	Socket Head Screw, M5-.80 x 12 mm
12	950616M	Low Head Screw, M6-1.00 x 16 mm
13	915-215	Retaining Ring (for 2" - 4" wide only)
14	801-115	Washer (for 2" - 4" wide only)
15	207222	Bearing Spacer
16	22BK2	Bearing Kit (2 Pack)
	22BK4	Bearing Kit (4 Pack)
AA = Angle 5, 10, 15, and 20		
WW = Conveyor width reference: 02, 03, 04, 05, 06, 08, 10, 12, 14, 16, 18, 20, 22, & 24		

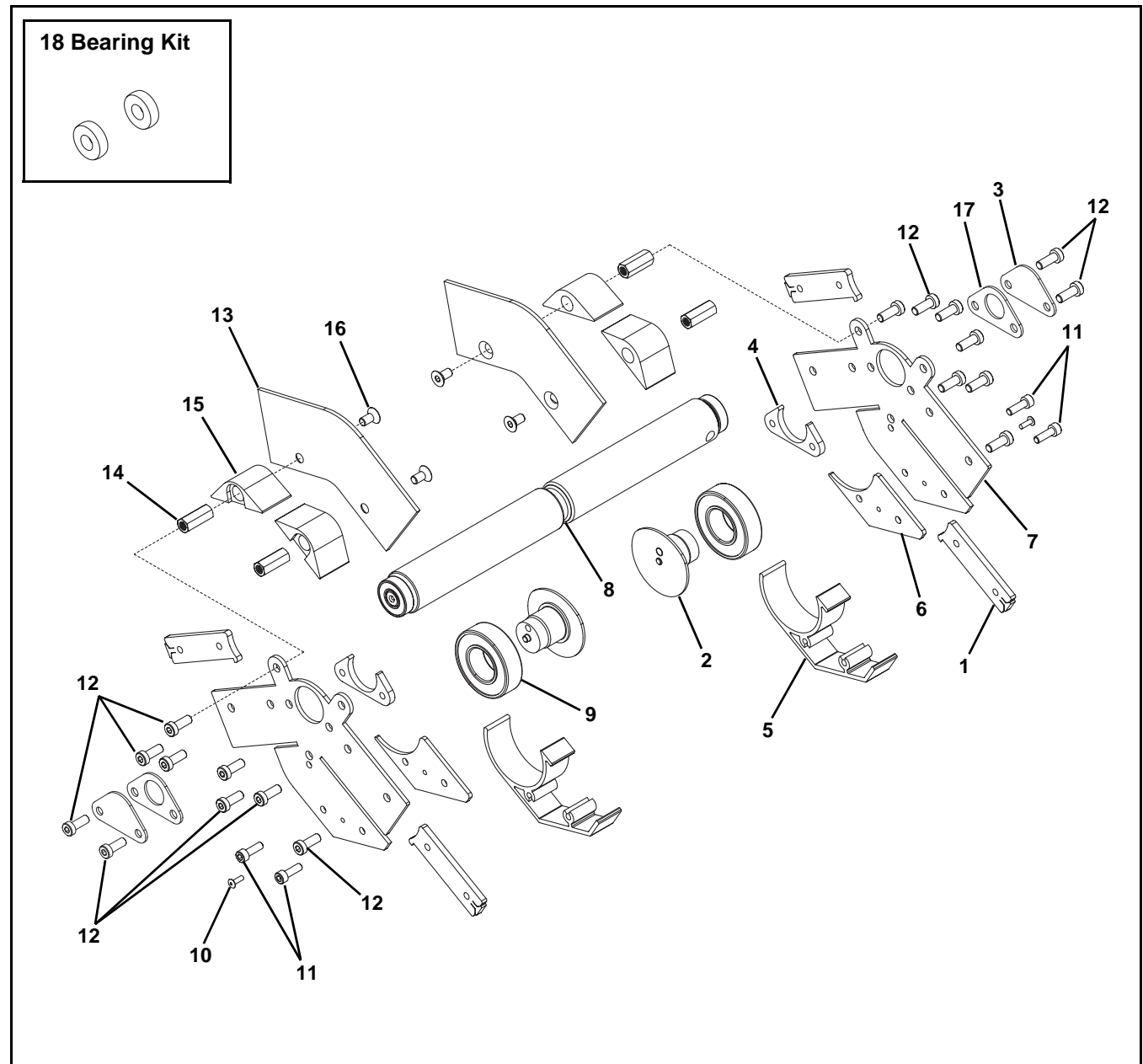
# Service Parts

## Cleated Belt Lower Knuckle



Item	Part Number	Description
1	203639	Nut Bar
2	206021	Bearing Stub Assembly
3	206690	Bearing Cover
4	206691	Bearing Housing
5	206693	Bearing Guard for 30°
	206379-AA	Bearing Guard for 45° and 60°
6	206387-AA	Outer Plate
7	201273-WW	Spindle Assembly
8	802-109	Bearing 25 mm x 52 mm
9	807-920	Square Nut
10	950616M	Low Head Screw, M6-1.00 x 16 mm
11	207222	Bearing Spacer
12	22BK2	Bearing Kit (2 Pack)
	22BK4	Bearing Kit (4 Pack)
AA = Angle 30, 45, 60		
WW = Conveyor width reference: 06, 08, 10, 12, 14, 16, 18, 20, 22, & 24		

## Cleated Belt Upper Knuckle

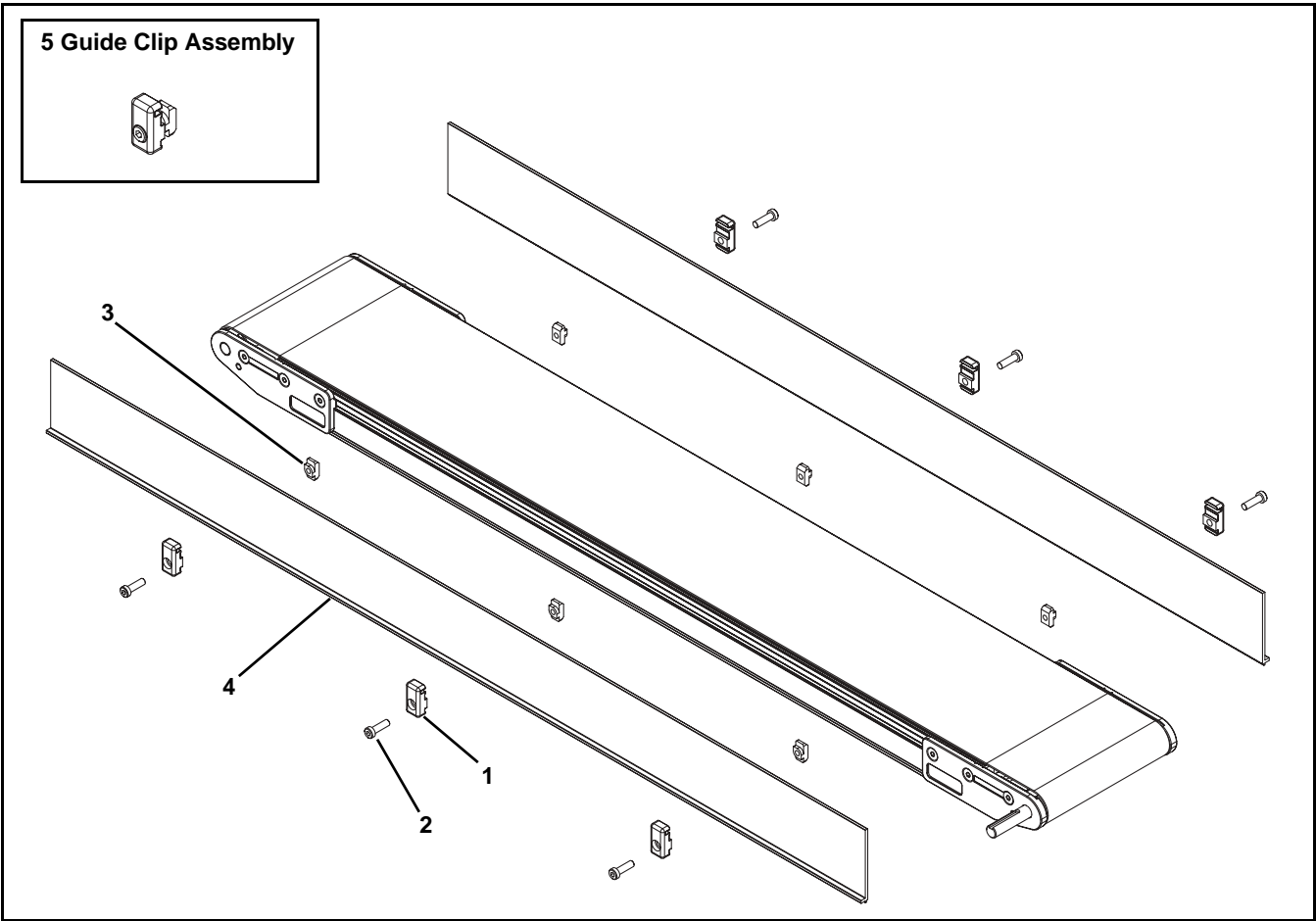


Item	Part Number	Description
1	203639	Nut Bar
2	206021	Bearing Stub Assembly
3	206690	Bearing Cover
4	206691	Bearing Housing
5	322501	Return Roller Cover
6	206390	Spacer
7	206391-AA	Outer Plate
8	201273-WW	Spindle Assembly
9	802-109	Bearing 25 mm x 52 mm
10	914-005	Rivet
11	920516M	Socket Head Screw, M5-.80 x 16 mm

Item	Part Number	Description
12	950616M	Low Head Screw, M6-1.00 x 16 mm
13	206049-AA	Guide
14	807-2853	Nut
15	206389	Spacer
16	930612M	Flat Head Screw, M6-1.00 x 12 mm
17	207222	Bearing Spacer
18	22BK2	Bearing Kit (2 Pack)
	22BK4	Bearing Kit (4 Pack)
AA = Angle 30, 45, 60		
WW = Conveyor width reference: 06, 08, 10, 12, 14, 16, 18, 20, 22, & 24		

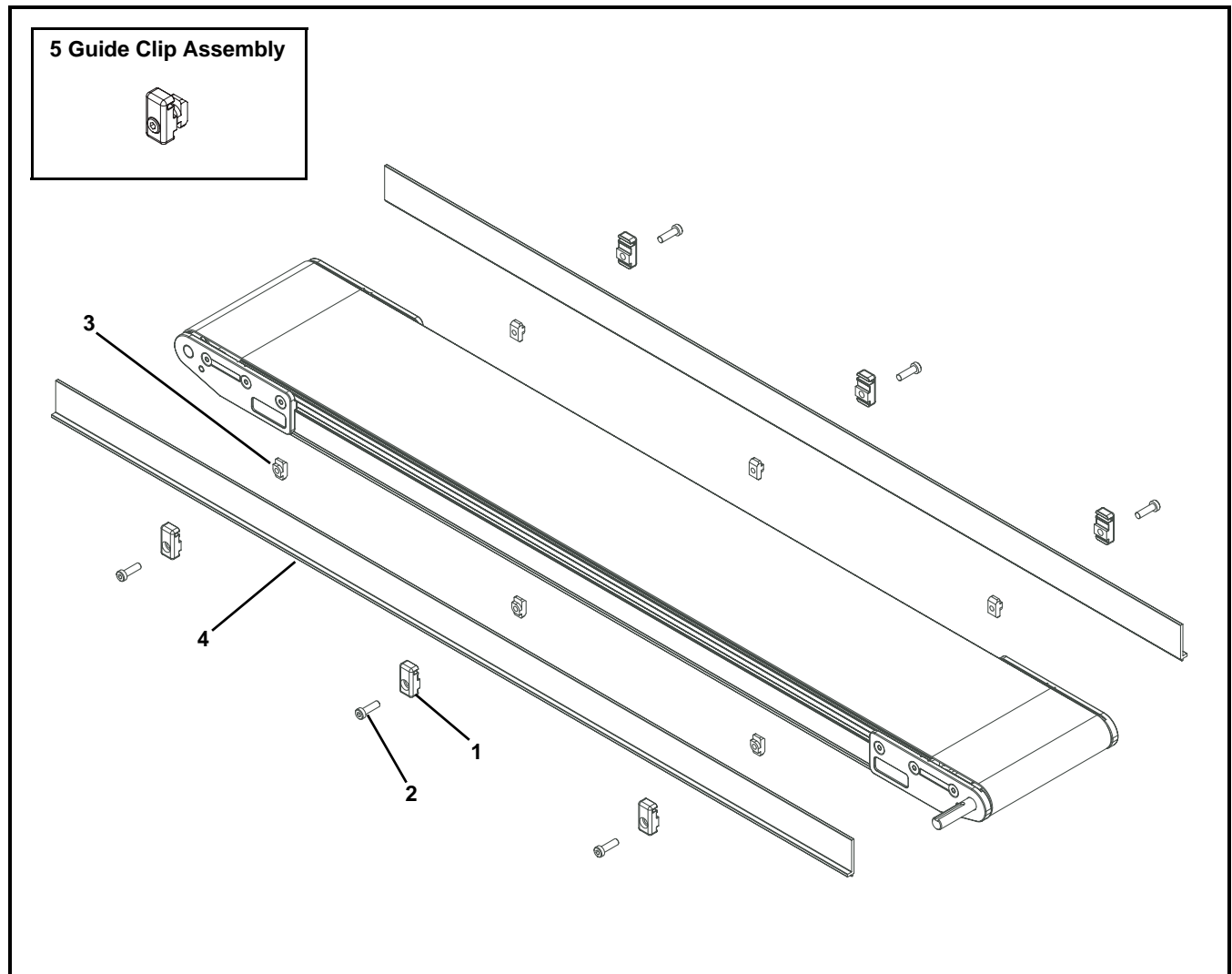
# Service Parts

## #04 Profile - 3.00" (76 mm) Aluminum Side



Item	Part Number	Description
1	206503	Guide Clip
2	807-2878	Low Head Cap Screw, M6-1.00 x 16 mm
3	206685	T-Nut
4	206514- <u>LLLLL</u>	3.00" Guides
	GTB04A04	3.00" Guides 4' long
	GTB04A08	3.00" Guides 8' long
5	203661	Guide Clip Assembly (Includes items 1, 2, and 3)
<u>LLLLL</u> = part length in inches with 2 decimal places		
Length Example: Length = 35.25" <u>LLLLL</u> = 03525		

## #05 Profile - 1.50" (38 mm) Aluminum Side

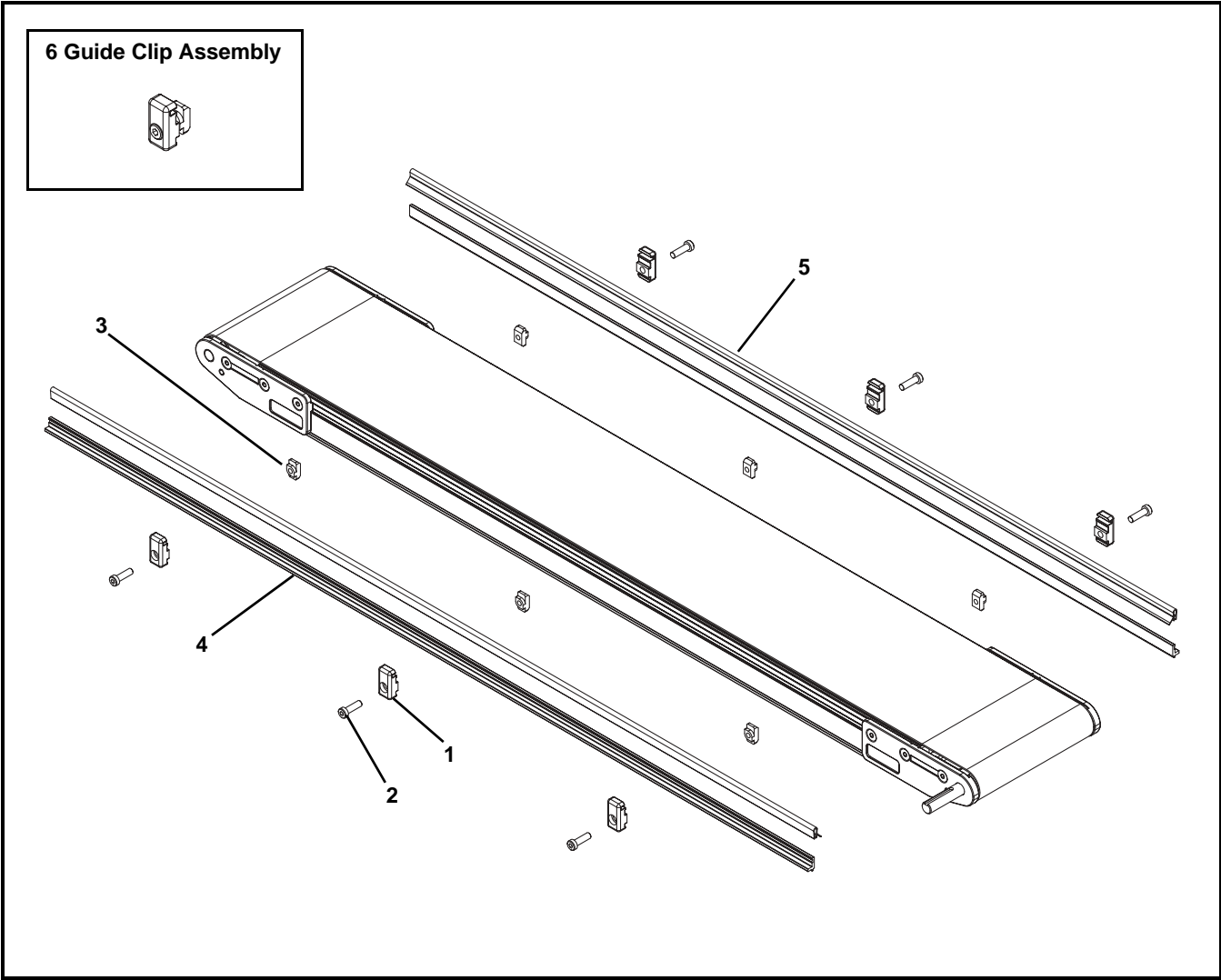


Item	Part Number	Description
1	206503	Guide Clip
2	807-2878	Low Head Cap Screw, M6-1.00 x 16 mm
3	206685	T-Nut
4	206513-LLLLL	1.50" Guides
	GTB05A04	1.50" Guides 4' long
	GTB05A08	1.50" Guides 8' long
5	203661	Guide Clip Assembly (Includes items 1, 2, and 3)
LLLLL = part length in inches with 2 decimal places		
Length Example: Length = 35.25" LLLLL = 03525		



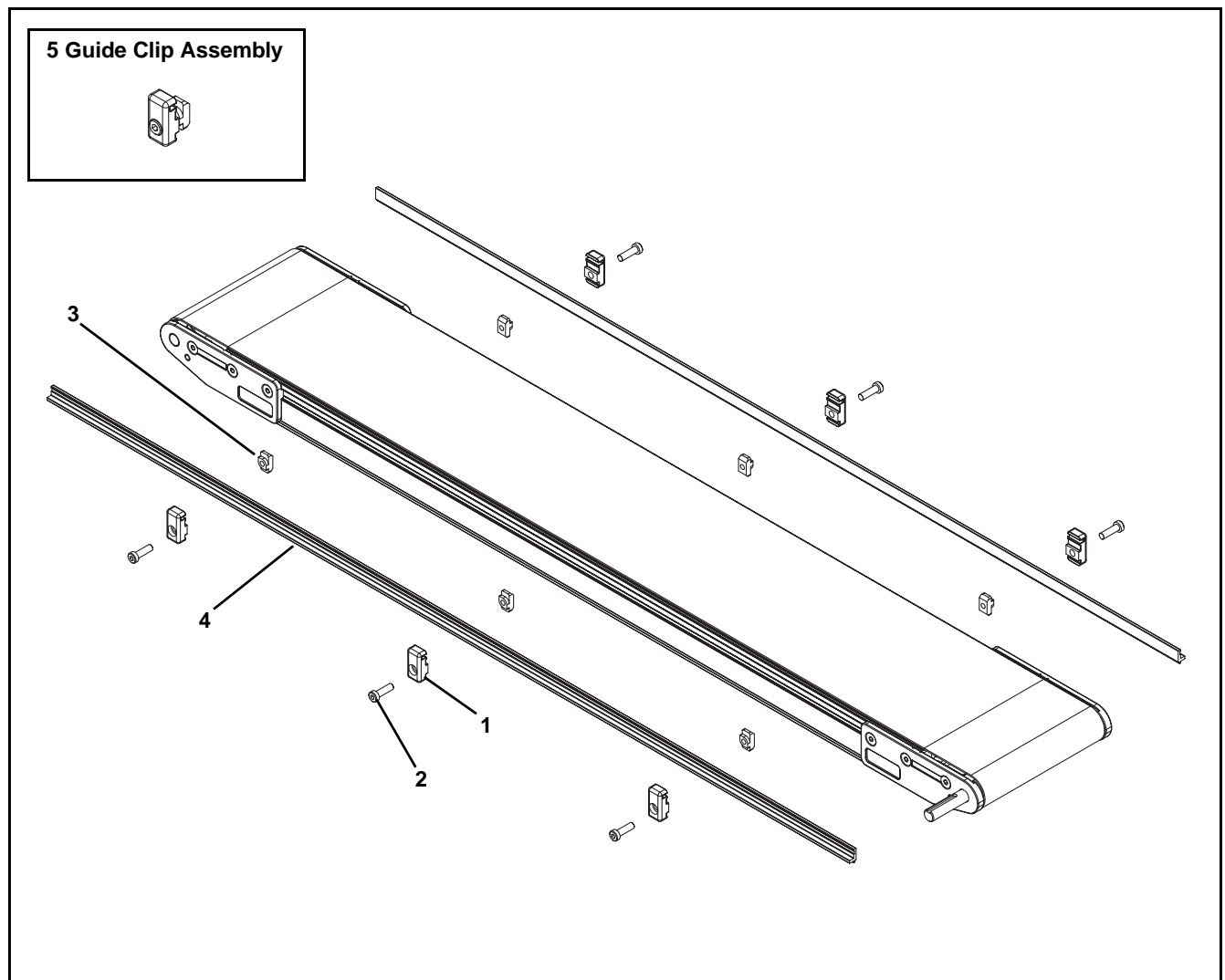
# Service Parts

## #07 Profile - Low to Side Wiper



Item	Part Number	Description
1	207136	Guide Clip
2	807-2878	Low Head Cap Screw, M6-1.00 x 16 mm
3	206685	T-Nut
4	206512-LLLLL	.50" Guides
	GTB09A04	.50" Guides 4' long
	GTB09A08	.50" Guides 8' long
5	41-00-24	Side Wiper (per foot)
6	203662	Guide Clip Assembly (Includes items 1, 2, and 3)
		LLLLL = part length in inches with 2 decimal places
		Length Example: Length = 35.25" LLLLL = 03525

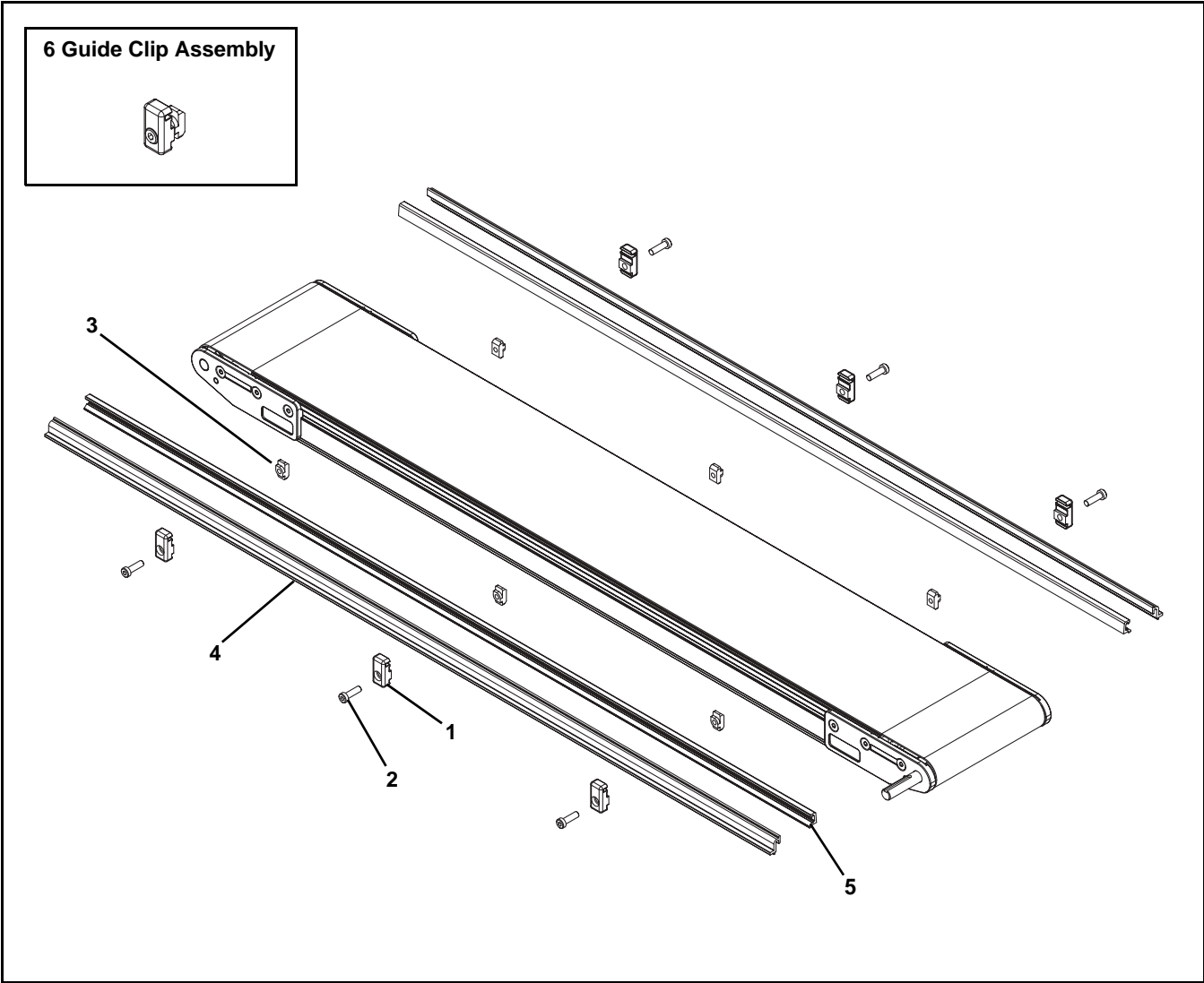
## #09 Profile - Low to High Side



Item	Part Number	Description
1	206503	Guide Clip
2	807-2878	Low Head Cap Screw, M6-1.00 x 16 mm
3	206685	T-Nut
4	206512- <u>LLLL</u>	.50" Guides
	GTB09A04	.50" Guides 4' long
	GTB09A08	.50" Guides 8' long
5	203661	Guide Clip Assembly (Includes items 1, 2, and 3)
<u>LLLL</u> = part length in inches with 2 decimal places		
Length Example: Length = 35.25" <u>LLLL</u> = 03525		

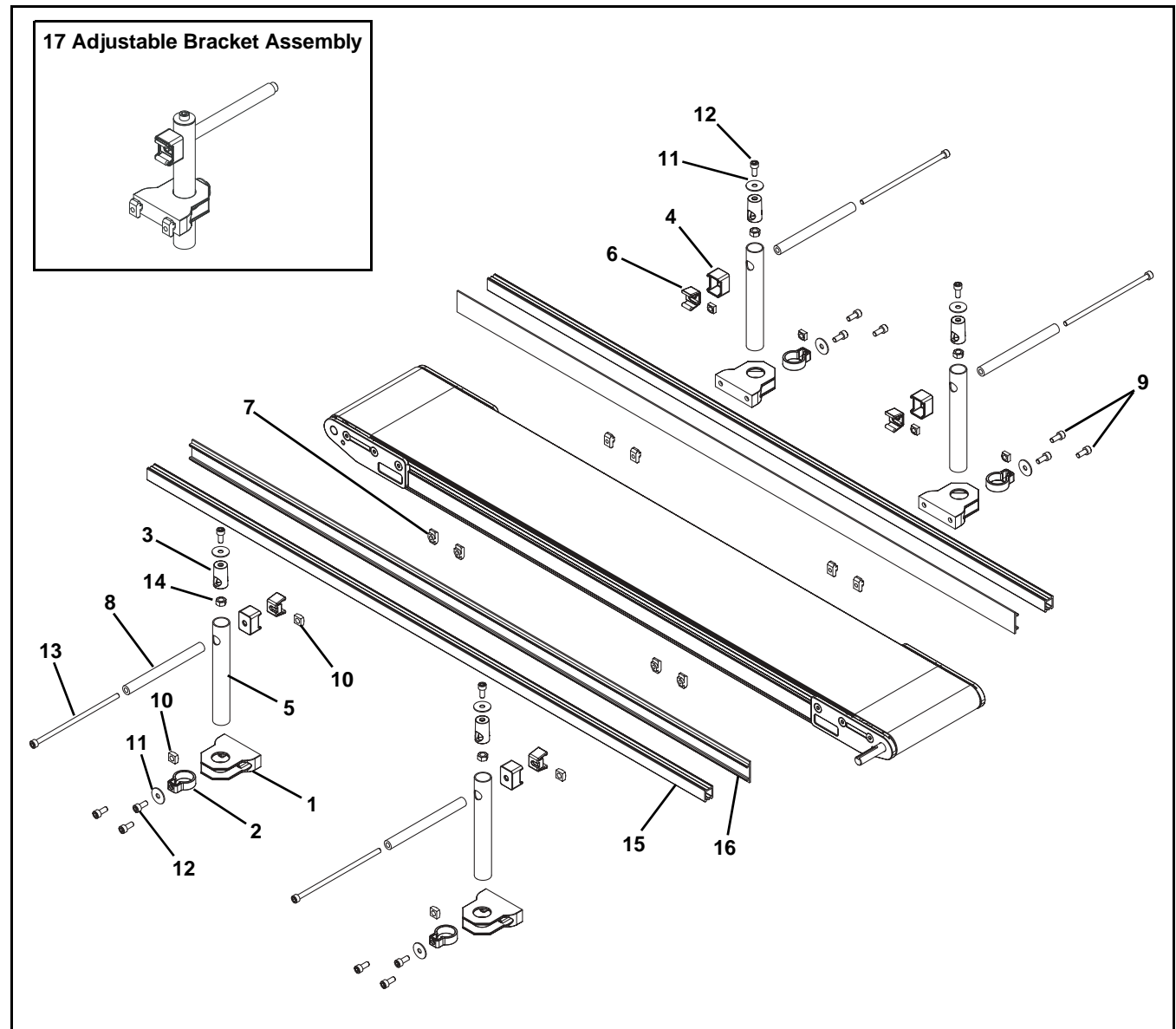
# Service Parts

## #10 Profile - .5" (13 mm) Extruded Plastic Side



Item	Part Number	Description
1	206503	Guide Clip
2	807-2878	Low Head Cap Screw, M6-1.00 x 16 mm
3	206685	T-Nut
4	206511- <u>LLLLL</u>	.50" Guides
	GTB09A04	.50" Guides 4' long
	GTB09A08	.50" Guides 8' long
5	200054P	Snap-On Guides (per foot)
6	203661P	Guide Clip Assembly (Includes items 1, 2, and 3)
<u>LLLLL</u> = part length in inches with 2 decimal places		
Length Example: Length = 35.25" <u>LLLLL</u> = 03525		

## #13, 33 & 43 Profile - Adjustable Guiding

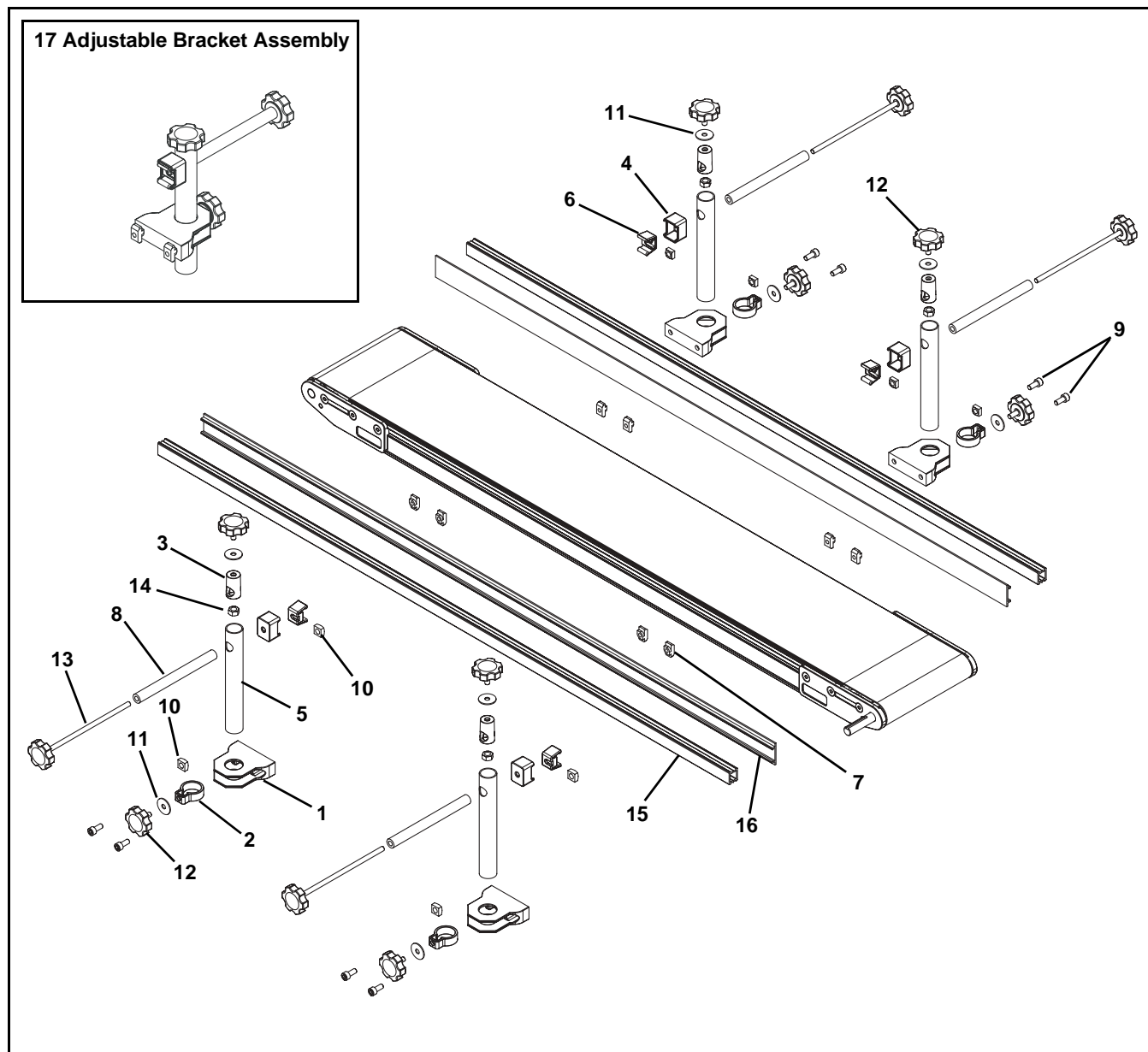


Item	Part Number	Description
1	206380	Base
2	206381	Base Clamp
3	206382	Insert Clamp
4	206383	Guide Ring
5	206385	Tube
6	206397	Clip
7	206685	T-Nut
8	206692	Guide Tube
9	807-2859	Nylon Cap Screw, N6 x 16 mm
10	807-920	Square Nut, M6-1.0
11	911-710	Washer
12	920616M	Socket Head Screw, M6-1.00 x 16 mm
13	9206150M	Socket Head Screw, M6-1.00 x 150 mm

Item	Part Number	Description
14	990601M	Hex Nut
15	834-238- <u>LLLL</u>	Guide Rail
	GTB13A04	Guide Rail 4' long
	GTB13A08	Guide Rail 8' long
16	834-241	1.3" UHMW Guiding (per foot)
	GTB13B04	1.3" UHMW Guiding 4' long
	GTB13B08	1.3" UHMW Guiding 8' long
	206683	2" UHMW Guiding (per foot)
	GTB13C04	2" UHMW Guiding 4' long
	GTB13C08	2" UHMW Guiding 8' long
17	206686	Adjustable Bracket Assembly (Includes Items 1 through 14)
<u>LLLL</u> = part length in inches with 2 decimal places		
Length Example: Length = 35.25" <u>LLLL</u> = 03525		

# Service Parts

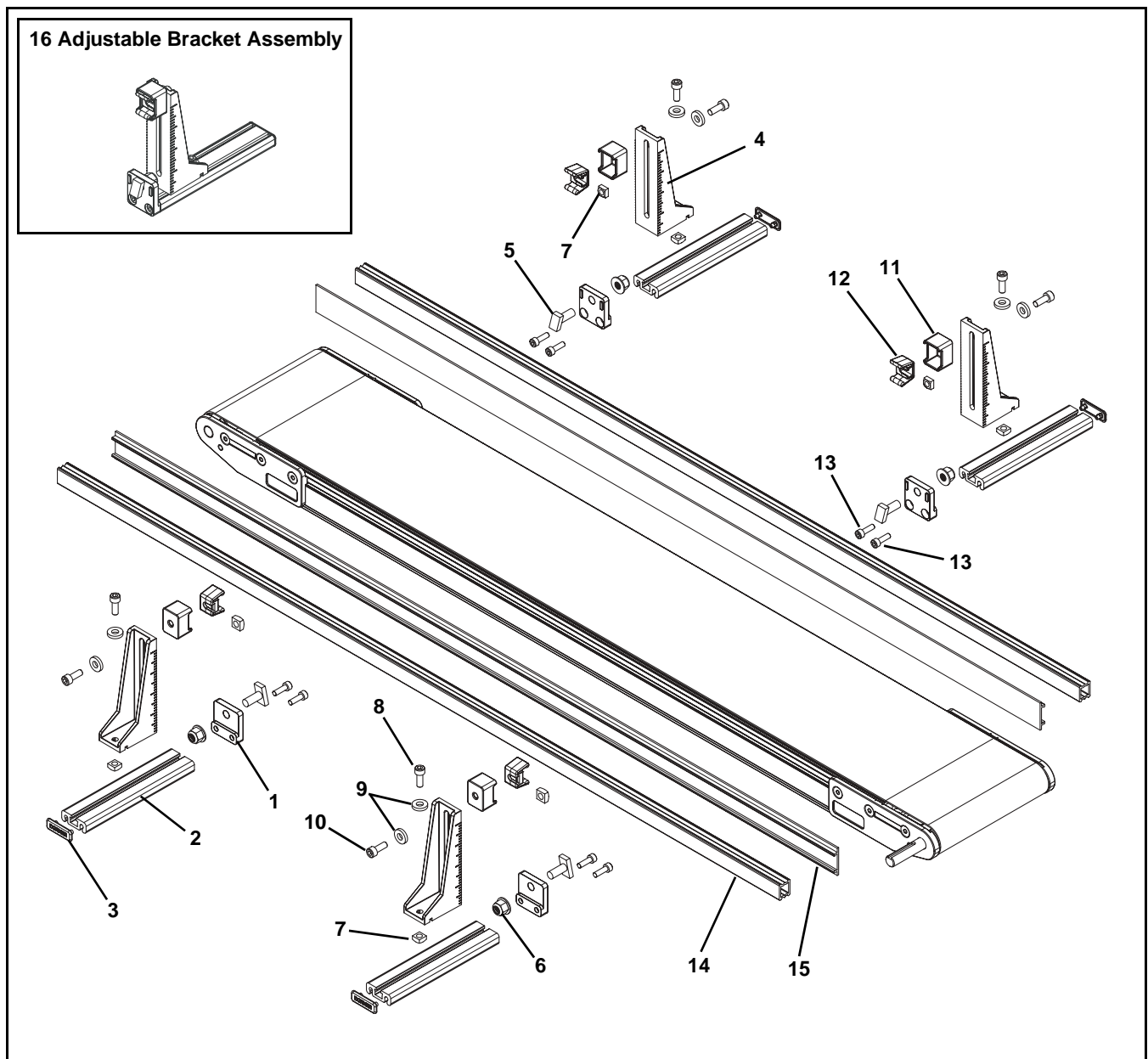
## #14, 34 & 44 Profile - Tool-Less Adjustable Guiding



Item	Part Number	Description
1	206380	Base
2	206381	Base Clamp
3	206382	Insert Clamp
4	206383	Guide Ring
5	206385	Tube
6	206397	Clip
7	206685	T-Nut
8	206692	Guide Tube
9	807-2859	Nylon Cap Screw, N6 x 16 mm
10	807-920	Square Nut, M6-1.0
11	911-710	Washer
12	206698	Knob, 12 mm
13	206697	Knob, 150 mm
14	990601M	Hex Nut

Item	Part Number	Description
15	834-238-LLLLL	Guide Rail
	GTB13A04	Guide Rail 4' long
	GTB13A08	Guide Rail 8' long
16	834-241	1.3" UHMW Guiding (per foot)
	GTB13B04	1.3" UHMW Guiding 4' long
	GTB13B08	1.3" UHMW Guiding 8' long
	206683	2" UHMW Guiding (per foot)
	GTB13C04	2" UHMW Guiding 4' long
	GTB13C08	2" UHMW Guiding 8' long
17	206687	Tool-Less Adjustable Bracket Assembly (Includes Items 1 through 14)
LLLLL = part length in inches with 2 decimal places		
Length Example: Length = 35.25" LLLLL = 03525		

## #16, 36 & 46 Profile - Outboard Adjustable Guiding



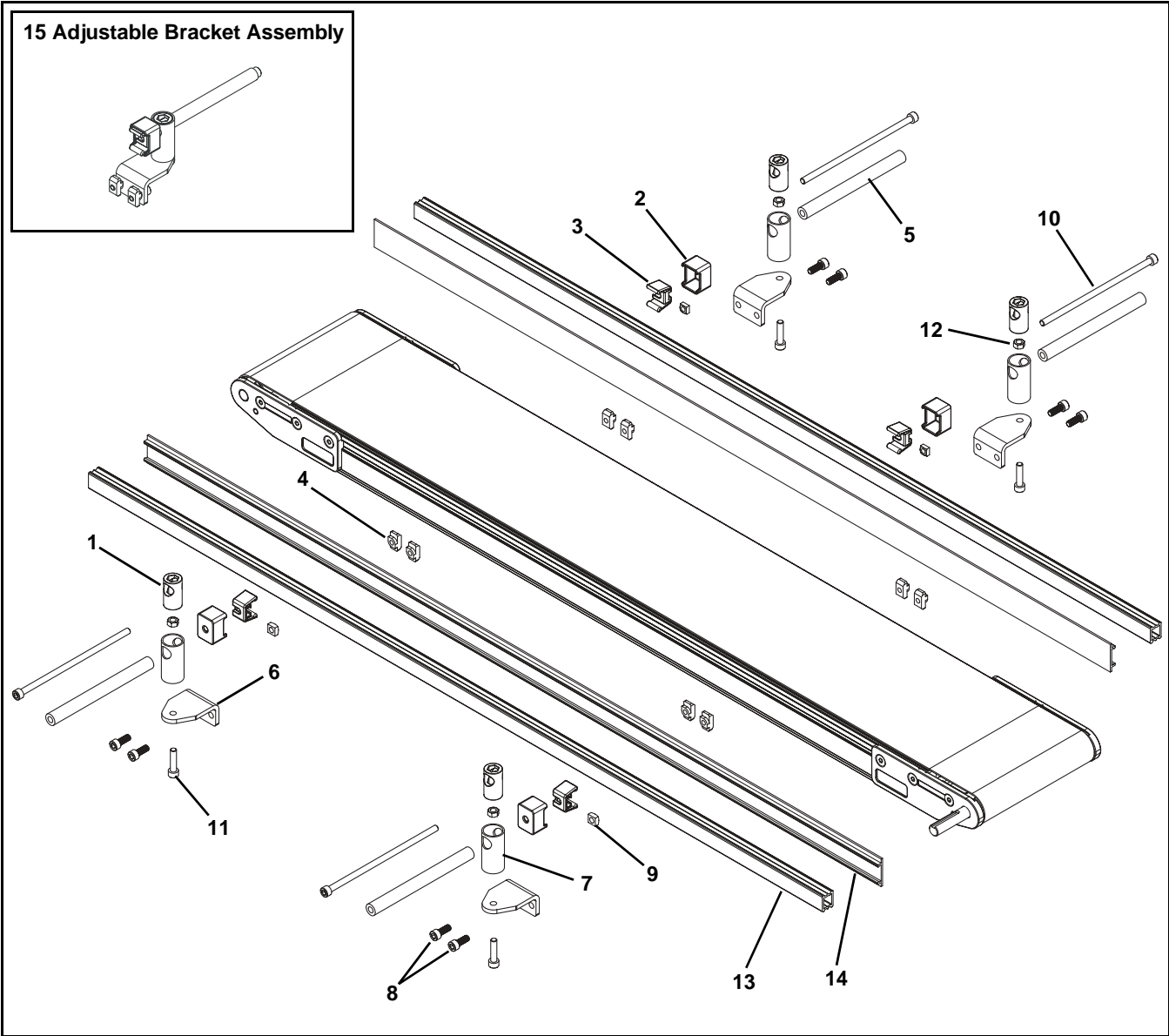
Item	Part Number	Description
1	210848	Mounting Block
2	210846-00600	Extrusion Base
3	210849	Cap
4	210847	Mounting Bracket
5	834-007	Stud, M8 x 20 mm
6	990812M	Hex Nut, M8-1.25
7	807-920	Square Nut, M6-1.0
8	920616M	Socket Head Screw, M6-1.00 x 16 mm
9	605279P	Washer
10	920622M	Socket Head Screw, M6-1.00 x 22 mm
11	206383	Guide Ring
12	206397	Clip
13	920516M	Socket Head Screw, M5-.80 x 16 mm

Item	Part Number	Description
14	834-238- <u>LLLL</u>	Guide Rail
	GTB13A04	Guide Rail 4' long
	GTB13A08	Guide Rail 8' long
15	834-241	1.3" UHMW Guiding (per foot)
	GTB13B04	1.3" UHMW Guiding 4' long
	GTB13B08	1.3" UHMW Guiding 8' long
	206683	2" UHMW Guiding (per foot)
	GTB13C04	2" UHMW Guiding 4' long
	GTB13C08	2" UHMW Guiding 8' long
16	206193	Adjustable Bracket Assembly (Includes Items 1 through 13)
<u>LLLL</u> = part length in inches with 2 decimal places		
Length Example: Length = 35.25" <u>LLLL</u> = 03525		



# Service Parts

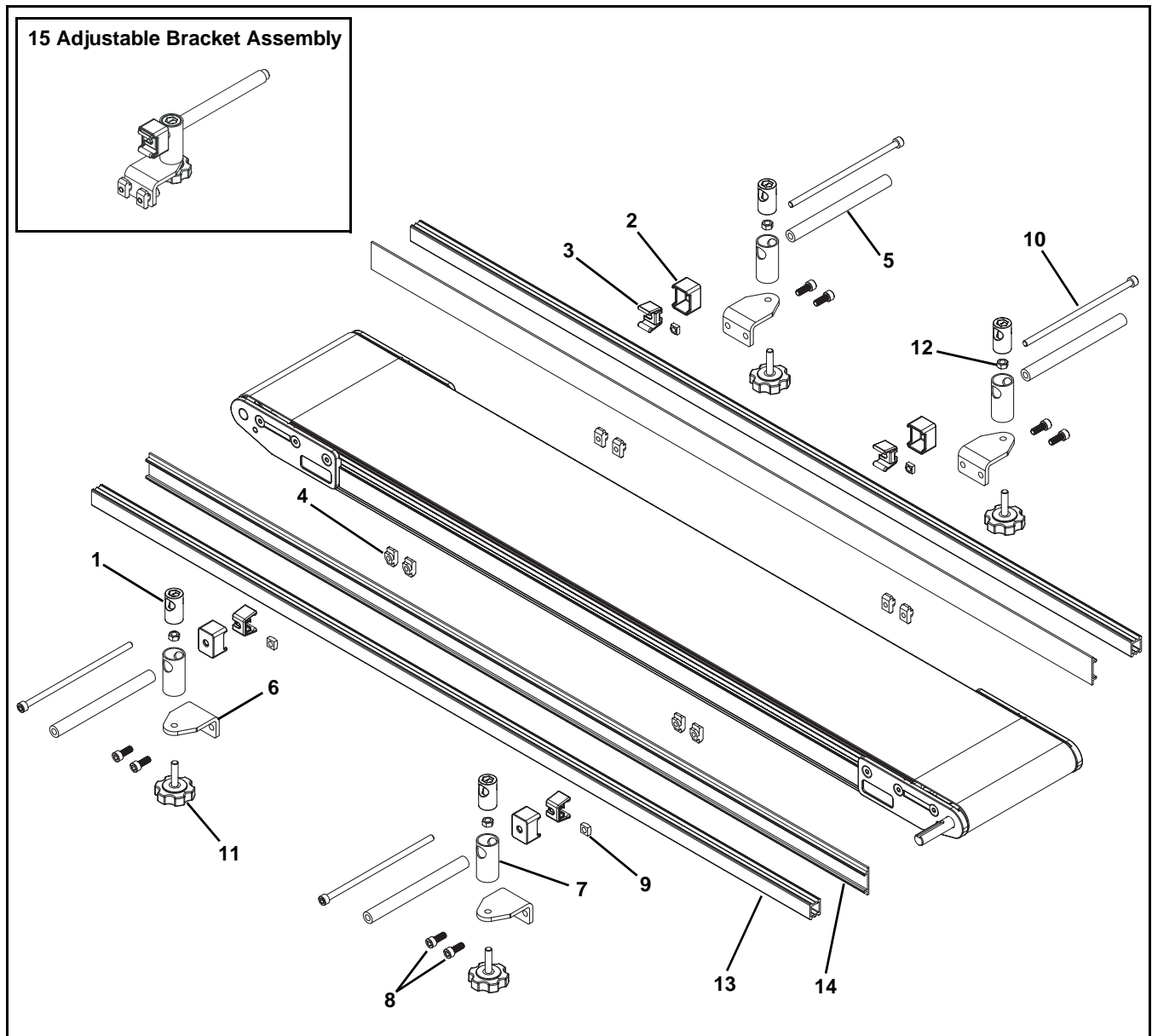
## #19, 39 & 49 Profile - Horizontal Adjustable Guiding



Item	Part Number	Description
1	206382	Insert Clamp
2	206383	Guide Ring
3	206397	Clip
4	206685	T-Nut
5	206692	Guide Tube
6	207146	Bracket
7	207147	Guide Tube
8	807-2859	Nylon Cap Screw, N6 x 16 mm
9	807-920	Square Nut, M6-1.0
10	9206150M	Socket Head Screw, M6-1.00 x 150 mm
11	920625M	Socket Head Screw, M6-1.00 x 25 mm
12	990601M	Hex Nut

Item	Part Number	Description
13	834-238-LLLLL	Guide Rail
	GTB13A04	Guide Rail 4' long
	GTB13A08	Guide Rail 8' long
14	834-241	1.3" UHMW Guiding (per foot)
	GTB13B04	1.3" UHMW Guiding 4' long
	GTB13B08	1.3" UHMW Guiding 8' long
	206683	2" UHMW Guiding (per foot)
	GTB13C04	2" UHMW Guiding 4' long
	GTB13C08	2" UHMW Guiding 8' long
15	207150	Adjustable Bracket Assembly (Includes Items 1 through 13)
		LLLLL = part length in inches with 2 decimal places
		Length Example: Length = 35.25" LLLLL = 03525

## #20, 40 & 50 Profile - Tool-Less Horizontal Adjustable Guiding

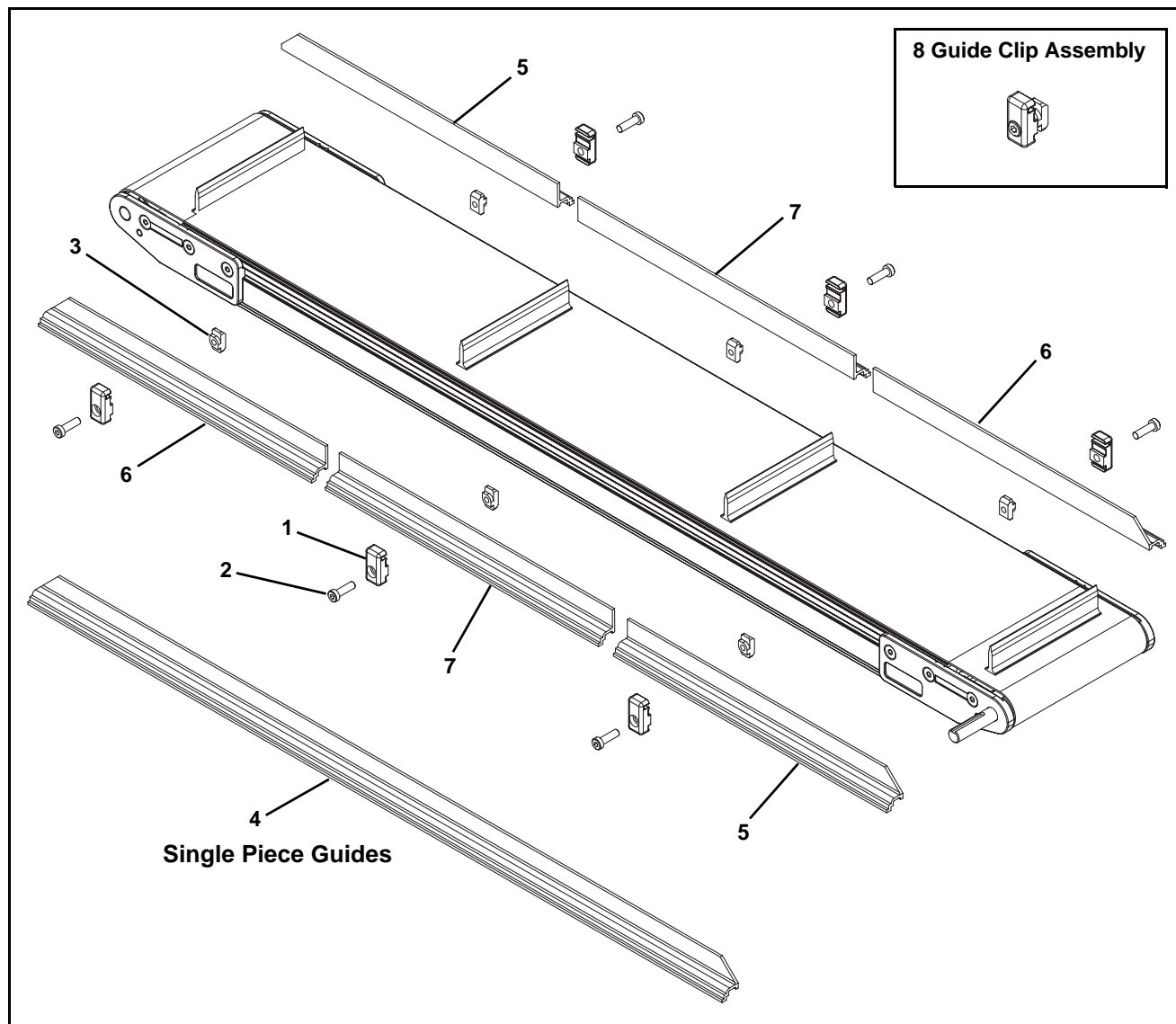


Item	Part Number	Description
1	206382	Insert Clamp
2	206383	Guide Ring
3	206397	Clip
4	206685	T-Nut
5	206692	Guide Tube
6	207146	Bracket
7	207147	Guide Tube
8	807-2859	Nylon Cap Screw, N6 x 16 mm
9	807-920	Square Nut, M6-1.0
10	9206150M	Socket Head Screw, M6-1.00 x 150 mm
11	207155	Knob
12	990601M	Hex Nut

Item	Part Number	Description
13	834-238- <u>LLLLL</u>	Guide Rail
	GTB13A04	Guide Rail 4' long
	GTB13A08	Guide Rail 8' long
14	834-241	1.3" UHMW Guiding (per foot)
	GTB13B04	1.3" UHMW Guiding 4' long
	GTB13B08	1.3" UHMW Guiding 8' long
	206683	2" UHMW Guiding (per foot)
	GTB13C04	2" UHMW Guiding 4' long
	GTB13C08	2" UHMW Guiding 8' long
15	207151	Tool-Less Adjustable Bracket Assembly (Includes Items 1 through 13)
<u>LLLLL</u> = part length in inches with 2 decimal places		
Length Example: Length = 35.25" <u>LLLLL</u> = 03525		

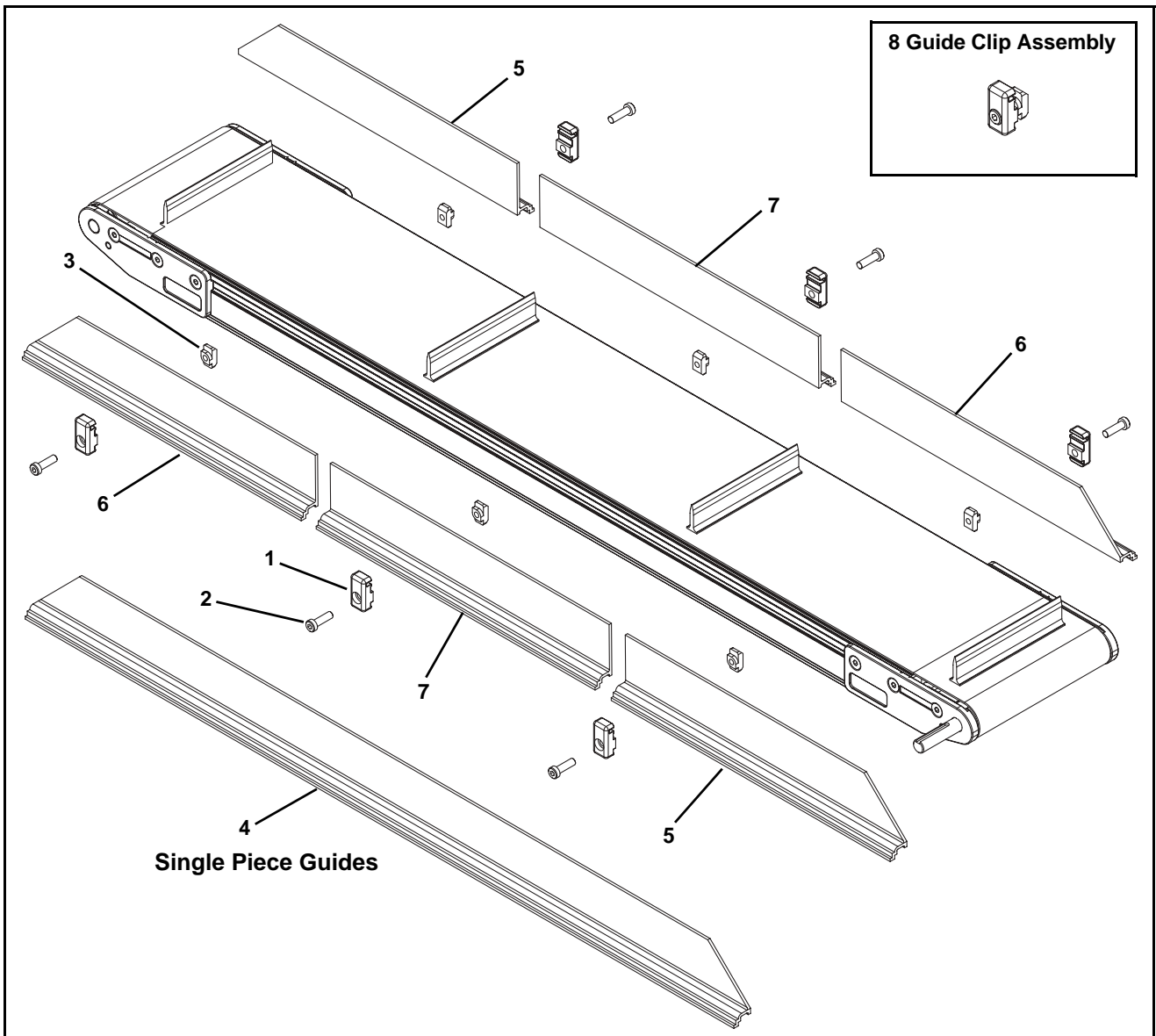
# Service Parts

## #2 Cleated Profile - 1.00" (25 mm) High Side



Item	Part Number	Description
1	206503	Guide Clip
2	807-2878	Low Head Cap Screw, M6-1.00 x 16 mm
3	206685	T-Nut
4	280203- <u>LLLLL</u>	1.00" Cleated Guiding for Single Piece Guides
5	280202- <u>LLLLL</u>	1.00" End 1 Section Cleated Guiding for Multi Piece Guides
6	280201- <u>LLLLL</u>	1.00" End 2 Section Cleated Guiding for Multi Piece Guides
7	206515- <u>LLLLL</u>	1.00" Mid Section Cleated Guiding for Multi Piece Guides
8	203661	Guide Clip Assembly (Includes items 1, 2, and 3)
<u>LLLLL</u> = part length in inches with 2 decimal places		
Length Example: Length = 35.25" <u>LLLLL</u> = 03525		

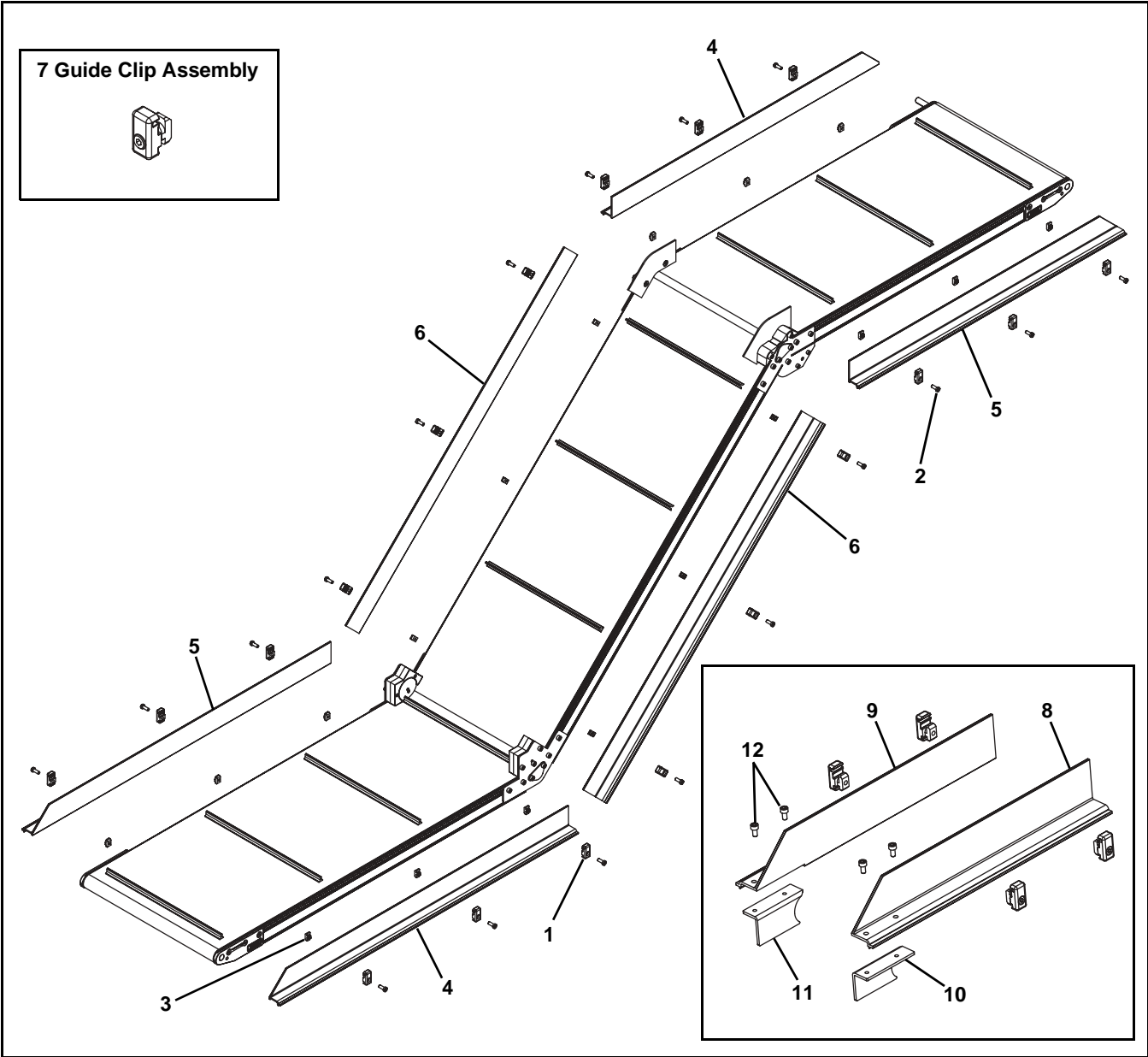
## #3 Cleated Profile - 2.50" (64 mm) High Side



Item	Part Number	Description
1	206503	Guide Clip
2	807-2878	Low Head Cap Screw, M6-1.00 x 16 mm
3	206685	T-Nut
4	280303- <u>LLLLL</u>	2.50" Cleated Guiding for Single Piece Guides
5	280302- <u>LLLLL</u>	2.50" End 1 Section Cleated Guiding for Multi Piece Guides
6	280301- <u>LLLLL</u>	2.50" End 2 Section Cleated Guiding for Multi Piece Guides
7	206516- <u>LLLLL</u>	2.50" Mid Section Cleated Guiding for Multi Piece Guides
8	203661	Guide Clip Assembly (Includes items 1, 2, and 3)
<u>LLLLL</u> = part length in inches with 2 decimal places		
Length Example: Length = 35.25" <u>LLLLL</u> = 03525		

# Service Parts

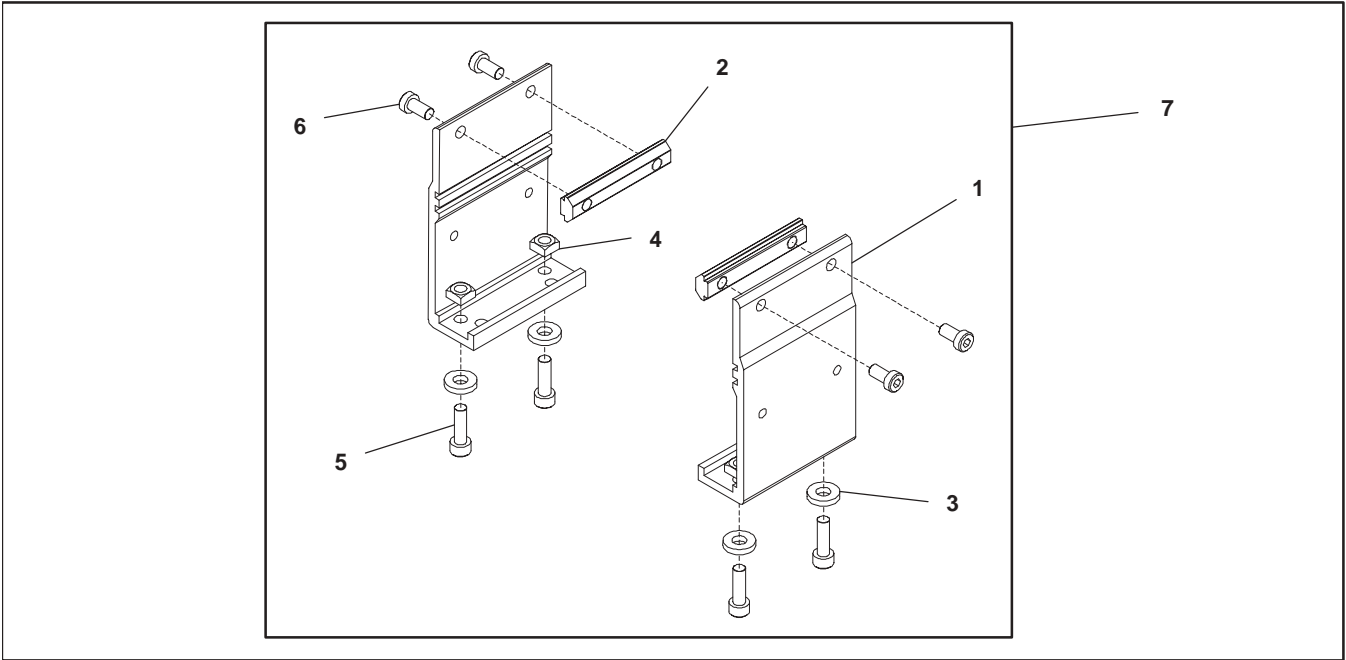
## #3 Cleated LPZ Profile - 2.50" (64 mm) High Side



Item	Part Number	Description
1	206503	Guide Clip
2	807-2878	Low Head Cap Screw, M6-1.00 x 16 mm
3	206685	T-Nut
4	280101- <u>LLLL</u>	2.50" End 1 Section Cleated Guiding
5	280102- <u>LLLL</u>	2.50" End 2 Section Cleated Guiding
6	206517- <u>LLLL</u>	2.50" Mid Section Cleated Guiding
7	203661	Guide Clip Assembly (Includes items 1, 2, and 3)
8	207228	Guide for End 1 Section Horizontal to Incline Conveyors

Item	Part Number	Description
9	207227	Guide for End 2 Section Horizontal to Incline Conveyors
10	207230	Exit Guide for End 1 Section Horizontal to Incline Conveyors
11	207229	Exit Guide for End 2 Section Horizontal to Incline Conveyors
12	920510M	Socket Head Screw, M5-.80 x 10 mm
<u>LLLL</u> = part length in inches with 2 decimal places		
Length Example: Length = 35.25" <u>LLLL</u> = 03525		

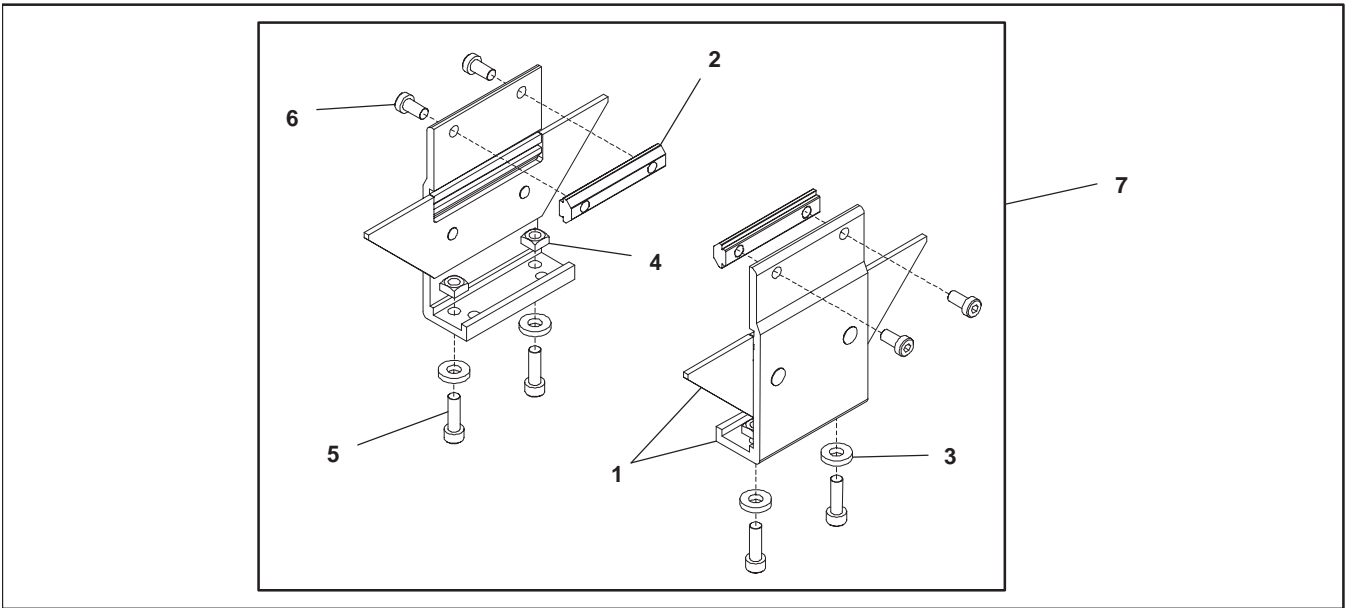
Flat Belt Mounting Brackets



Item	Part Number	Description
1	240831	Stand Mount
2	300150MK4	Drop-In Tee Bar (x4)
3	605279P	Washer
4	807-920	Square Nut M6

Item	Part Number	Description
5	920620M	Socket Head Screw M6 x 20 mm
6	950616M	Low Head Cap Screw M6 x 16 mm
7	240839	Flat Belt Stand Mount Assembly

Cleated Belt Mounting Brackets

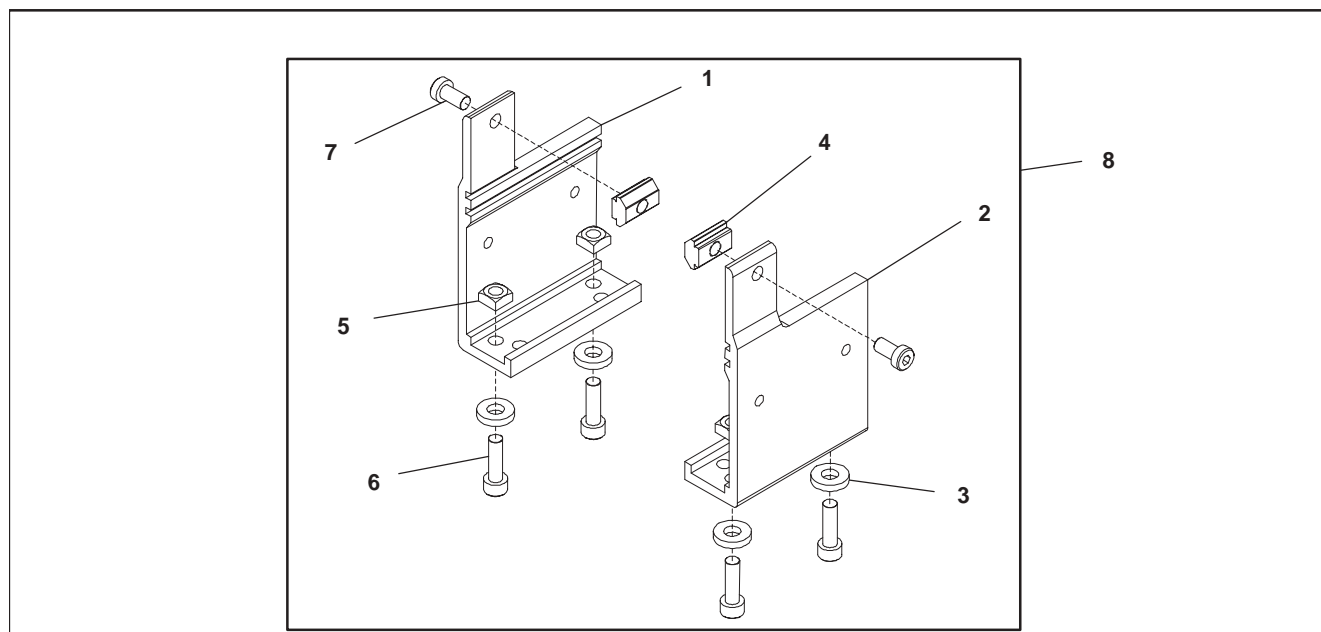


Item	Part Number	Description
1	240836	Cleated Mount Assembly
2	300150MK4	Drop-In Tee Bar (x4)
3	605279P	Washer

Item	Part Number	Description
4	807-920	Square Nut M6
5	920620M	Socket Head Screw M6 x 20 mm
6	950616M	Low Head Cap Screw M6x16 mm
7	240838	Cleated Stand Mount Assembly

# Service Parts

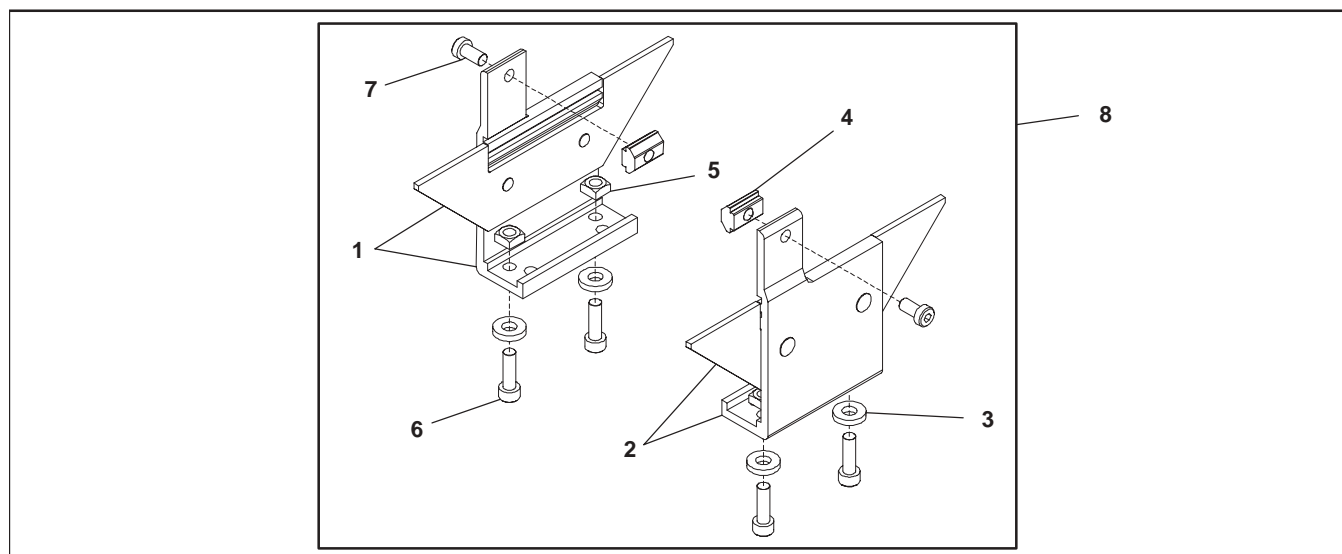
## Flat Belt Mounting Brackets for Short Conveyors



Item	Part Number	Description
1	240833	Stand Mount, LH 2' (610mm)
2	240834	Stand Mount, RH 2' (610mm)
3	605279P	Washer
4	639971MK10	Drop-In Tee Bar (x10)

Item	Part Number	Description
5	807-920	Square Nut M6
6	920620M	Socket Head Screw M6 x 20 mm
7	950616M	Low Head Cap Screw M6 x 16 mm
8	240847	Flat Belt Stand Mount Assembly for 2' (610mm) Conveyors

## Cleated Belt Mounting Brackets for Short Conveyors

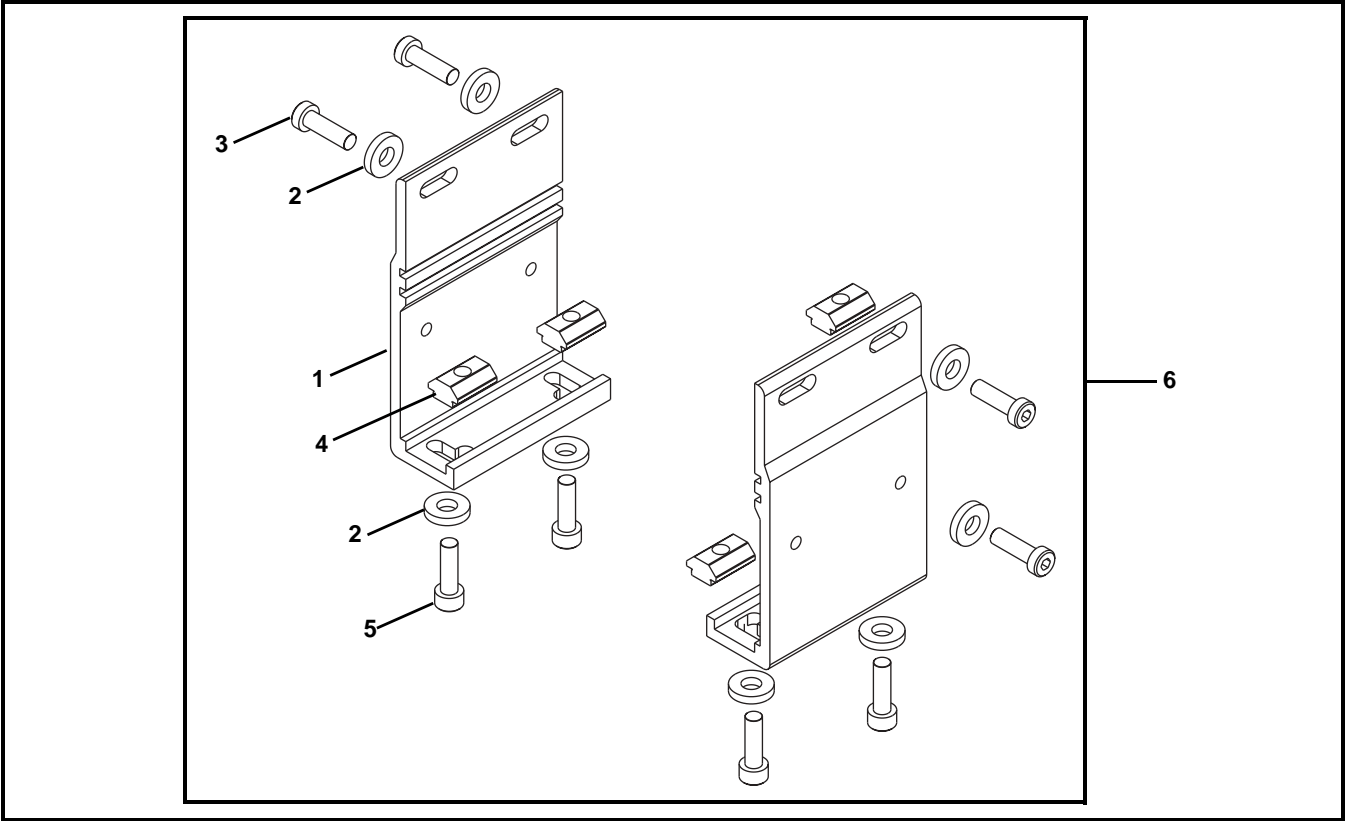


Item	Part Number	Description
1	240852	Cleated Stand Bracket Assembly LH 2' (610mm) Conveyor
2	240853	Cleated Stand Bracket Assembly RH 2' (610mm) Conveyor
3	605279P	Washer
4	639971MK10	Drop-In Tee Bar (x10)

Item	Part Number	Description
5	807-920	Square Nut M6
6	920620M	Socket Head Screw M6 x 20 mm
7	950616M	Low Head Cap Screw M6 x 16 mm
8	240851	Cleated Belt Stand Mount Assembly for 2' (610mm) Conveyors



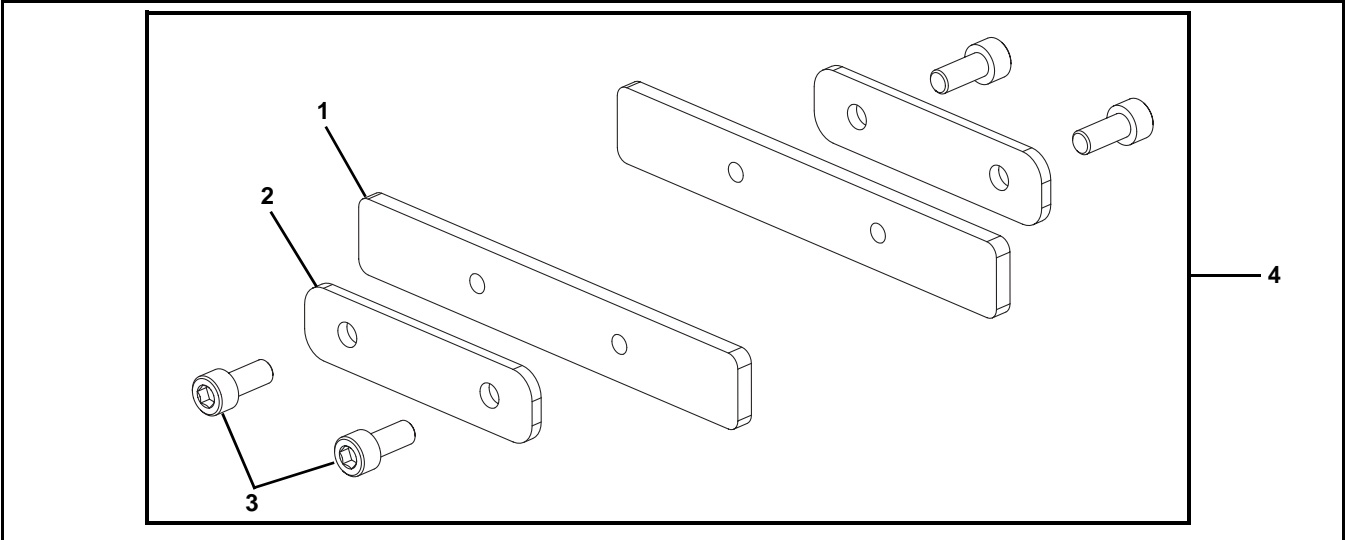
Flat Belt Mounting Brackets Assembled to the Tail



Item	Part Number	Description
1	240850	Stand Mount
2	605279P	Washer
3	950620M	Socket Low Head Screw M6 x 20 mm

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

Connecting Assembly without Stand Mount

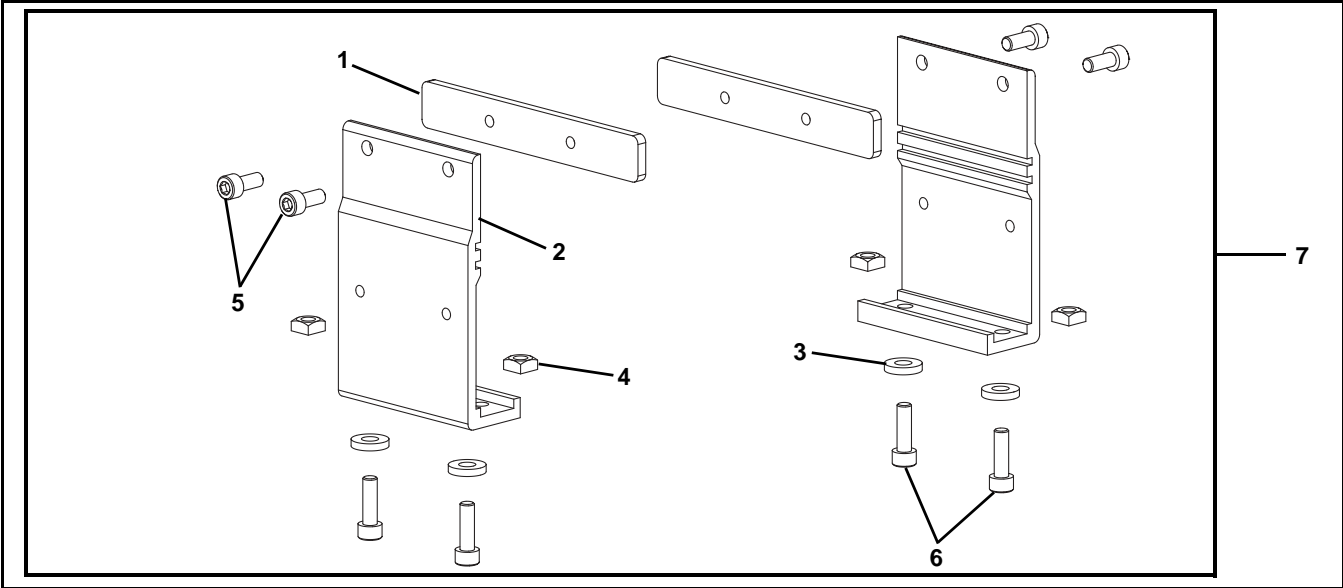


Item	Part Number	Description
1	206520	Connecting Bar
2	240859	Plate

Item	Part Number	Description
3	920614M	Socket Head Screw, M6-1.00 x 14 mm
4	206519	Connecting Assembly

# Service Parts

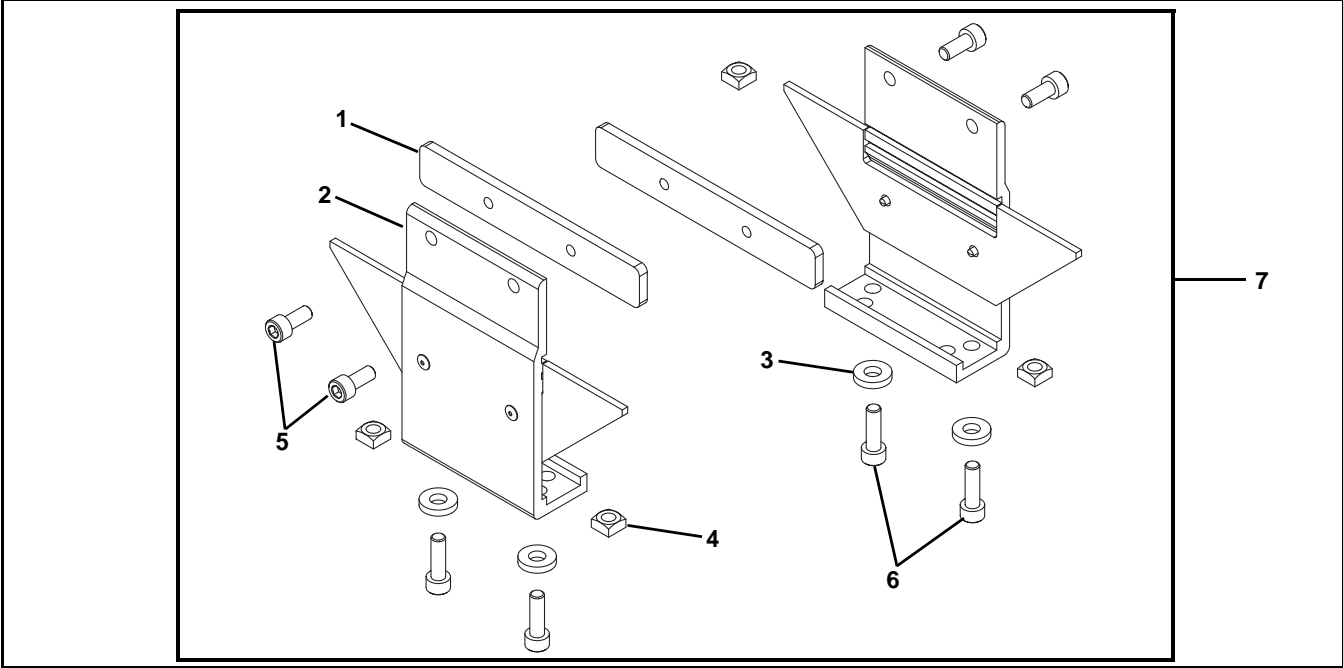
## Flat Belt Connecting Assembly with Stand Mount



Item	Part Number	Description
1	206520	Connecting Bar
2	240831	Stand Mount
3	605279P	Washer
4	807-920	Square Nut M6

Item	Part Number	Description
5	920614M	Socket Head Screw, M6-1.00 x 14 mm
6	920620M	Socket Head Screw, M6-1.00 x 20 mm
7	206518	Connecting Assembly

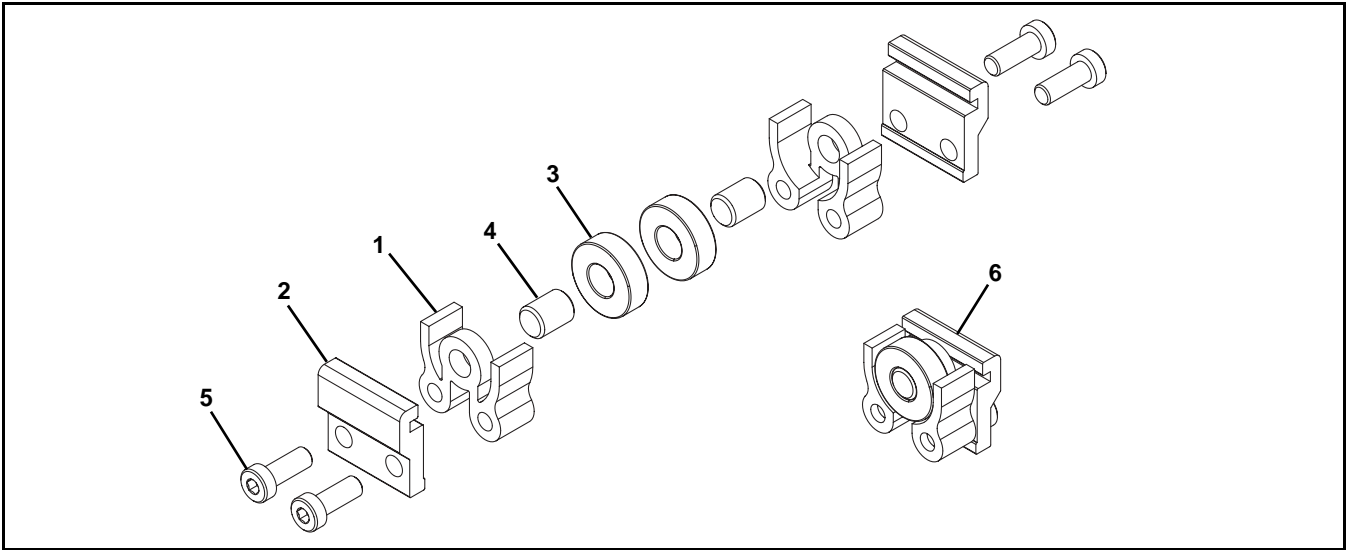
## Cleated Belt Connecting Assembly with Stand Mount



Item	Part Number	Description
1	206520	Connecting Bar
2	240836	Cleated Stand Mount Assembly
3	605279P	Washer
4	807-920	Square Nut M6

Item	Part Number	Description
5	920614M	Socket Head Screw, M6-1.00 x 14 mm
6	920620M	Socket Head Screw, M6-1.00 x 20 mm
7	240929	Connecting Assembly

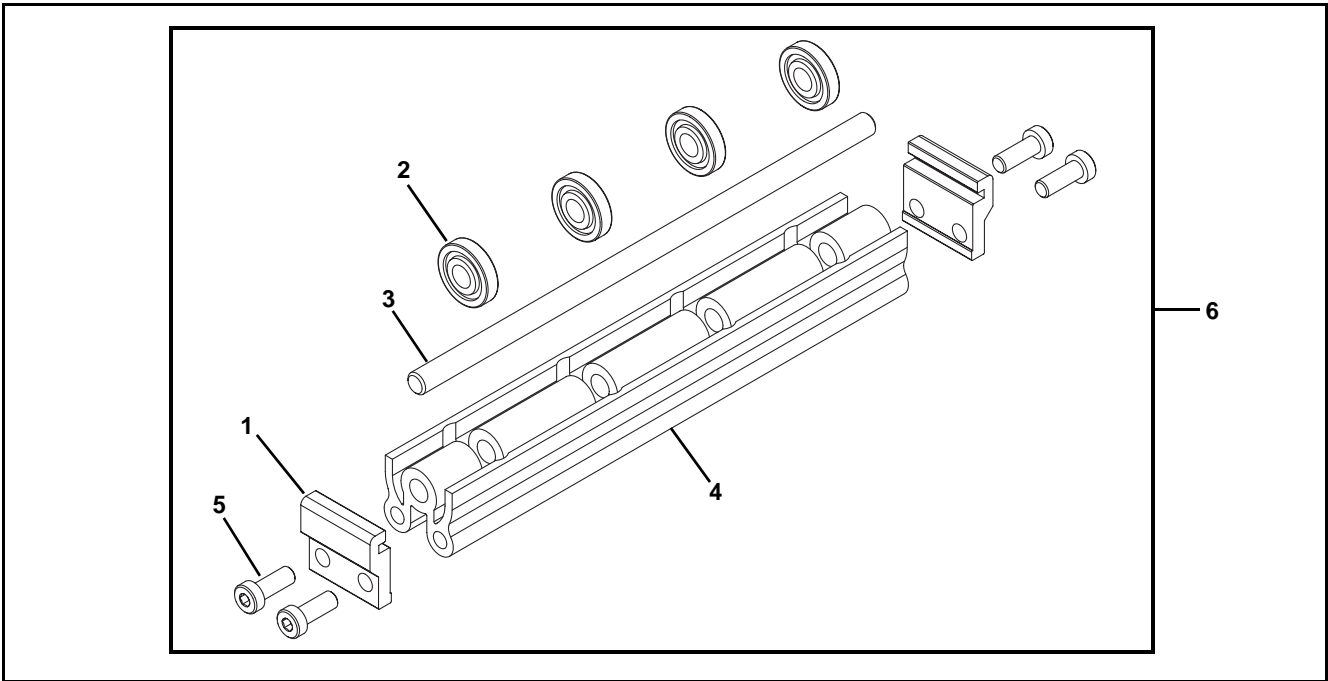
2" (51 mm) to 6" (152 mm) Flat Belt Return Roller



Item	Part Number	Description
1	240825	Return Roller Guard – Short
2	205978	Flat Return Roller Clip
3	802-027	Bearing
4	913-100	Dowel Pin

Item	Part Number	Description
5	950616M	Low Head Cap Screw M6-1.00 x 16 mm
6	206522	Return Roller Assembly

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

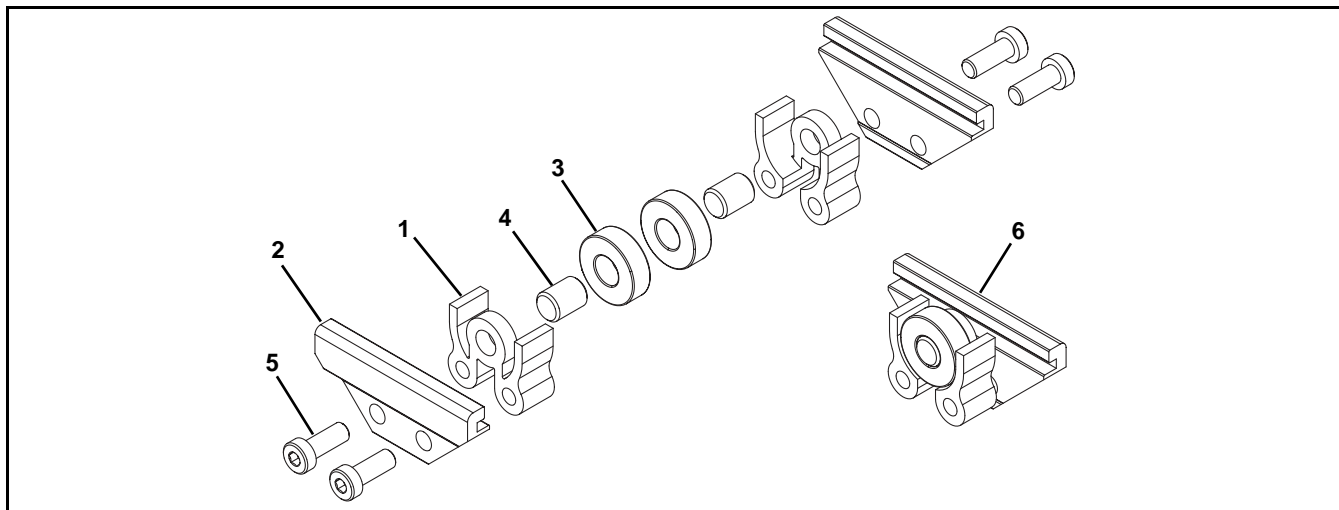


Item	Part Number	Description
1	205978	Flat Return Roller Clip
2	240826	Return Roller
3	2410WW	Return Roller Rod
4	2436WW	Return Roller Guard

Item	Part Number	Description
5	950616M	Low Head Cap Screw, M6-1.00 x 16 mm
6	206523-WW	Return Roller Assembly
WW = Conveyor width reference: 08, 10, 12, 14, 16, 18, 20, 22, & 24		

# Service Parts

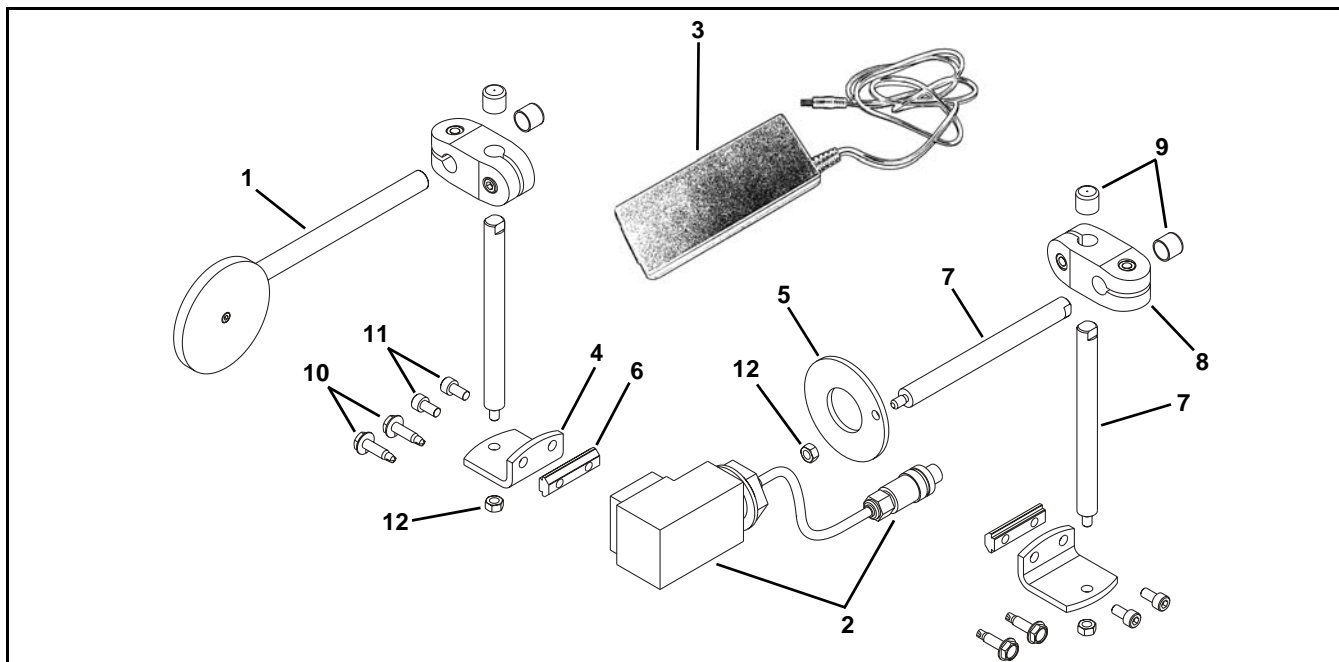
## Cleated Belt Return Roller



Item	Part Number	Description
1	240825	Return Roller Guard – Short
2	205979	Cleated Return Roller Clip
3	802-027	Bearing
4	913-100	Dowel Pin

Item	Part Number	Description
5	950616M	Low Head Cap Screw M6-1.00 x 16 mm
6	206521	Cleated Belt Return Roller Assembly

## Photo Eye



Item	Part Number	Description
1	201880	Reflector Mounting Assembly
2	201881	Eye Assembly with Plug
3	201882	Transformer with Plug
4	202004	Mounting Bracket
5	205109	Washer
6	200830M	Drop-In Tee Bar

Item	Part Number	Description
7	202028M	Mounting Shaft
8	807-652	Cross Block
9	807-948	Cap
10	807-1937	Drilling Screw, 1/4-20 x 1" (2300 Series)
11	920612M	Socket Head Screw, M6-1.00 x 12 mm (2200 Series)
12	990601M	Hex Nut

Conveyor Belt Part Number Configuration

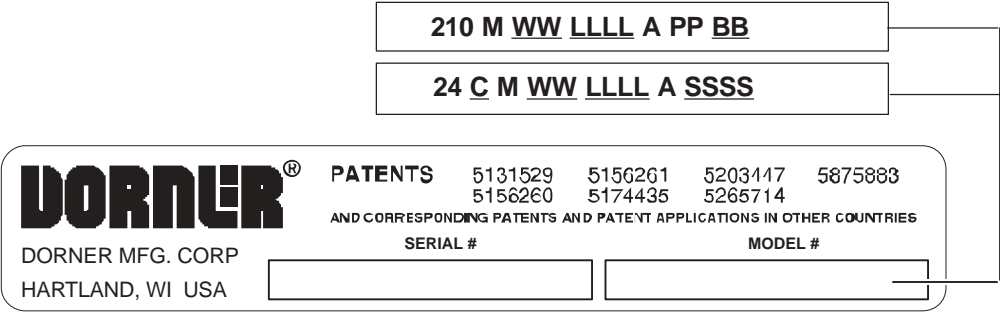


Figure 157

Flat Belt Part Number Configuration

Refer to Dorner patent plate (Figure 157). From the model number, determine conveyor width (“WW”), length (“LLLL”) and belt type (“BB”). Use data to configure belt part number as indicated below. \*Add “V” for V-guided belts.

22 - WW LLLL / BB V \*

22 - \_\_\_\_\_ / \_\_\_\_\_ V\*

(Fill In)

Cleated Belt Part Number Configuration

Refer to Dorner patent plate (Figure 157). From the model number, determine conveyor type (“T”), width (“WW”), length (“LLLL”), cleat type (“C”) and cleat spacing (“SSSS”). Use data to configure belt part number as indicated below. \*Add “V” for V-guided belts.

2T - WW LLLL C SSSS V \*

2 - \_\_\_\_\_ / \_\_\_\_\_ V\*

(Fill In)

# Return Policy

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

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

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

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

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

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

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

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



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

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