

2200 Series Gang Drive Conveyors

Installation, Maintenance & Parts Manual



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Introduction

IMPORTANT

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

Upon receipt of shipment:

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

Dorner's Limited Warranty applies.

Dorner 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

A WARNING

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

A DANGER



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

DANGER



DO NOT OPERATE CONVEYORS IN AN EXPLOSIVE ENVIRONMENT.

A WARNING



Exposed moving parts can cause severe injury.

LOCK OUT POWER before removing guards or performing maintenance.

WARNING



Gearmotors may be HOT.

DO NOT TOUCH Gearmotors.

A WARNING



Dorner cannot control the physical installation and application of conveyors. Taking protective measures is the responsibility of the user.

When conveyors are used in conjunction with other equipment or as part of a multiple conveyor system, CHECK FOR POTENTIAL PINCH POINTS and other mechanical hazards before system start-up.

A WARNING



Loosening stand height or angle adjustment screws may cause conveyor sections to drop down, causing severe injury.

SUPPORT CONVEYOR SECTIONS PRIOR TO LOOSENING STAND HEIGHT OR ANGLE ADJUSTMENT SCREWS.

Product Description

Refer to Figure 1 for typical conveyor components.

- A Conveyor
- B Drive End
- C Tension End
- D Belt
- E Hex Drive Shaft

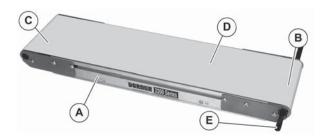
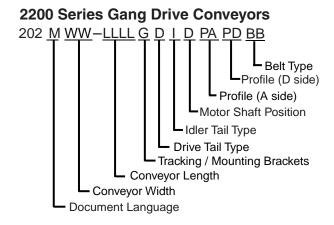


Figure 1

Specifications

Model:

2200 Series Gang Drive Conveyor



^{*} See Ordering and Specifications Catalog for details.

Specifications

Conveyor Width Reference (<u>WW</u>)	02	03	04	05	06	08	10	12	18	21***	24***
Conveyor Belt Width	1.75" (44mm)	2.75" (70mm)	3.75" (95mm)	5" (127mm)	6" (152mm)	8" (203mm)	10" (254mm)	12" (305mm)	18" (457mm)	21" (533mm)	24" (609mm)
Maximum Conveyor Load* (See NOTE Below)	30 lb (14kg)	35 lb (16kg)	42 lb (19kg)	50 lb (23kg)	60 lb (27kg)	70 lb (32kg)	80 lb (36kg)				
Conveyor Startup Torque*	2 in-lb (0.5Nm)	3 in-lb (0.6Nm)	4 in-lb (0.7Nm)	6 in-lb (0.8Nm)	8 in-lb (0.9Nm)	10 in-lb (1.1Nm)	12 in-lb (1.4Nm)	14 in-lb (1.5Nm)	15 in-lb (1.7Nm)	18 in-lb (2.0Nm)	20 in-lb (2.3Nm)
Belt Travel		4.0" (88 mm) per revolution of pulley									
Maximum Belt Speed*		264 ft/minute (80.5 m/minute)									
Belt Takeup				0.38" (10	mm) of stre	oke = 0.75"	(19 mm) c	of belt take-	up		

Conveyor Length Reference (<u>LL</u>)	02	03	04	05	06	07	08	09	10	11	12	13**	14**	15**	16**	17**	18**
Conveyor Length Up to 18 ft in any length to nearest 0.12" (3mm)	2-ft (610 mm)	3-ft (914 mm)	4-ft (1219 mm)	5-ft (1524 mm)	6-ft (1829 mm)	7-ft (2134 mm)	8-ft (2438 mm)	9-ft (2743 mm)	10-ft (3048 mm)	11-ft (3353 mm)	12-ft (3658 mm)	13-ft (3962 mm)**	14-ft (4267 mm)**	15-ft (4572 mm)**	16-ft (4877 mm)**	17-ft (5182 mm)**	18-ft (5486 mm)**

NOTE

Maximum conveyor loads based on:

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

- * See Ordering and Specifications Catalog for details.
- ** Lengths available only in 6" (152 mm) and wider conveyors.
- *** V-guide tracking belt not available on 21" (533 mm) or 24" (610 mm) wide gang drive conveyors.

Installation

Required Tools

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

Recommended Installation Sequence

- Install support stands (see accessory instructions)
- Assemble conveyor (if required)
- · Attach mounting brackets to conveyor
- · Attach conveyor to stands
- Install return rollers on conveyor (optional)
- Mount gearmotor mounting package (see accessory instructions)
- Attach guides/accessories (see page 19 through page 28 of "Service Parts" section 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 7 and "Return Rollers" on page 7.

Conveyors Longer Than 12 ft (3658 mm)

 Locate and arrange conveyor sections (Figure 2) by section labels.



Figure 2

NOTE

At tension end on both sides of conveyor, loosen and move cam tracking assemblies (I) (if equipped) away from head plates.

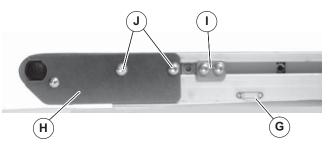


Figure 3

- 3. Loosen two screws (J) on both sides of conveyor and then push tail assembly (H) inward.
- 4. Roll out conveyor belt and place conveyor frame sections (Figure 4, item F) into belt loop.



Figure 4

 Join conveyor sections and install connector brackets (Figure 5, item K) or connector/mount brackets (KA) and screws (L) on both sides as indicated. Tighten screws to 60 in-lb (7 Nm).

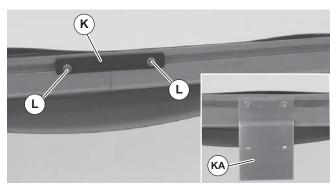


Figure 5

6. With a 5 mm hex-key wrench, rotate pinion gear (Figure 6, item M) to tension the conveyor belt. Tighten two screws (J) on both sides of conveyor to 80 in-lb (9 Nm). For proper tensioning, refer to "Conveyor Belt Tensioning" on page 10.

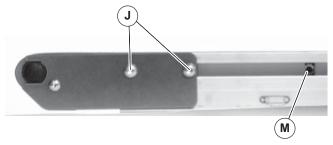


Figure 6

Installation

- 7. Install mounting brackets and return rollers. Refer to "Mounting Brackets" on page 7 and "Return Rollers" on page 7.
- 8. If equipped with cam tracking assemblies (Figure 3, item I), reposition and adjust belt tracking. Refer to "Conveyor Belt Tracking" on page 10.

Mounting Brackets

1. Locate mounting bracket assemblies. Exploded views are shown in Figure 7.

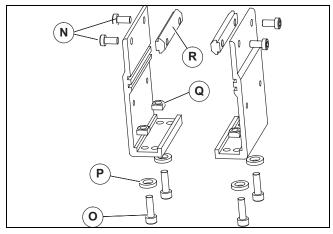


Figure 7

- 2. Remove screws (Figure 7, item N and O), washers (P), nuts (Q) and T-bars (R) from brackets.
- 3. Insert T-bars (Figure 7, item R) into conveyor side slots (Figure 8, item S). Fasten brackets (T) to conveyor and T-bars (R) with mounting screws (N).

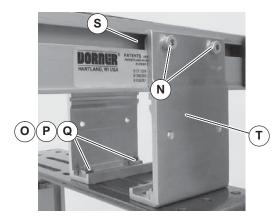


Figure 8

- 4. Fasten brackets to support stand with mounting screws (O), washers (P) and nuts (Q).
- 5. Tighten screws (N and O) to 60 in-lb (7 Nm).

Return Rollers

2" (51mm) through 6" (152mm) Wide Conveyors

1. Locate return roller assemblies. Exploded views are shown in Figure 9.

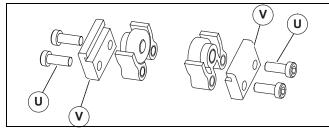


Figure 9

- Remove screws (Figure 9, item U) and clips (V) from roller assembly.
- 3. Install roller assemblies (Figure 10, item W) as shown. Tighten screws (U) to 60 in-lb (7 Nm).

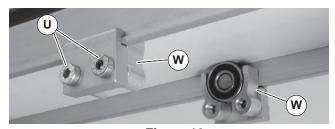


Figure 10

8" (203mm) through 24" (610mm) Wide Conveyors

1. Locate return roller(s). Exploded view is shown in Figure 11.

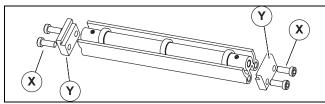


Figure 11

- 2. Remove screws (X) and clips (Y) from roller assembly.
- 3. Install roller assembly (Figure 12, item Z) as shown. On each side of conveyor, tighten screws (X) to 60 in-lb (7 Nm).



Figure 12

Required Tools

Standard Tools

- Hex-key wrenches: 2.5 mm, 4 mm, 5 mm
- · Arbor press

Special Tools

- 807-1078 Bearing Puller Tool
- 450292 Sealed Bearing Installation Tool
- 2500M Tool Kit for Gang Drive Bearings

Checklist

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

Lubrication

No lubrication is required. Replace bearings if worn.

Maintaining Conveyor Belt

Troubleshooting

Inspect conveyor belt for:

- · Surface cuts or wear
- Stalling or slipping
- · 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

IMPORTANT

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

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

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

Conveyor Belt Replacement

Belt Removal for Conveyor Without Stands or Gearmotor Mounting Package

NOTE

Tension end of conveyor is identified with a Description [Section 2] label (Figure 3, item G).

1. At tension end on both sides of conveyor, loosen belt tracking cam assemblies (Figure 13, item I) (if equipped) and slide them toward middle of conveyor.

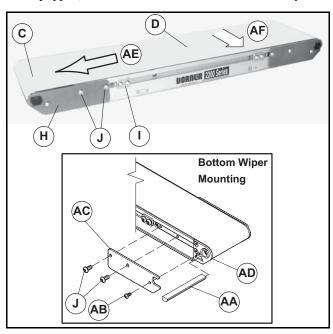


Figure 13

- 2. At tension end (C) on both sides of conveyor, loosen two tail cover plate screws (J).
- 3. Push tail assembly (H) into conveyor frame. This will loosen belt sufficiently for removal.
- 4. If installed, remove bottom wiper (AA) at discharge end of conveyor as follows: Remove three tail cover plate screws (J and AB) on one side of conveyor. Remove tail cover plate (AC) and slide out bottom wiper (AA) through hole in head plate (AD).
- 5. Slide old belt (D) sideways (AF) off of conveyor.

Belt Installation for Conveyor Without Stands or Gearmotor Mounting Package

1. Orient replacement belt so belt splice leading fingers (Figure 14, item AG) point in direction of belt travel (AE) and that outside fingers (AH) are positioned as shown.

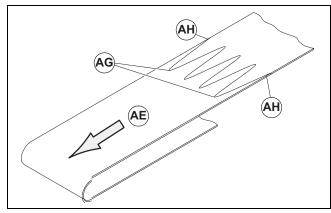


Figure 14

- 2. Slide new belt sideways onto conveyor frame assembly
- 3. If removed, slide bottom wiper (Figure 13, item AA) into slot in head plate (AD).
- 4. Install tail cover plate (AC) and three screws (J and AB) to secure bottom wiper at discharge end of conveyor. Securely tighten screws.
- 5. Refer to "Conveyor Belt Tensioning" on page 10, and set conveyor belt tension.
- 6. At tension end on both sides of conveyor, slide belt tracking cam assemblies (I) (if equipped) until tight against tail assembly (H).
- 7. Refer to "Conveyor Belt Tracking Adjustment" on page 10 to adjust belt tracking after start—up.

Conveyor Belt Tensioning

1. Locate tension end (Figure 15, item C) of conveyor, identified with a label (G).

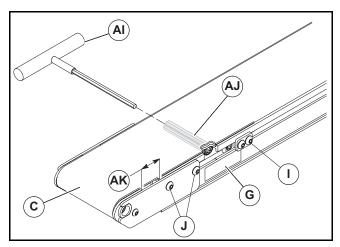


Figure 15

- 2. If equipped, loosen and slide belt tracking cam assemblies (I) towards center of conveyor on both sides of tension end (C).
- 3. Loosen tail cover plate screws (J) on both sides of tension end (C).
- 4. Insert a hex key wrench (AI) into either end of pinion (AJ).
- 5. Rotate pinion (AJ) to extend tensioning end until gap (AK) between pulley plate and conveyor frame measures 1.19" (30 mm) for a new belt or as required to stop belt slippage on drive pulley.

NOTE

Over-tensioning adds unnecessary loading to the pulley bearings.

- 6. While holding pinion (AJ) in tensioned position, tighten cover plate screws (J) on both sides of conveyor. Torque screws to 18 in/lb (2 Nm).
- Position belt tracking cam against the slide bar while making sure groove is correctly oriented. See Figure 16, below.

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 16, item I) for belt tracking adjustment.

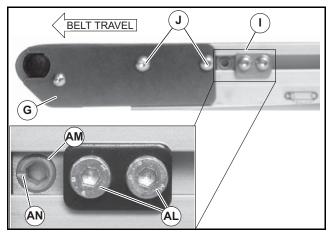


Figure 16

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

- 1. Ensure tail cover plate screws (Figure 16, item J) on both sides of conveyor are tight.
- On both sides of conveyor, loosen two cam fastening screws (AL). Adjust cams (AM) until indicator slots (AN) are horizontal and facing end of conveyor. Then slide cam assemblies against head plates (G) and retighten cam fastening screws (AL) to 60 in-lb (7 Nm).
- 3. On the side toward which the belt is tracking, loosen head plate fastening screws (J).
- 4. With conveyor running, use a 5 mm hex-key wrench to rotate tracking cam (AM) in small increments until belt tracks in center of conveyor. Then while holding cam in position, tighten head plate fastening screws (J) to 60 inlb (7 Nm).

Pulley Replacement

Pulley Removal

- 1. Remove conveyor belt. Refer to the "Conveyor Belt Replacement" topic beginning on page 9.
- 2. Remove tail cover plate screws (Figure 17, item J and AB) and tail cover plates (AC) on both sides of the conveyor.

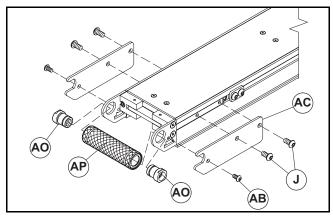


Figure 17

- 3. Remove the retaining sleeves (AO) and pulley (AP). If retaining sleeves are frozen, continue with the next step.
- 4. All non-driven positions have a plastic plug (Figure 18, item AQ) installed into ends of pulley retaining sleeves (AO). Use a small flat screwdriver to remove these plugs.

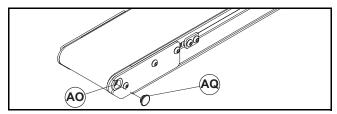


Figure 18

5. Position bearing anvil/sleeve removal tool (Figure 19, item AR), part number §25-09, over retaining sleeve (Figure 17, item AO) and (Figure 19, item AO).

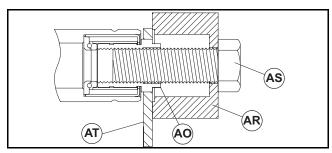


Figure 19

6. Insert special threaded bolt (Figure 19, item AS), part number §906-278, through bearing anvil/sleeve removal tool (AR) and thread into retaining sleeve (AO).

- 7. Tighten bolt (AS) until retaining sleeve (AO) is free of spindle tail plate (AT).
- 8. Remove retaining sleeve (AT) from the bolt (AS).
- 9. Repeat steps 5 through 8 for the other side.
- 10. Remove pulley (AR) from conveyor frame.
- §- Part of Tool Kit, Part Number 2500M.
- ¤ Shipped with conveyors wider than 12" (305 mm).

Pulley Installation

- 1. Insert pulley (Figure 17, item AP) between the spindle tail plates (AT).
- 2. Slide the retaining sleeves (AO) through openings in the spindle tail plates and into the pulley on each side.
- 3. Install the plastic plug (Figure 18, item AQ) into the ends of the pulley retaining sleeves (AO).
- 4. Secure the tail cover plates (Figure 17, item AC) to the conveyor with screws (J and AB).
- 5. Install conveyor belt. Refer to the "Belt Installation (No Stands or Gearmotor Mounting Package)" topic beginning on page 9.

Pulley Bearing Replacement

Bearings in the pulleys on the 2" (44 mm) wide conveyor cannot be replaced. If the bearings are worn, the entire pulley must be replaced. Refer to Spindle chart on page 7 for the correct part number for your conveyor.

Bearings in pulleys on the 3" (70 mm) and wider conveyors can be removed with Dorner Bearing Removal Tool (Figure 20, item AU), part number §25-05.

§- Part of Tool Kit, Part Number 2500M.

Bearing Removal

Use procedure below to remove pulley bearings:

NOTE

To ensure bearing removal tool (Figure 20, item AU) will fit into bearing, make sure that the flair (AV) on bearing removal tool is completely closed.

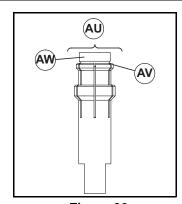


Figure 20

 Using hex key wrench extension tool (Figure 21, item AX), either part number §25-08 or ¤25-08A, loosen tapered screw (Figure 20, item AW) on bearing removal tool (AU) to compress flair (AV) until flair is completely closed.

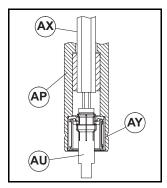


Figure 21

- 2. Insert bearing removal tool (Figure 21, item AU) into pulley (AP) through bearing (AY).
- While holding hex key wrench extension tool (Figure 22, item AX), rotate bearing removal tool using flats (AZ) to tighten bearing removal tool's tapered screw (AW) until flair (AV) of tool is completely spread open inside bearing (AY).

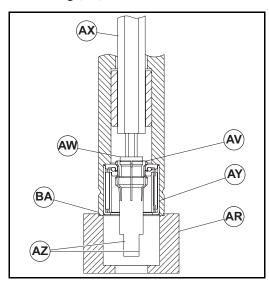


Figure 22

Support pulley end (BA) with bearing anvil/sleeve removal tool (Figure 19, item AR) and (Figure 22, item AR), part number §25-09. Using an arbor press, push bearing (AY) out of the pulley into bearing anvil/sleeve removal tool (AR).

IMPORTANT

Heavy tapping or hammering will damage the hex key wrench extension tool (AX) and/or bearing (AY).

- §- Part of Tool Kit, Part Number 2500M.
- x Shipped with conveyors wider than 12" (305 mm).

Bearing Installation

Use the following procedure to install pulley bearings (Figure 23, item AY).

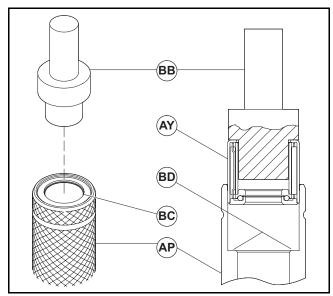


Figure 23

- Support pulley (AP) in an upright position with "V" blocks or other means. Support bottom end of pulley using bearing anvil/sleeve removal tool (Figure 22, item AR).
- 2. Install bearing insertion tool (Figure 23, item BB), part number §25-10 in an arbor press.
- 3. Align bearing insertion tool (BB) with pulley bore (BC).
- 4. Slide bearing (AY) onto bearing insertion tool.

NOTE

Keep bearings (AY) and pulley (AP) aligned when installing. Misalignment tilts bearing and may result in bearing damage.

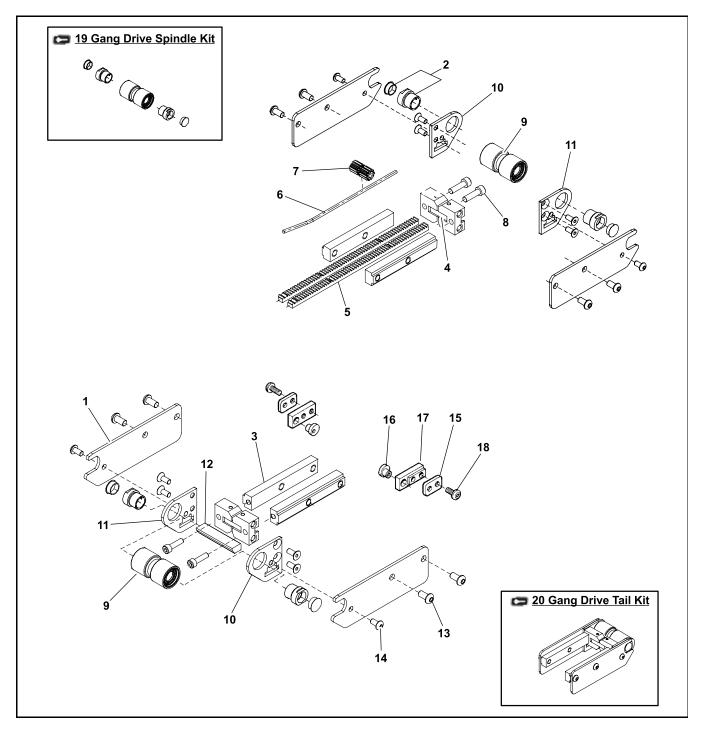
- 5. Press bearing (AY) firmly and slowly into pulley (AP) until it bottoms out on pulley shoulder (BD). If bearing fits too loosely in the pulley bore (BC) or if the bore is out of round, the pulley must be replaced.
- §- Part of Tool Kit, Part Number 2500M.

Notes

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.

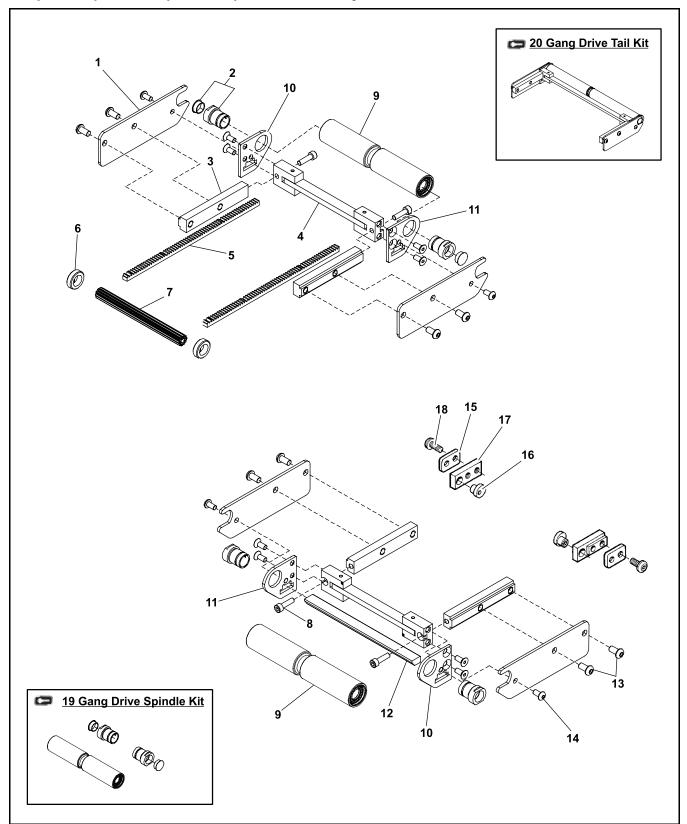
2" (51mm) Wide Conveyor Ends



Item	Part Number	Description
1	200030M	Cover Plate
2	22GDSK2	2" Bearing Sleeve Kit (x2)
3	241128	Head Plate Bar
4	201337-02	Articulating Bar Assembly
5	240420	Rack Gear 14.5 PA x 24 P
6	240422	Pinion Pin
7	240423	Pinion 2" (51mm)
8	920518M	Socket Head Screw M5 x 18mm
9	454702	Spindle w/Bearings 2" (51mm)
10	200027M	Tail Plate, RH
11	200028M	Tail Plate, LH
12	203502	Bottom Wiper

Item	Part Number	Description
13	910612M	Button Head Screw M6 x 12mm
14	910510M	Button Head Screw M5 x 10mm
15	200038	Cam Clamping Plate
16	200039P	Belt Tracking Cam
17	200341M	Cam Retaining Block
18	920692M	Socket Low Head Cap Screw M6 x 12mm
19	22GD-02	Gang Drive Spindle Kit (Includes Items 2 and 9)
20	22GDTA-02	Gang Drive Tail Kit (Includes Items 1 through 4, 8 through 11, and 13) A Position
	22GDTD-02	Gang Drive Tail Kit (Includes Items 1 through 4, 8 through 11, and 13) D Position

3" (76mm) to 24" (610mm) Wide Conveyor Ends

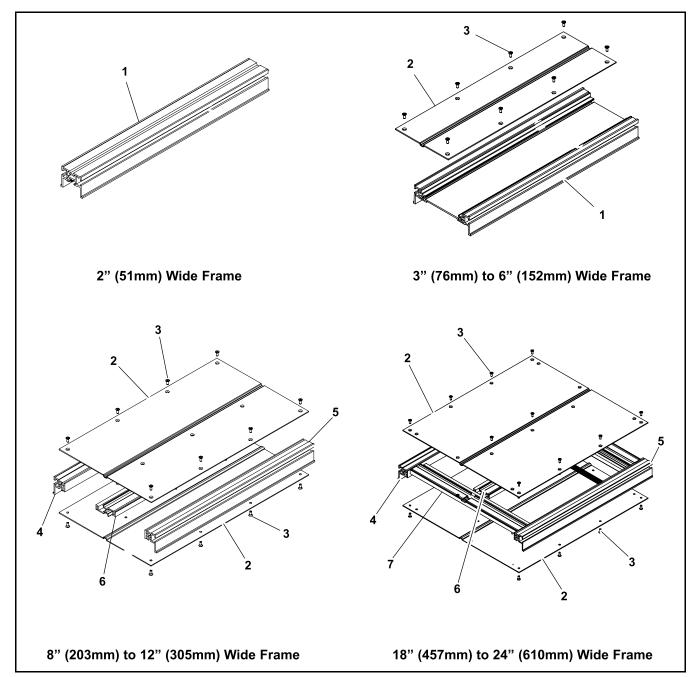


Item	Part Number	Description
1	200030M	Cover Plate
2	22GDSK	Bearing Sleeve Kit (x2)
3	241128	Head Plate Bar
4	201337- <u>WW</u>	Articulating Bar Assembly
5	240420	Rack Gear 14.5 PA x 24 P
6	240421	Pinion Bushing [3" (76mm) through 6" (152mm) Wide Conveyors Only]
7	2030 <u>WW</u> M	Pinion
8	920518M	Socket Head Cap Screw M5 x 18mm
9	See Spindle	Spindle Assembly
	chart	
10	200027M	Tail Plate, RH
11	200028M	Tail Plate, LH
12	2035 <u>WW</u>	Bottom Wiper
13	910612M	Button Head Screw M6 x 12mm
14	910510M	Button Head Screw M5 x 10mm
15	200038	Cam Clamping Plate
16	200039P	Belt Tracking Cam
17	200341M	Cam Retaining Block
18	920692M	Socket Low Head Cap Screw M6 x 12mm
19	22GD- <u>WW</u>	Gang Drive Spindle Kit (Includes Items 2 and 12)
20	22GDT- <u>WW</u>	Gang Drive Tail Kit (Includes Items 1 through 6, 10 through 13, 15 and 16)

<u>WW</u> = Conveyor width reference: 03, 04, 05, 06, 08, 10, 12, 18, 21,	1
24	
* = 6" (152mm) and wider conveyors, only	

Item 12: Spindle							
Spindle Width	Spindle assembly with bearings	Spindle without bearings	Bearings (2x)				
3" (76mm)	454703	454503	41–33				
4" (102mm)	454704	454504	41–33				
5" (127mm)	454705	454505	41–33				
6" (152mm)	454706	454506	41–33				
8" (203mm)	454708	454508	41–33				
10" (254mm)	454710	454510	41–33				
12" (305mm)	454712	454512	41–33				
18" (457mm)	454718	454518	41–33				
21" (533mm)	204821	204721	41–33				
24" (610mm)	204824	204724	41–33				

Conveyor Frames

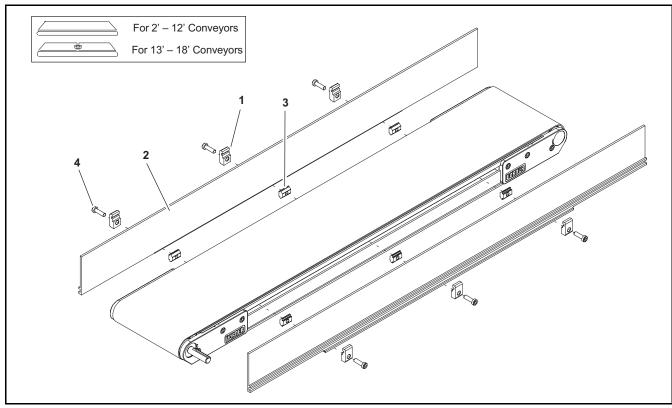


Item	Part Number	Description
1	2404 <u>WW</u> - <u>LLLLL</u>	Frame
2	2405 <u>WW</u> - <u>LLLLL</u>	Bed Plate
3	807-1074	Flat Head Torx Screw M4 x 10mm
4	240412- <u>LLLLL</u>	Side Rail LH
5	240413- <u>LLLLL</u>	Side Rail RH
6	240414- <u>LLLLL</u>	Center Rail 8" (203mm) to 12" (305mm)
7	240417	Center Rail Cross Support 18" (457mm)
	240419	Center Rail Cross Support 21" (533mm)
	240418	Center Rail Cross Support 24" (610mm)

<u>WW</u> = Conveyor Width reference: 03, 04, 05, 06, 08, 10, 12, 18, 21, 24

Item	Part Number	Description				
LLLLL	<u>LLLLL</u> = Part length in inches with 2 decimal places					
Exam	Example: Part Length = 55.08" <u>LLLLL</u> = 05508					

-04 3" (76mm) Aluminum Side

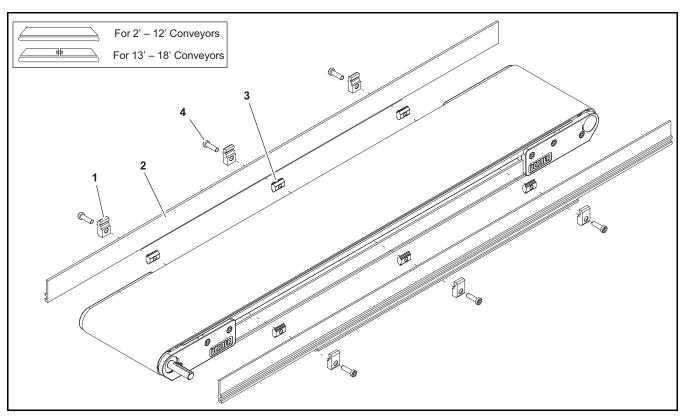


Item	Part Number	Description
1	200121	Guide Retaining Clip
2	See Chart Below	2200 Guide 3" (76mm) HS
3	639971M	Single Drop-in Tee Bar
4	920694M	Socket Head Screw M6 x 20mm

	Item 2: 2200 (Guide 3" (76mm) H	S
Length		End Guide	End Guide
2' (610mm)	Left Hand	280403-02400	N/A
	Right Hand	280403-02400	N/A
3' (914mm)	Left Hand	280403-03600	N/A
	Right Hand	280403-03600	N/A
4' (1219mm)	Left Hand	280403-04800	N/A
	Right Hand	280403-04800	N/A
5' (1524mm)	Left Hand	280403-06000	N/A
	Right Hand	280403-06000	N/A
6' (1829mm)	Left Hand	280403-07200	N/A
	Right Hand	280403-07200	N/A
7' (2134mm)	Left Hand	280403-08400	N/A
	Right Hand	280403-08400	N/A
8' (2438mm)	Left Hand	280403-09600	N/A
	Right Hand	280403-09600	N/A
9' (2743mm)	Left Hand	280403-10800	N/A
	Right Hand	280403-10800	N/A
10' (3048mm)	Left Hand	280403-12000	N/A
	Right Hand	280403-12000	N/A
11' (3353mm)	Left Hand	280403-13200	N/A
	Right Hand	280403-13200	N/A
12' (3658mm)	Left Hand	280403-14400	N/A
	Right Hand	280403-14400	N/A

Item 2: 2200 Guide 3" (76mm) HS			
Length		End Guide	End Guide
13' (3962mm)	Left Hand	280401-07500	280401-08100
	Right Hand	280402-07500	280402-08100
14' (4267mm)	Left Hand	280401-07500	280401-09300
	Right Hand	280402-07500	280402-09300
15' (4572mm)	Left Hand	280401-07500	280401-10500
	Right Hand	280402-07500	280402-10500
16' (4877mm)	Left Hand	280401-07500	280401-11700
	Right Hand	280402-07500	280402-11700
17' (5182mm)	Left Hand	280401-07500	280401-12900
	Right Hand	280402-07500	280402-12900
18' (5486mm)	Left Hand	280401-07500	280401-14100
	Right Hand	280402-07500	280402-14100

-05 1.5" (38mm) Aluminum Side

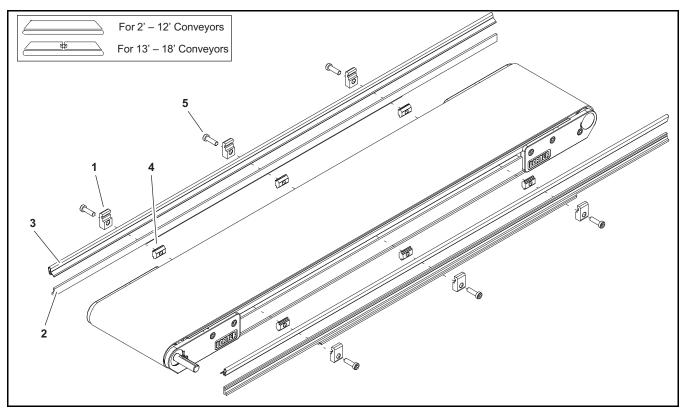


Item	Part Number	Description
1	200121	Guide Retaining Clip
2	See Chart Below	2200 Guide .5" (13mm) HS
3	639971MK10	Single Drop-in Tee Bar (x10)
4	920694M	Socket Head Screw M6 x 20mm

Item 2: 2200 Guide .5" (13mm) HS				
Length		End Guide	End Guide	
2' (610mm)	Left Hand	280503-02400	N/A	
	Right Hand	280503-02400	N/A	
3' (914mm)	Left Hand	280503-03600	N/A	
	Right Hand	280503-03600	N/A	
4' (1219mm)	Left Hand	280503-04800	N/A	
	Right Hand	280503-04800	N/A	
5' (1524mm)	Left Hand	280503-06000	N/A	
	Right Hand	280503-06000	N/A	
6' (1829mm)	Left Hand	280503-07200	N/A	
	Right Hand	280503-07200	N/A	
7' (2134mm)	Left Hand	280503-08400	N/A	
	Right Hand	280503-08400	N/A	
8' (2438mm)	Left Hand	280503-09600	N/A	
	Right Hand	280503-09600	N/A	
9' (2743mm)	Left Hand	280503-10800	N/A	
	Right Hand	280503-10800	N/A	
10' (3048mm)	Left Hand	280503-12000	N/A	
	Right Hand	280503-12000	N/A	
11' (3353mm)	Left Hand	280503-13200	N/A	
	Right Hand	280503-13200	N/A	

Item 2: 2200 Guide .5" (13mm) HS			
Length		End Guide	End Guide
12' (3658mm)	Left Hand	280503-14400	N/A
	Right Hand	280503-14400	N/A
13' (3962mm)	Left Hand	280501-07500	280501-08100
	Right Hand	280502-07500	280502-08100
14' (4267mm)	Left Hand	280501-07500	280501-09300
	Right Hand	280502-07500	280502-09300
15' (4572mm)	Left Hand	280501-07500	280501-10500
	Right Hand	280502-07500	280502-10500
16' (4877mm)	Left Hand	280501-07500	280501-11700
	Right Hand	280502-07500	280502-11700
17' (5182mm)	Left Hand	280501-07500	280501-12900
	Right Hand	280502-07500	280502-12900
18' (5486mm)	Left Hand	280501-07500	280501-14100
	Right Hand	280502-07500	280502-14100

-07 Low to Side Wiper

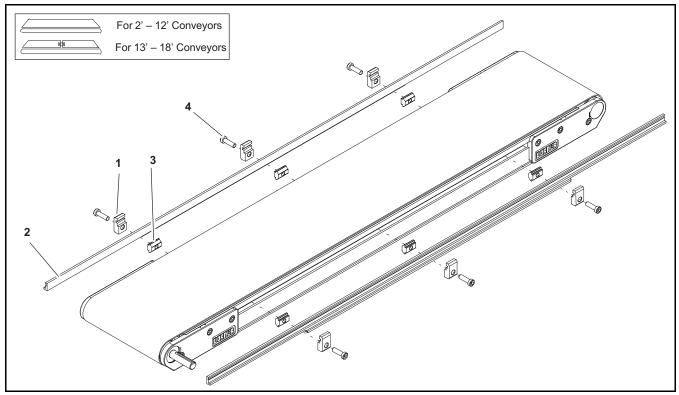


Item	Part Number	Description	
1	200121	Guide Retaining Clip	
2	See Chart Below	2200 Guide .5" (13mm) HS	
3	41-00-24	Side Wiper Nylatron (per foot)	
4	639971MK10	Single Drop-in Tee Bar (x10)	
5	920694M	Socket Head Screw M6 x 20mm	

Item 2: 2200 Guide .5" (13mm) HS				
Length		End Guide	End Guide	
2' (610mm)	Left Hand	280903-02400	N/A	
	Right Hand	280903-02400	N/A	
3' (914mm)	Left Hand	280903-03600	N/A	
	Right Hand	280903-03600	N/A	
4' (1219mm)	Left Hand	280903-04800	N/A	
	Right Hand	280903-04800	N/A	
5' (1524mm)	Left Hand	280903-06000	N/A	
	Right Hand	280903-06000	N/A	
6' (1829mm)	Left Hand	280903-07200	N/A	
	Right Hand	280903-07200	N/A	
7' (2134mm)	Left Hand	280903-08400	N/A	
	Right Hand	280903-08400	N/A	
8' (2438mm)	Left Hand	280903-09600	N/A	
	Right Hand	280903-09600	N/A	
9' (2743mm)	Left Hand	280903-10800	N/A	
	Right Hand	280903-10800	N/A	
10' (3048mm)	Left Hand	280903-12000	N/A	
	Right Hand	280903-12000	N/A	
11' (3353mm)	Left Hand	280903-13200	N/A	
	Right Hand	280903-13200	N/A	

Item 2: 2200 Guide .5" (13mm) HS			
Length		End Guide	End Guide
12' (3658mm)	Left Hand	280903-14400	N/A
	Right Hand	280903-14400	N/A
13' (3962mm)	Left Hand	280901-07500	280901-08100
	Right Hand	280902-07500	280902-08100
14' (4267mm)	Left Hand	280901-07500	280901-09300
	Right Hand	280902-07500	280902-09300
15' (4572mm)	Left Hand	280901-07500	280901-10500
	Right Hand	280902-07500	280902-10500
16' (4877mm)	Left Hand	280901-07500	280901-11700
	Right Hand	280902-07500	280902-11700
17' (5182mm)	Left Hand	280901-07500	280901-12900
	Right Hand	280902-07500	280902-12900
18' (5486mm)	Left Hand	280901-07500	280901-14100
	Right Hand	280902-07500	280902-14100

-09 Low to High Side

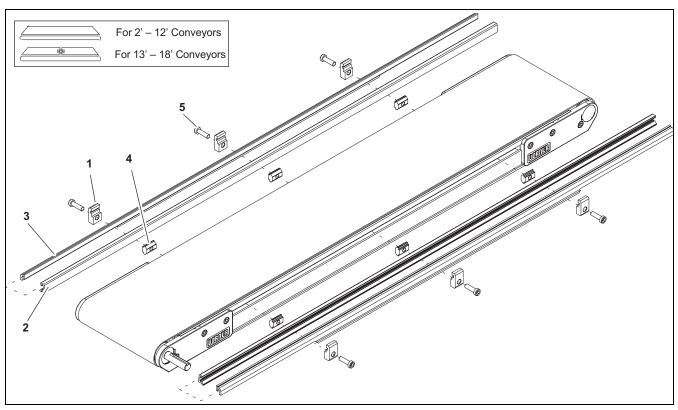


Item	Part Number	Description
1	200121	Guide Retaining Clip
2	See Chart Below	2200 Guide .5" (13mm) HS
3	639971MK10	Single Drop-in Tee Bar (x10)
4	920694M	Socket Head Screw M6 x 20mm

Item 2: 2200 Guide .5" (13mm) HS			
Length		End Guide	End Guide
2' (610mm)	Left Hand	280903-02400	N/A
	Right Hand	280903-02400	N/A
3' (914mm)	Left Hand	280903-03600	N/A
	Right Hand	280903-03600	N/A
4' (1219mm)	Left Hand	280903-04800	N/A
	Right Hand	280903-04800	N/A
5' (1524mm)	Left Hand	280903-06000	N/A
	Right Hand	280903-06000	N/A
6' (1829mm)	Left Hand	280903-07200	N/A
	Right Hand	280903-07200	N/A
7' (2134mm)	Left Hand	280903-08400	N/A
	Right Hand	280903-08400	N/A
8' (2438mm)	Left Hand	280903-09600	N/A
	Right Hand	280903-09600	N/A
9' (2743mm)	Left Hand	280903-10800	N/A
	Right Hand	280903-10800	N/A
10' (3048mm)	Left Hand	280903-12000	N/A
	Right Hand	280903-12000	N/A
11' (3353mm)	Left Hand	280903-13200	N/A
	Right Hand	280903-13200	N/A
12' (3658mm)	Left Hand	280903-14400	N/A
	Right Hand	280903-14400	N/A

Item 2: 2200 Guide .5" (13mm) HS			
Length		End Guide	End Guide
13' (3962mm)	Left Hand	280901-07500	280901-08100
	Right Hand	280902-07500	280902-08100
14' (4267mm)	Left Hand	280901-07500	280901-09300
	Right Hand	280902-07500	280902-09300
15' (4572mm)	Left Hand	280901-07500	280901-10500
	Right Hand	280902-07500	280902-10500
16' (4877mm)	Left Hand	280901-07500	280901-11700
	Right Hand	280902-07500	280902-11700
17' (5182mm)	Left Hand	280901-07500	280901-12900
	Right Hand	280902-07500	280902-12900
18' (5486mm)	Left Hand	280901-07500	280901-14100
	Right Hand	280902-07500	280902-14100

-10 .5" (13mm) Extruded Plastic

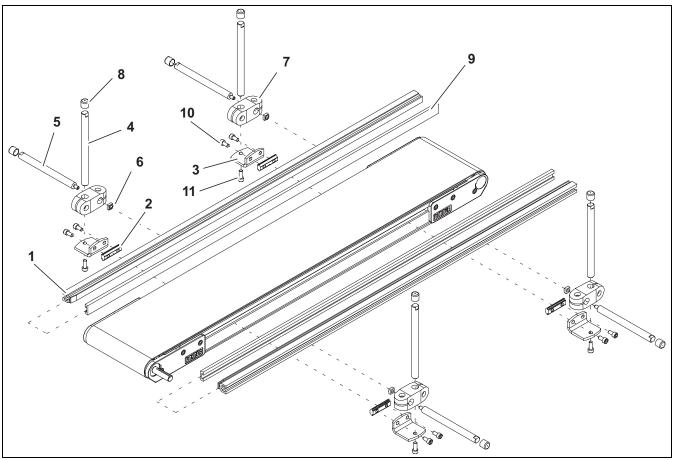


Item	Part Number	Description	
1	200121	Guide Retaining Clip	
2	200054P	Snap-On Guide (per foot)	
3	See Chart Below	2200 Guide	
4	639971MK10	Single Drop-in Tee Bar (x10)	
5	920694M	Socket Head Screw M6 x 20mm	

Item 3: 2200 Guide				
Length		End Guide	End Guide	
2' (610mm)	Left Hand	281003-02400	N/A	
	Right Hand	281003-02400	N/A	
3' (914mm)	Left Hand	281003-03600	N/A	
	Right Hand	281003-03600	N/A	
4' (1219mm)	Left Hand	281003-04800	N/A	
	Right Hand	281003-04800	N/A	
5' (1524mm)	Left Hand	281003-06000	N/A	
	Right Hand	281003-06000	N/A	
6' (1829mm)	Left Hand	281003-07200	N/A	
	Right Hand	281003-07200	N/A	
7' (2134mm)	Left Hand	281003-08400	N/A	
	Right Hand	281003-08400	N/A	
8' (2438mm)	Left Hand	281003-09600	N/A	
	Right Hand	281003-09600	N/A	
9' (2743mm)	Left Hand	281003-10800	N/A	
	Right Hand	281003-10800	N/A	
10' (3048mm)	Left Hand	281003-12000	N/A	
	Right Hand	281003-12000	N/A	
11' (3353mm)	Left Hand	281003-13200	N/A	
	Right Hand	281003-13200	N/A	

Item 3: 2200 Guide			
Length		End Guide	End Guide
12' (3658mm)	Left Hand	281003-14400	N/A
	Right Hand	281003-14400	N/A
13' (3962mm)	Left Hand	281001-07500	281001-08100
	Right Hand	281002-07500	281002-08100
14' (4267mm)	Left Hand	281001-07500	281001-09300
	Right Hand	281002-07500	281002-09300
15' (4572mm)	Left Hand	281001-07500	281001-10500
	Right Hand	281002-07500	281002-10500
16' (4877mm)	Left Hand	281001-07500	281001-11700
	Right Hand	281002-07500	281002-11700
17' (5182mm)	Left Hand	281001-07500	281001-12900
	Right Hand	281002-07500	281002-12900
18' (5486mm)	Left Hand	281001-07500	281001-14100
	Right Hand	281002-07500	281002-14100

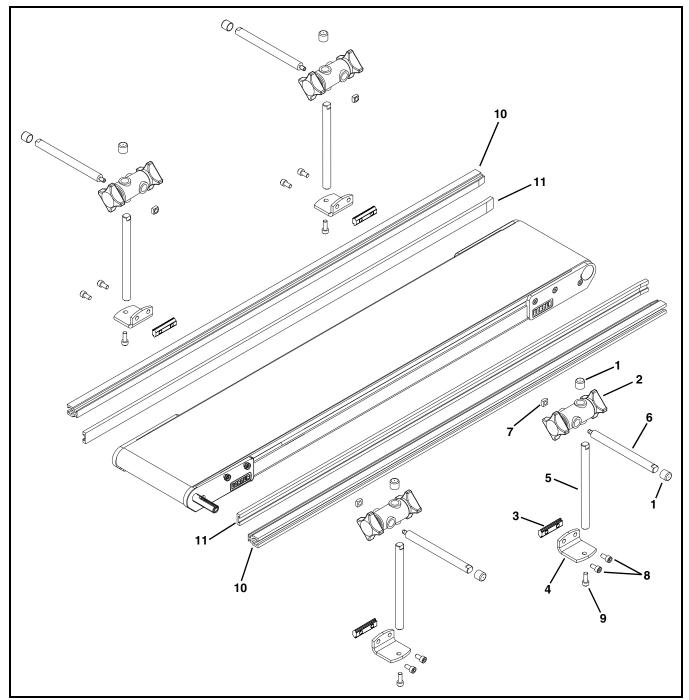
-13 Adjustable Guiding



Item	Part Number	Description
1	202983	Aluminum Profile Guide 2' (610mm)
	202984	Aluminum Profile Guide 3' (914mm)
	202985	Aluminum Profile Guide 4' (1219mm)
	202986	Aluminum Profile Guide 5' (1524mm)
	202987	Aluminum Profile Guide 6' (1829mm)
	202988	Aluminum Profile Guide 7' (2134mm)
	202989	Aluminum Profile Guide 8' (2438mm)
	202990	Aluminum Profile Guide 9' (2743mm)
	202991	Aluminum Profile Guide 10' (3048mm)
	202992	Aluminum Profile Guide 11' (3353mm)
	202993	Aluminum Profile Guide 12' (3658mm)
	202994	Aluminum Profile Guide 13' (3962mm)

Item	Part Number	Description
2	200830M	Drop-In Tee Bar
3	202004	Mounting Bracket
4	202027M	Guide Mounting Shaft Vertical
5	202028M	Guide Mounting Shaft Horizontal
6	674175MP	Square Nut
7	807–652	Cross Block
8	807–948	Vinyl Shaft Cap
9	614068P	Flat Extruded Guide (per foot)
10	920612M	Socket Head Screw M6 x 12mm
11	920616M	Socket Head Screw M6 x 16mm

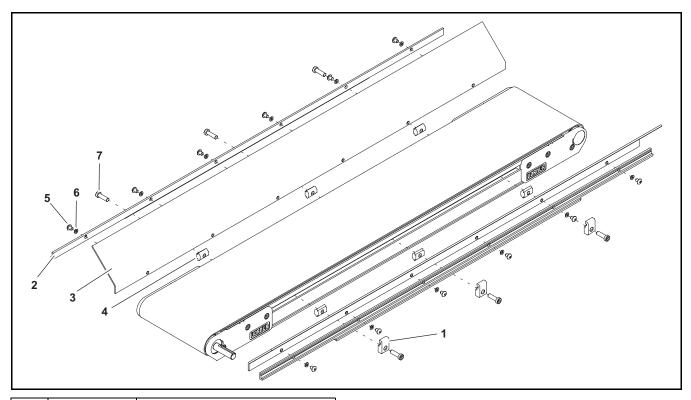
-14 Tool-Less Adjustable Guiding



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

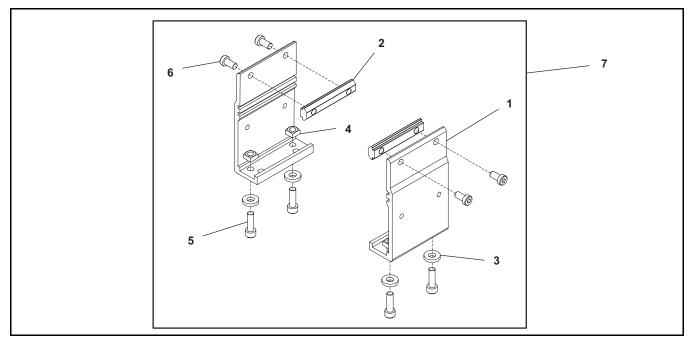
Item	Part Number	Description	
7	674175MP	Square Nut, M6-1.00	
8	920612M	Socket Head Screw, M6-1.00 x 12 mm (2200 Series)	
	807-1937	Self-Drilling Hex Head Screw, 1/4-20x1" (2300 Series)	
9	920616M	Socket Head Screw, M6-1.00 x 16 mm	
10	460063- <u>LLLLL</u>	Aluminum Profile Guide	
11	614068P- <u>LLLLL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

Flared Side Guiding



Item	Part Number	Description
1	200121	Guide Retaining Clip
2	202212	Side-Flare Mounting Guide 2' (610mm)
	202213	Side-Flare Mounting Guide 3' (914mm)
	202214	Side–Flare Mounting Guide 4' (1219mm)
	202215	Side—Flare Mounting Guide 5' (1524mm)
	202216	Side-Flare Mounting Guide 6' (1829mm)
3	202522M	Flared Guide 45° 2' (610mm)
	202523M	Flared Guide 45° 3' (914mm)
	202523M	Flared Guide 45° 4' (1219mm)
	202523M	Flared Guide 45° 5' (1524mm)
	202523M	Flared Guide 45° 6' (1829mm)
4	639971M	Drop-In Tee Bar
5	910506M	Button Head Screw M5 x 6mm
6	911–512	Washer
7	920694M	Cap Low-Head Screw M6 x 20mm

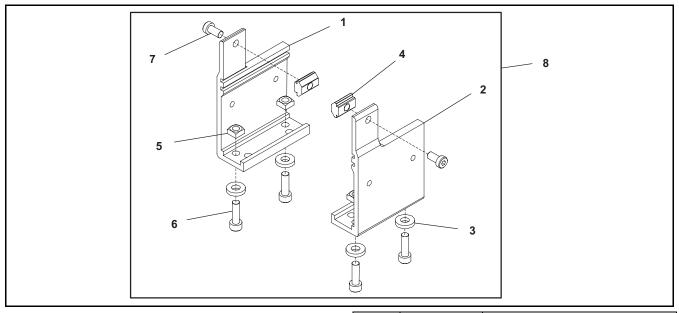
Flat Belt Stand Mount Assembly



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

Item	Part Number	Description
5	920620M	Socket Head Screw M6 x 20mm
6	920692M	Socket Low Head Screw M6x12mm
7	240839	Flat Belt Stand Mount Assembly

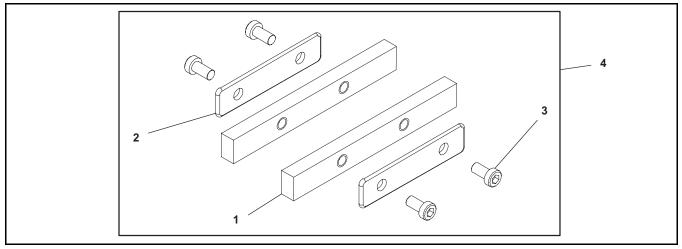
Flat Belt Stand Mount Assembly for 2' (610mm) Conveyors



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

Item	Part Number	Description
5	807–920	Square Nut M6
6	920620M	Socket Head Screw M6 x 20mm
7	920692M	Socket Low Head Screw M6x12mm
8	240847	Flat Belt Stand Mount Assembly for 2' (610mm) Conveyors

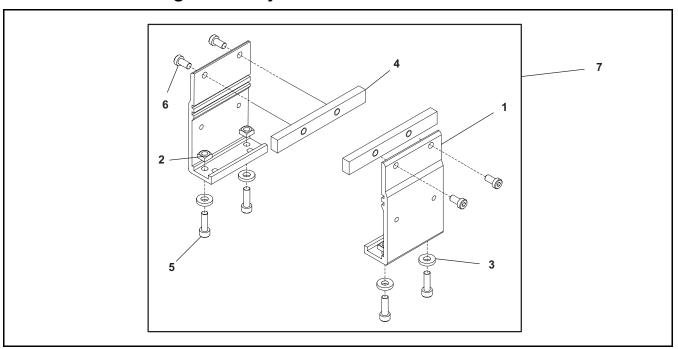
Connecting Assembly without Stand Mount



Item	Part Number	Description
1	240858	Frame Connector Bar
2	240859	Frame Connector Plate

Item	Part Number	Description
3	920692M	Socket Low Head Screw M6x12mm
4	240861	Connecting Assembly without
		Stand Mounts

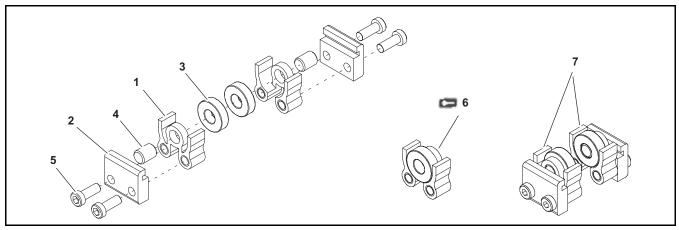
Flat Belt Connecting Assembly with Stand Mount



Item	Part Number	Description
1	240831	Stand Mount
2	807–920	Square Nut M6 5mm x 10mm
3	605279P	Washer
4	240858	Frame Connector Bar

Item	Part Number	Description
5	920620M	Socket Head Screw M6 x 20mm
6	920693M	Socket Low Head Screw M6 x 16mm
7	240860	Flat Belt Connecting Assembly with Stand Mounts

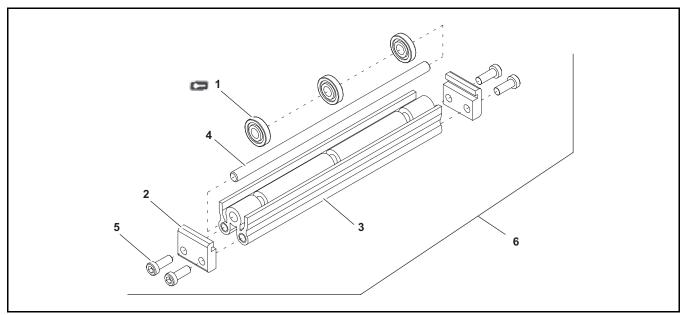
2" (51mm) to 6" (152mm) Flat Belt Return Roller



Item	Part Number	Description
1	240825	Return Roller Guard – Short
2	240827	Return Roller Clip
3	802-027	Bearing
4	913–100	Dowel Pin
5	920693M	Socket Low Head Screw M6 x
		16mm

Item	Part Number	Description
6	240840	Roller Assembly (Includes Items 1, 3 and 4)
7	240830	2" (51mm) to 6" (152mm) Flat Belt Return Roller Assy

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



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

Item	Part Number	Description
5	920693M	Socket Low Head Screw M6 x 16mm
6	2408 <u>WW</u>	8" (203mm) to 24" (610mm) Flat Belt Return Roller Assembly
<u>WW</u> = Conveyor width ref.: 02, 03, 04, 05, 06, 08, 10, 12, 18, 21, 24		

Conveyor Belt Part Number Configuration

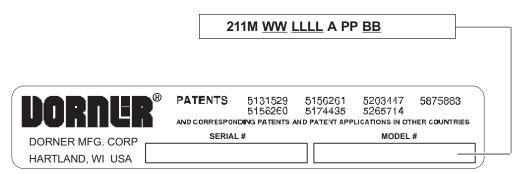
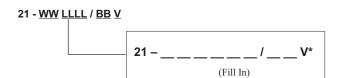


Figure 24

Belt Part Number Configuration

Refer to Dorner patent plate (Figure 24). 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.



Notes

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.

Conveyors and conveyor accessories

Standard catalog conveyors

MPB, 7200, 7300 Series, cleated and specialty belt
AquaGard & AquaPruf Series conveyors
Engineered to order products
Drives and accessories
Sanitary stand supports

30%
non-returnable items
30%
non-returnable items

Parts

Standard stock parts 30% Plastic chain, cleated and specialty belts non-returnable items

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

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

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

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



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