2200 Series
iDrive Conveyors

Installation, Maintenance & Parts Manual

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851-686 Rev. A

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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.

⚠ DANGER

SEVERE HAZARD!

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

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.

⚠ 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

Refer to Figure 1 for typical components.

1	Conveyor
2	Support Stand
3	Drive End
4	Idler/Tension End

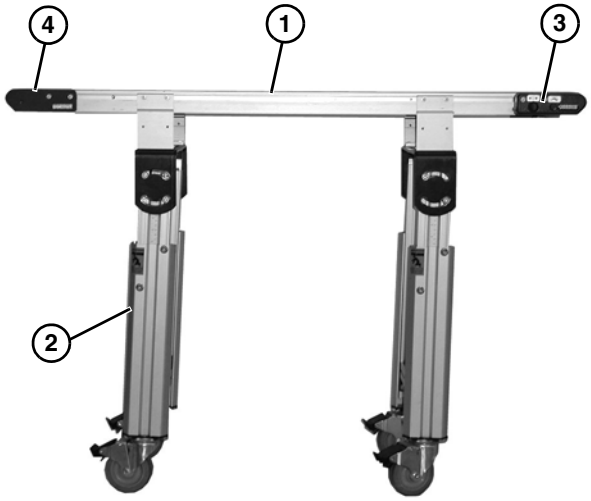


Figure 1

Specifications

Models

Flat Belt 2200 Series Conveyor

2 1 0 M WW LLLL A PP BB–FDMPH

- **In frame iDrive Type**
- **Belt Type***
- **Conveyor Profile***
- **Output Shaft Position***
- **Conveyor Length Reference**
- **Conveyor Width Reference**
- **Document Language, M = English**
- **Pulley Type:**
  0 = Standard 1.25" (32mm) Dia.
  1 = Gang Drive 1" (25mm) Dia.
- **1 = with belt tracking cams and mounting brackets**
  2 = with V-guide tracking and mounting brackets
  4 = with V–guide tracking and no mounting brackets
  5 = with belt tracking cams and no mounting brackets

Cleated Belt 2200 Series Conveyor

2 4 C M WW LLLL A SSSS–FDMPH

- **In frame iDrive Type**
- **Cleat Spacing***
- **Output Shaft Position***
- **Conveyor Length Reference**
- **Conveyor Width Reference**
- **Document Language, M = English**
- **Cleat Type***
- **0 = with V-guide tracking and no mounting brackets**
  4 = with V-guide tracking and mounting brackets
  5 = with belt tracking cams and mounting brackets
  9 = with belt tracking cams and no mounting brackets

* See Ordering and Specifications Catalog for details.

Conveyor Supports:

Maximum Distances

1 = 18" (457 mm)

2 = 18" (457 mm)

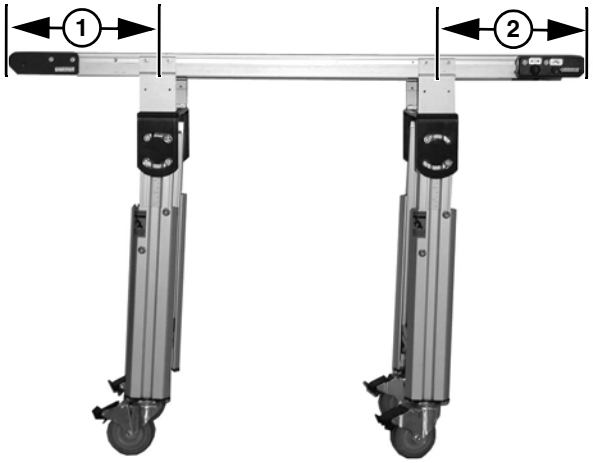


Figure 2

Specifications

Conveyor Width Reference (WW)	03	04	05	06	08	10	12	18
Conveyor Belt Width	2.75¨ (70mm)	3.75¨ (95mm)	5¨ (127mm)	6¨ (152mm)	8¨ (203mm)	10¨ (254mm)	12¨ (305mm)	18¨ (457mm)
Maximum Conveyor Load	See Load Capacity Chart							
Belt Travel	4.0¨ (88 mm) per revolution of spindle							
Maximum Belt Speed*	100 ft/minute (30.5 m/minute)							
Belt Takeup	0.38¨ (10 mm) of stroke = 0.75¨ (19 mm) of belt take-up							

Conveyor Length Reference (LLLL)	0200 - 1200 in 0001 increments
Conveyor Length	2 ft (610 mm) to 12 ft (3658 mm) in 0.12” (0.31 mm) increments

* See Ordering and Specifications Catalog for details.

NOTE

Maximum conveyor loads based on:

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

Motor Specifications

Output Power	50 watt
Motor Voltage	24 volt DC, 5 amp
Transformer Voltage	100-240 VAC, 50/60 Hz
Gearmotor Ratio	23:1
Motor Type	Brushless DC
Belt Speeds	7-70 Ft./Min., Low Speed, 10-100 Ft./Min. High Speed

iDrive Load Capacity

WIDTH		LOW SPEED (07 - 70 FPM) FOR 09 BELT TYPE										
		LENGTH										
		2	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
	3	3	30	30	30	30	30	30	30	29	29	29
	4	4	28	28	28	28	28	28	28	27	27	27
	5	5	28	28	28	28	28	28	28	27	27	27
	6	6	27	27	27	27	27	27	27	26	26	26
	8	8	26	26	26	26	25	25	25	25	24	24
	10	10	23	23	23	22	22	22	21	21	21	20
	12	12	21	21	20	20	20	19	19	18	18	18
	18	18	16	15	15	14	13	13	12	12	11	11

WIDTH		HIGH SPEED (10 - 100 FPM) FOR 09 BELT TYPE										
		LENGTH										
		2	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
	3	17	17	17	17	17	17	17	16	16	16	16
	4	15	15	15	15	15	15	15	15	14	14	14
	5	15	15	15	15	14	14	14	14	14	14	13
	6	14	14	14	14	14	14	13	13	13	13	13
	8	13	13	13	13	12	12	12	12	11	11	11
	10	10	10	10	9	9	9	8	8	8	7	7

Specifications

WIDTH	LOW SPEED (07 - 70 FPM) FOR DOUBLE CARCASS (TYPE 05) BELTS										
	LENGTH										
	2	3	4	5	6	7	8	9	10	11	12
3	26	26	26	26	26	26	26	25	25	25	25
4	24	24	24	24	24	24	24	24	23	23	23
5	24	24	24	23	23	23	23	23	23	23	23
6	23	23	23	23	23	23	22	22	22	22	22
8	22	22	22	22	21	21	21	21	21	21	20
10	19	19	19	18	18	18	18	18	17	17	17
12	17	17	16	16	16	16	15	15	15	15	14
18	11	11	11	10	10	10	9	9	8	8	8

WIDTH	HIGH SPEED (10 - 100 FPM) FOR DOUBLE CARCASS (TYPE 05) BELTS										
	LENGTH										
	2	3	4	5	6	7	8	9	10	11	12
3	13	13	13	13	13	13	13	12	12	12	12
4	11	11	11	11	11	11	11	11	10	10	10
5	11	11	11	10	10	10	10	10	10	10	10
6	10	10	10	10	10	10	10	9	9	9	9
8	9	9	9	9	9	8	8	8	8	8	8
10	6	6	6	5	5	5	5	5	4	4	4

WIDTH	*LOW SPEED (07 - 70 FPM) FOR SINGLE PLY (TYPE 19 AND 53) BELTS										
	LENGTH										
	2	3	4	5	6	7	8	9	10	11	12
3	36	36	36	36	36	36	36	36	36	36	36
4	34	34	34	34	34	34	34	34	34	34	34
5	34	34	34	34	34	34	34	34	34	34	34
6	34	33	33	33	33	33	33	33	33	33	33
8	32	32	32	32	32	32	32	32	32	32	32
10	29	29	29	29	29	29	29	28	28	28	28
12	27	27	27	27	27	26	26	26	26	26	26
18	22	22	21	21	21	21	21	20	20	20	20

*Load capacity reduced by 50% when used with Nose Bar tail.

WIDTH	HIGH SPEED (10 - 100 FPM) FOR SINGLE PLY (TYPE 19 AND 53) BELTS										
	LENGTH										
	2	3	4	5	6	7	8	9	10	11	12
3	23	23	23	23	23	23	23	23	23	23	23
4	21	21	21	21	21	21	21	21	21	21	21
5	21	21	21	21	21	21	21	21	21	21	21
6	20	20	20	20	20	20	20	20	20	20	20
8	19	19	19	19	19	19	19	19	19	19	19
10	16	16	16	16	16	16	16	16	15	15	15

WIDTH	LOW SPEED (07 - 70 FPM) FOR ALL OTHER BELTS										
	LENGTH										
	2	3	4	5	6	7	8	9	10	11	12
3	23	23	23	23	23	22	22	22	22	22	22
4	21	21	21	21	21	21	20	20	20	20	20
5	21	21	20	20	20	20	20	20	20	19	19
6	20	20	20	20	19	19	19	19	19	19	18
8	19	19	19	18	18	18	18	18	17	17	17
10	16	16	15	15	15	14	14	14	14	13	13
12	14	13	13	13	12	12	12	11	11	11	10
18	8	8	7	7	6	6	5	5	4	4	3

NOTE

Conveyor MUST be mounted straight, flat and level within confines of conveyor. Use a level ***(Figure 3, item 1)*** *for setup.*

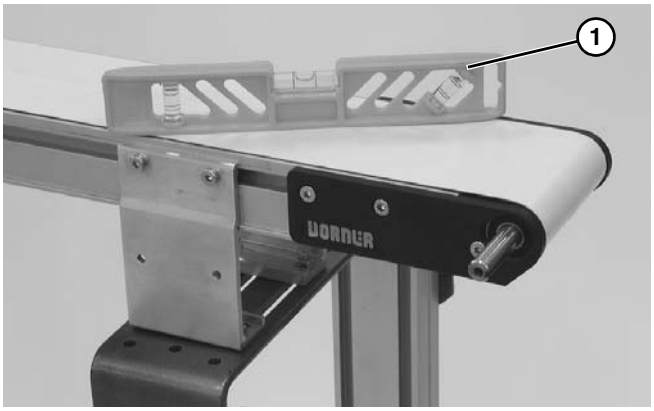


Figure 3

Installation Component List

Conveyor frame (two sections if longer than 12ft)
Conveyor brackets (4x)
Return rollers (for longer conveyors)

Required Tools

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

Recommended Installation Sequence

- Attach mounting brackets to conveyor
- Attach conveyor to stands
- Install return rollers on conveyor (optional)
- Attach guides/accessories (see page 22 through page 42 of "Service Parts" section for details)
- Remove and discard shipping brackets **(Figure 4, item 1)**.

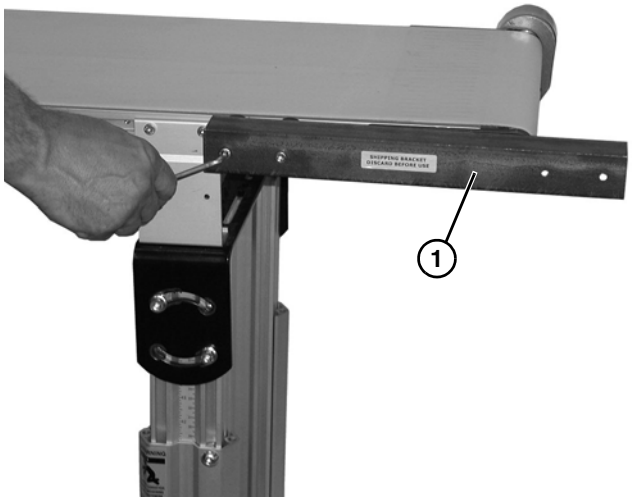


Figure 4

Installation

Mounting Brackets

1. Locate brackets. Exploded views shown in Figure 5 and Figure 6.

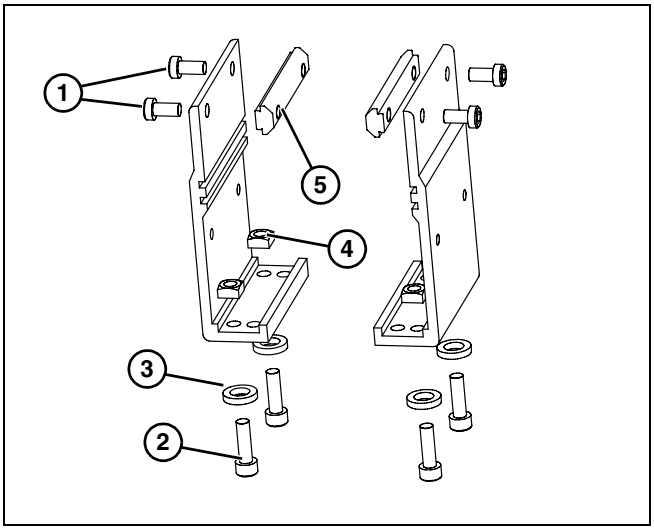


Figure 5

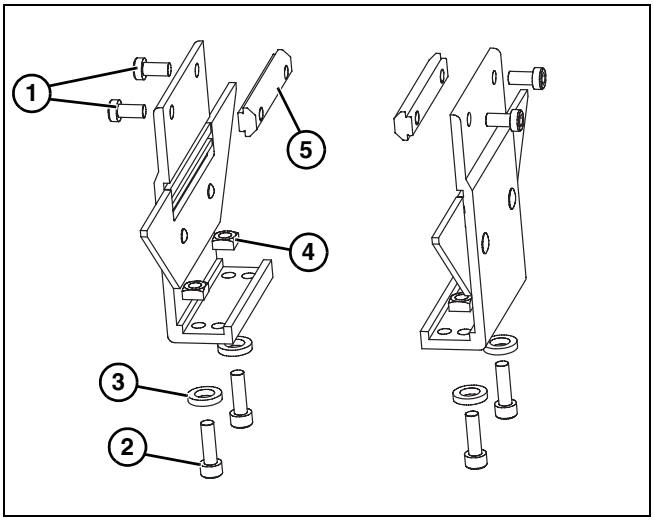


Figure 6

2. Remove screws **(Figure 5, item 1 and 2)** and **(Figure 6, item 1 and 2)** washers **(Item 3)**, nuts **(Item 4)** and T-bars **(Item 5)** from brackets.
3. Insert T-bars **(Figure 5, item 5)** and **(Figure 6, item 5)** into conveyor side slots **(Figure 7, item 1)**. Fasten brackets **(Figure 7, item 2)** to conveyor with mounting screws **(Figure 7, item 3)**.

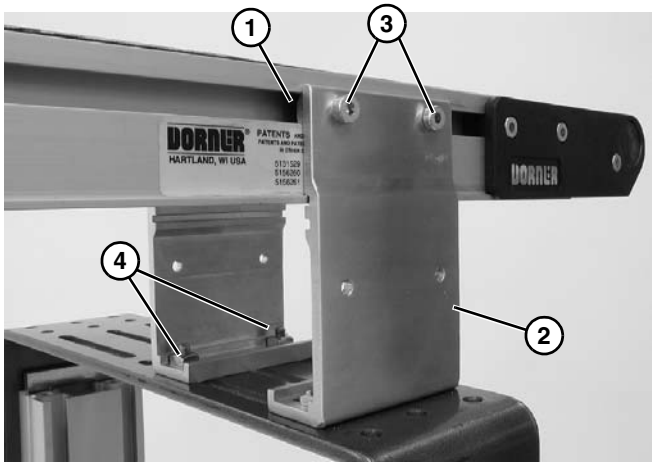


Figure 7

NOTE

Mounting brackets for flat belt conveyors shown.

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

Return Rollers

Cleated Belt and 3 - 6¨ (70 - 152 mm) Wide Flat Belt Conveyors

1. Locate return rollers. Exploded views shown in Figure 8 and Figure 9.

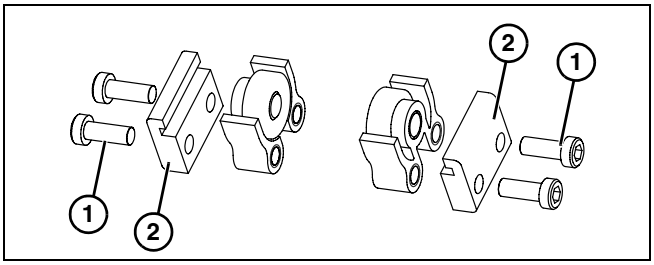


Figure 8

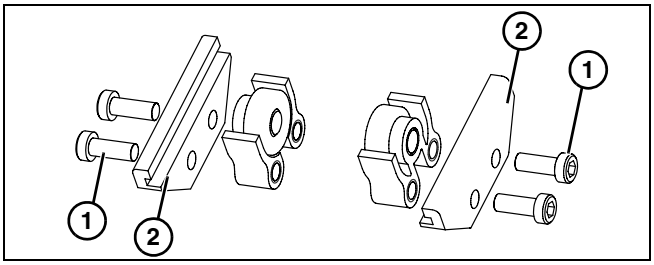


Figure 9

2. Remove screws **(Figure 8, item 1)** and **(Figure 9, item 1)** and clips **(Item 2)** from roller assembly.
3. Install roller assemblies **(Figure 10, item 1)** as shown. Tighten screws **(Figure 10, item 2)** to 60 in-lb (7 Nm).

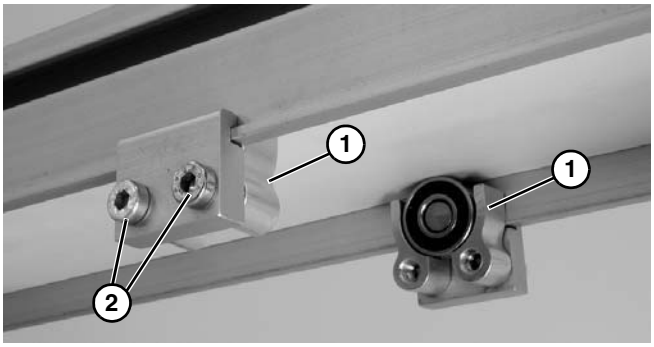


Figure 10

8 - 18¨ (203 - 457 mm) Wide Flat Belt Conveyors

1. Locate return rollers. Exploded view shown in Figure 11.

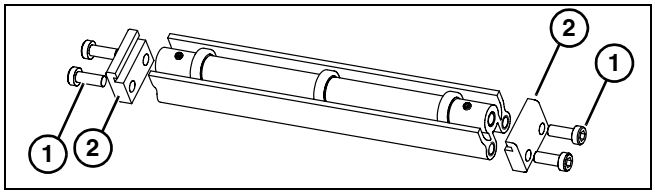


Figure 11

2. Remove screws **(Figure 11, item 1)** and clips **(Figure 11, item 2)** from roller assembly.
3. Install roller assembly as shown **(Figure 12, item 1)**. Tighten screws **(Figure 12, item 1)** to 60 in-lb (7 Nm).

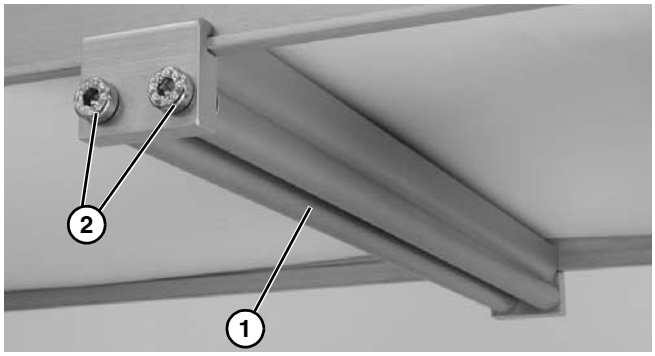


Figure 12

Wiring

Customer Wired Control

Wiring Designations **(Figure 13)**

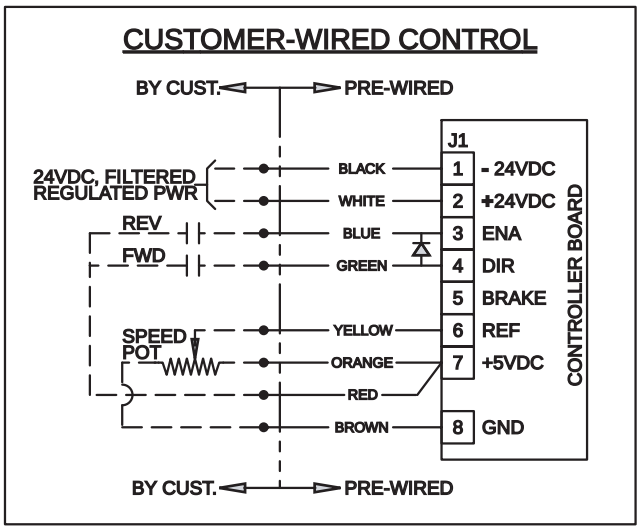


Figure 13

Refer to Maxon Motor Operating Instructions manual 343253 for wiring details.

Preventive Maintenance and Adjustment

Required Tools

Standard Tools

- Hex-key wrenches:
  2.5 mm, 4 mm, 5 mm, 5/64 in.
- Arbor press
- T20 Torque Wrench

Special Tools

- 807–1078 Bearing Puller Tool (or equivalent)
- 450292 Bearing Installation Tool
- 456070 Bearing Removal Tool

Checklist

- Keep service parts on hand (see "Service Parts" section for recommendations)
- Keep supply of belt cleaner (part # 625619)
- Clean entire conveyor and knurled spindle 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 spindle
- Intermittent jamming or drive train problems

Damage to V-guide indicates:

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

NOTE

Visit www.dorner.com for complete list of troubleshooting solutions.

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

⚠ WARNING

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

Conveyor Belt Replacement Sequence

- Remove old conveyor belt
- Install new conveyor belt
- Tension conveyor belt

Belt Removal

1. Place temporary support stands **(Figure 14, item 1)** at both ends of the conveyor.

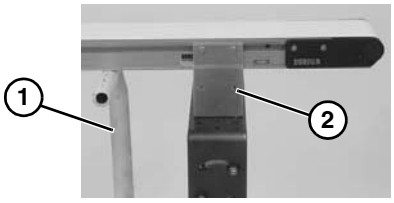


Figure 14

2. Remove mounting brackets **(Figure 14, item 2)** from one side of conveyor. (Reverse steps 3 & 4 of "Mounting Brackets" section beginning on page 8.).

3. If equipped, remove bottom wipers **(Figure 15, item 1)**: Remove fastening screws **(Figure 15, item 2)** then remove wiper **(Figure 15, item 1)**.

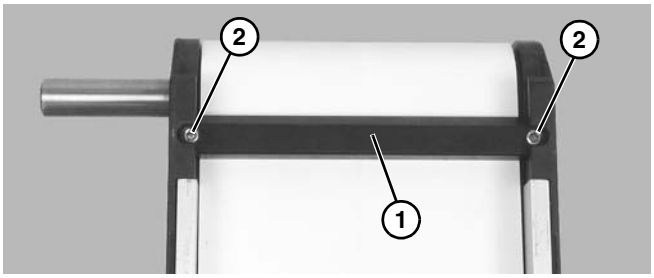
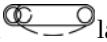


Figure 15

4. On tension end of the conveyor, identified with a  label **(Figure 16, item 1)**, push in head plate assembly **(Figure 16, item 2)**: On both sides of conveyor, loosen and move cam tracking assemblies **(Figure 16, item 3)** (if equipped) away from head plates, then loosen fastening screws **(Figure 16, item 4)** and push head plate assembly inward.

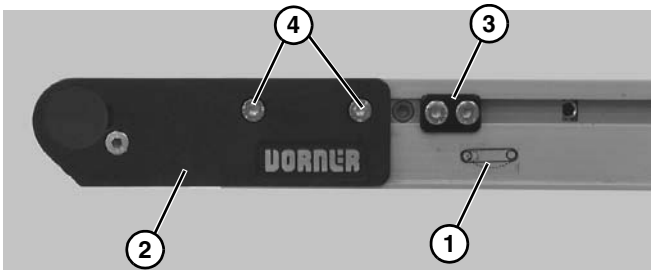


Figure 16

5. Remove belt **(Figure 17, item 1)** from conveyor.

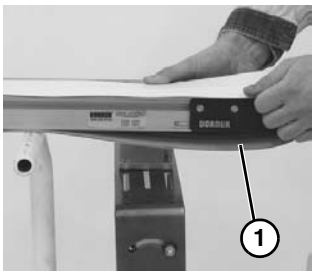


Figure 17

Belt Installation

1. Ensure temporary support stands **(Figure 14, item 1)** are placed at both ends of the conveyor.
2. Orient belt so splice leading fingers **(Figure 18, item 1)** point in the direction of belt travel as identified by the conveyor directional label **(Figure 18, item 2)**.

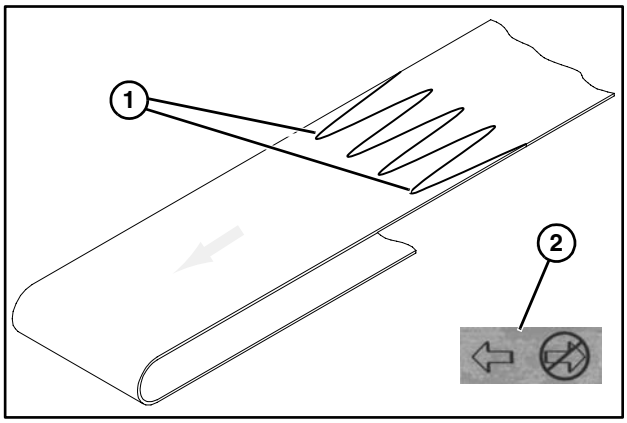


Figure 18

3. Install belt **(Figure 19, item 1)** on conveyor. Lift conveyor slightly to avoid pinching belt on temporary support stands.

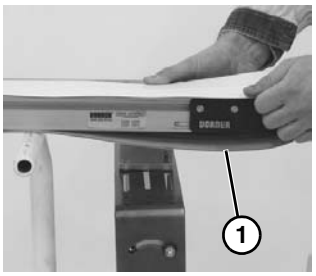


Figure 19

4. Re-install conveyor mounting brackets. Refer “Mounting Brackets” beginning on page 8, steps 3 through 5.
5. Tension belt. Refer to “Conveyor Belt Tensioning” on page 12
6. If equipped, re-install wipers, 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 20, item 1)**, adjust head plate assembly **(Figure 20, item 2)**: On both sides of conveyor, loosen fastening screws **(Figure 20, item 3)** and rotate pinion gear **(Figure 20, item 4)** to adjust head plate assembly.

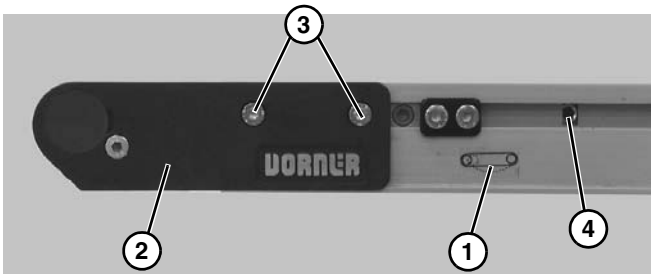


Figure 20

2. Adjust head plate assembly so end of conveyor frame aligns with or between the head plate tensioning marks **(Figure 21, item 1 and 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 21

NOTE

Tension belt with minimum tension to keep belt from slipping. On pinion gear, do not exceed a torque of 15 in-lb (1.6 Nm). Over tensioning the conveyor belt could cause reduced load capacity, excessive pulley bearing load, and early failure.

3. After adjusting proper tensioning, tighten fastening screws **(Figure 22, item 1)** on both sides of conveyor to 60 in-lb (7 Nm).

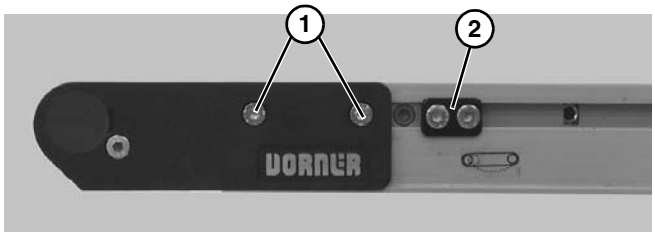


Figure 22

4. If equipped with cam tracking assemblies **(Figure 22, item 2)**, position against head plates and adjust belt tracking. Refer to “Conveyor Belt Tracking” on page 13.

Conveyors with Nose Bar Idlers

1. On tension end of the conveyor, identified with a label **(Figure 23, item 1)**, adjust head plate assembly **(Figure 23, item 2)**: On both sides of conveyor, loosen fastening screws **(Figure 23, item 3)** and rotate pinion gear **(Figure 23, item 4)** to adjust head plate assembly.

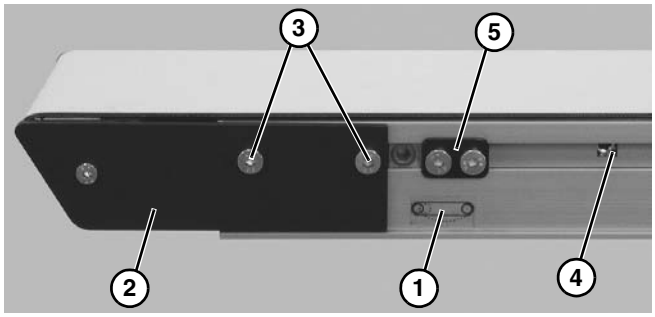


Figure 23

2. Adjust head plate assembly so the edge of the axle support plate **(Figure 24, item 1)** is separated from the end of the conveyor **(Figure 24, item 2)** by 1.125¨ (29 mm) **(Figure 24, item 3)**. Replace belt if proper tensioning can not be obtained within a distance of 1.50¨ (38 mm). See NOTE.

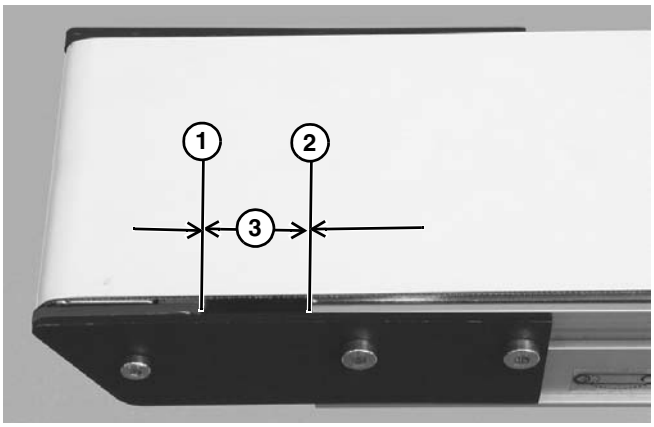


Figure 24

NOTE

Tension belt with minimum tension to keep belt from slipping. On pinion gear, do not exceed a torque of 15 in-lb (1.6 Nm). Over tensioning the conveyor belt could cause reduced load capacity, excessive pulley bearing load, and early failure.

3. After adjusting proper tensioning, tighten fastening screws **(Figure 23, item 3)** on both sides of conveyor to 60 in-lb (7 Nm).
4. If equipped with cam tracking assemblies **(Figure 23, item 5)** position against head plates and adjust belt tracking. Refer to “Conveyor Belt Tracking”, next section.

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 25, item 1)** for belt tracking adjustment.

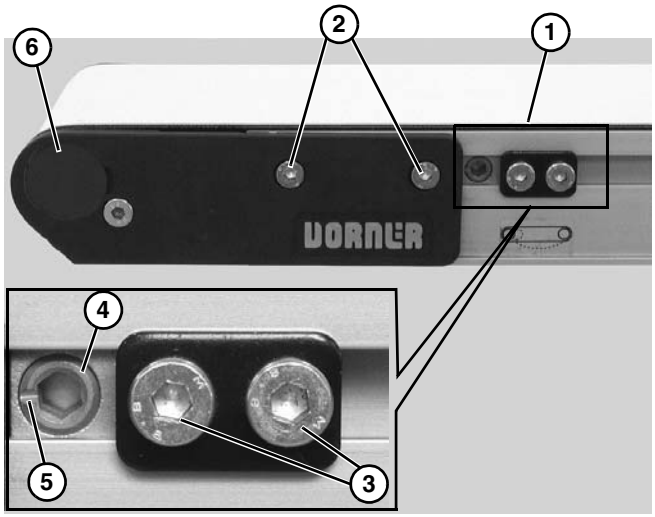


Figure 25

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

1. Ensure head plate fastening screws **(Figure 25, item 2)** on both sides of conveyor are tightened.
2. On both sides of conveyor, loosen two (2) cam fastening screws **(Figure 25, item 3)**. Adjust cams **(Figure 25, item 4)** until indicator slots **(Figure 25, item 5)** are horizontal and facing end of conveyor. Then slide cam assemblies against head plates **(Figure 25, item 6)** and re-tighten cam fastening screws **(Figure 25, item 3)** to 60 in-lb (7 Nm).
3. On the side toward which the belt is tracking, loosen head plate fastening screws **(Figure 25, item 2)**.
4. With the conveyor running, use a 5 mm hex-key wrench to rotate the tracking cam **(Figure 25, 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 25, item 2)** with a 4 mm hex-key wrench to 60 in-lb (7 Nm).

Spindle Removal

⚠ WARNING

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

- A – Idler Spindle Removal
- B – Drive Spindle Removal

A – Idler Spindle Removal

NOTE

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

1. On one side of the conveyor, loosen two (2) head plate fastening screws **(Figure 26, item 1)** and remove them.

Figure 26

2. Remove the head plate **(Figure 27, item 1)** from the conveyor frame.

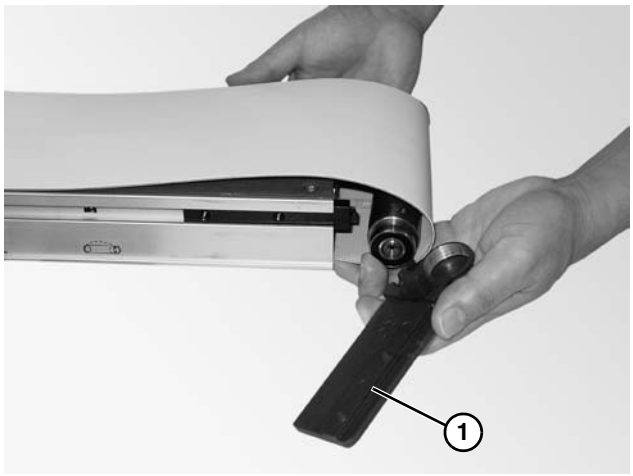


Figure 27

3. Spindle will slide out of opposite head plate and drop into slack of belt **(Figure 28)**.

Figure 28

4. Slide spindle out of the belt loop.

B – Drive Spindle Removal

NOTE

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

1. Remove belt. (See “Belt Removal” on page 10.)
2. Remove inframe drive side cover **(Figure 29, item 1)** by removing two head plate fastening screws **(Figure 29, item 2)**.

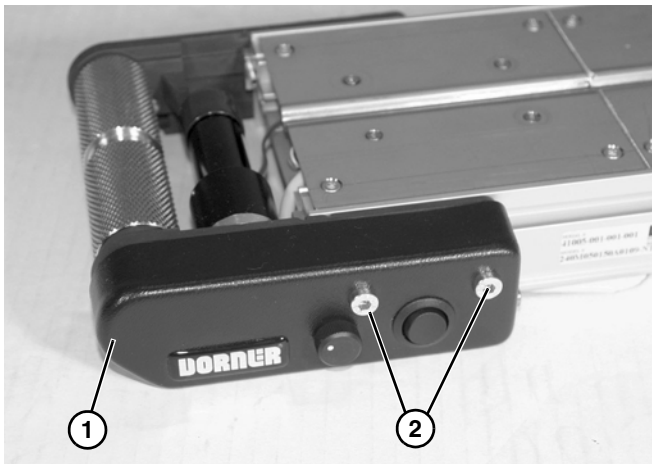


Figure 29

3. Loosen four clamp plate screws **(Figure 30, item 1)**.

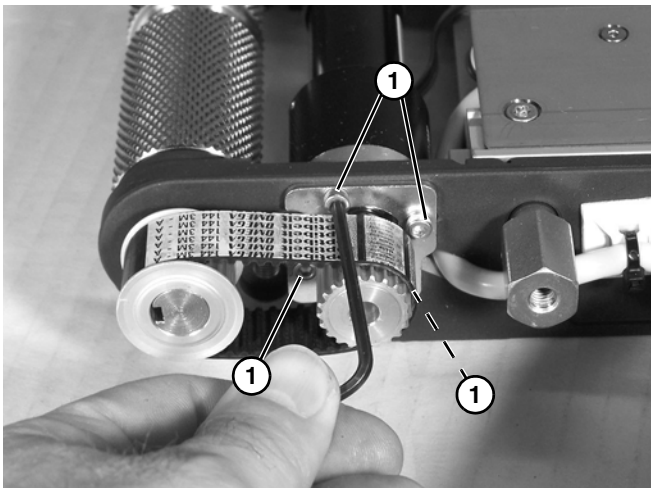


Figure 30

4. Loosen timing belt tension cam **(Figure 31, item 1)**.

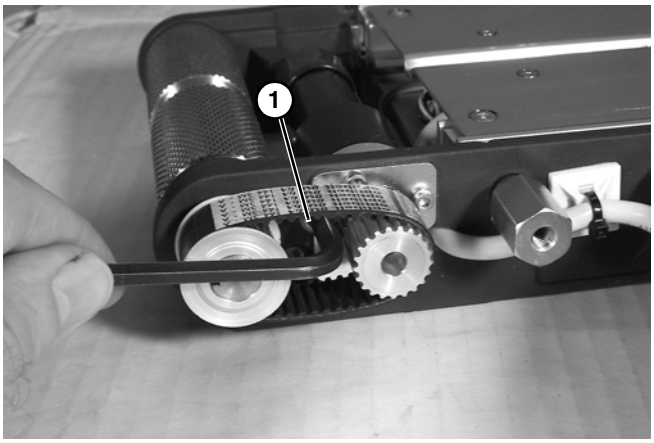


Figure 31

5. Loosen two set screws **(Figure 32, item 1)** on drive pulley **(Figure 32, item 2)**. Slide drive pulley outward off of the gearmotor shaft, and remove timing belt **(Figure 32, item 3)**.

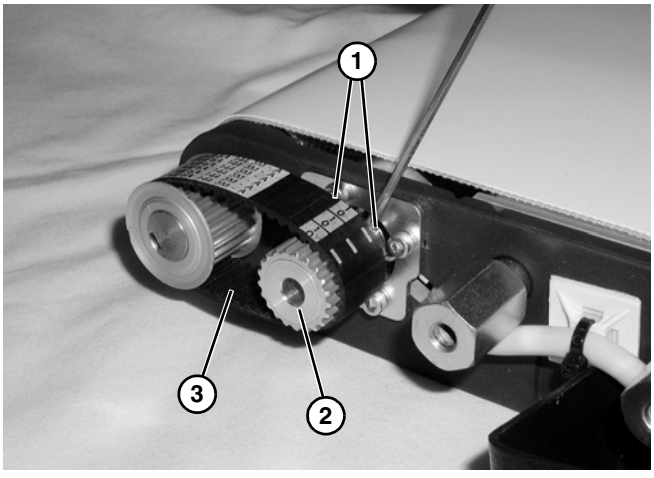


Figure 32

⚠ WARNING

Drive shaft keyway may be sharp. HANDLE WITH CARE.

6. Loosen two set screws **(Figure 33, item 1)** on driven pulley **(Figure 33, item 2)**, and slide off of shaft to remove.

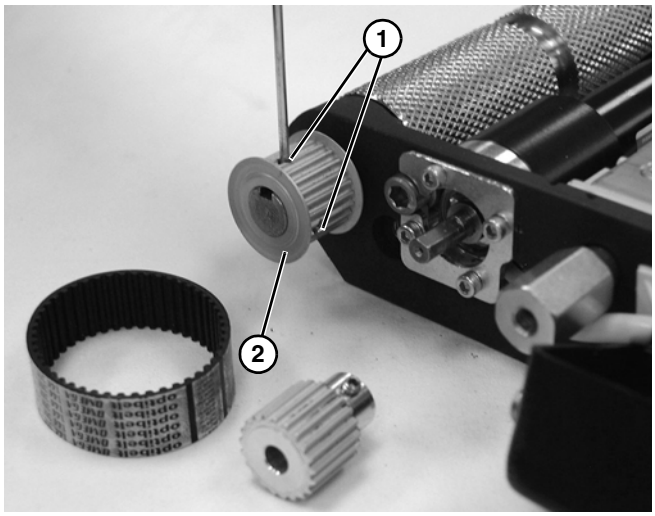


Figure 33

7. Remove driven pulley **(Figure 33, item 2)**.
8. Remove two head plate fastening screws **(Figure 34, item 1)** from opposite side of conveyor.

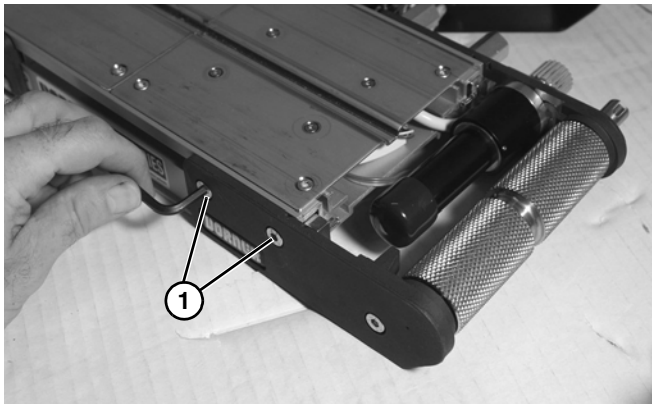


Figure 34

⚠ CAUTION

Spindle can slide out.

9. Remove head plate **(Figure 35, item 1)** from frame.

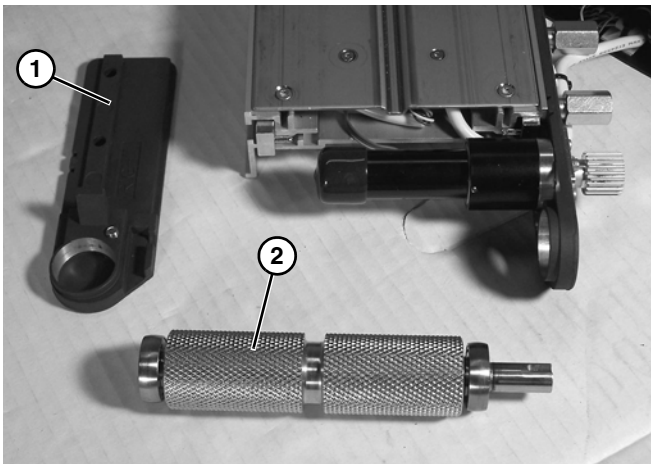


Figure 35

10. Replace spindle **(Figure 35, item 2)**.

Bearing Removal & Replacement

Removal

IMPORTANT

Do not use any removed bearings. Replace them.

1. Use a bearing removal tool, **(Figure 36, item 1)**, **(Figure 37, item 1)**, part number 807–1078, or equivalent and remove both bearings from the idler spindle and the drive spindle.

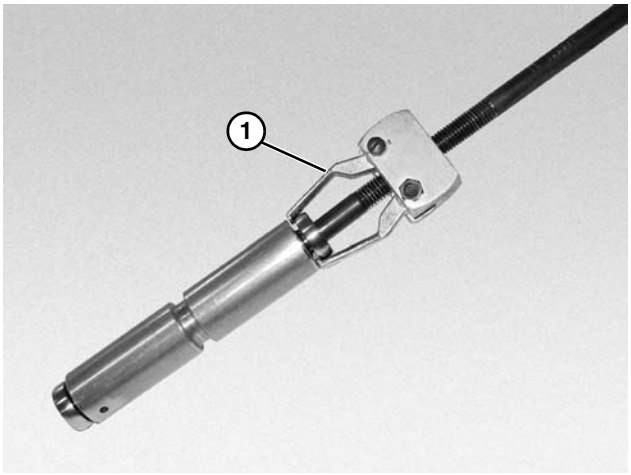


Figure 36

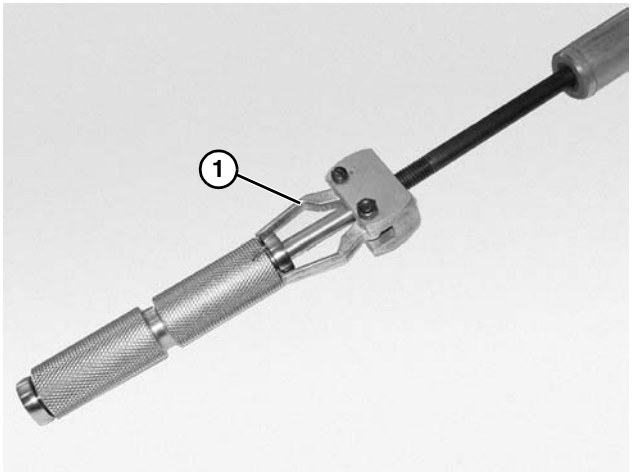


Figure 37

Replacement

1. Inspect the head plates bearing seating surface **(Figure 38, item 1)**. If they are worn or damaged, replace the head. See “Service Parts” beginning on page 22.

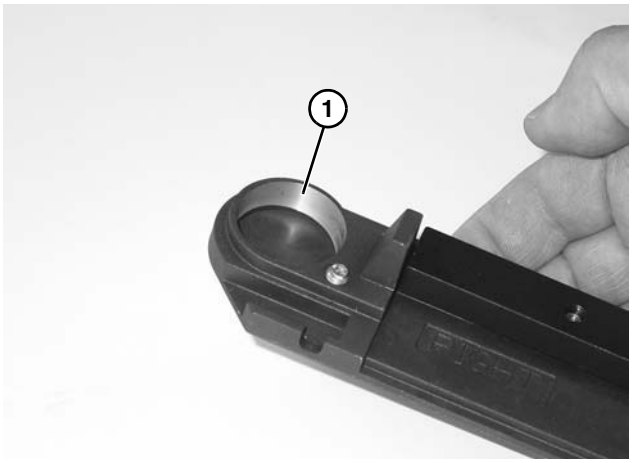


Figure 38

NOTE

Two washers may be required when installing the bearing over the drive shaft on the drive spindle, if the bearing installation tool is not long enough to fit the length of the drive shaft.

2. Use a bearing installation tool, **(Figure 39, item 1)**, part number 450292 or equivalent and press bearings onto the spindle and drive spindle.

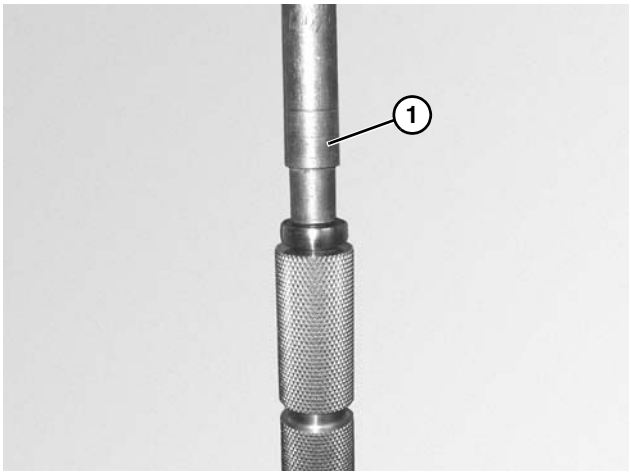


Figure 39

Spindle Installation

Idler Spindle Installation

1. With opposite head plate installed, position the idler spindle **(Figure 40, item 1)** through the loop of the belt, into the opposite head plate.

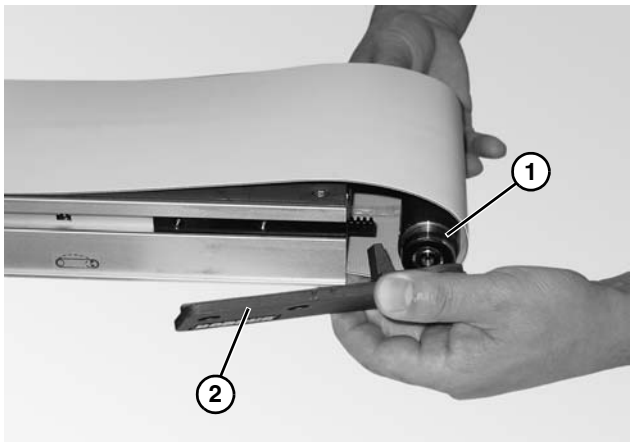


Figure 40

2. Place the head plate **(Figure 40, item 2)** and attach the head plate to the conveyor frame with the two (2) screws removed and hand tighten.

Drive Spindle Installation

1. Install drive spindle **(Figure 41, item 1)** into head plate **(Figure 41, item 2)**. Install head plate **(Figure 41, item 3)** and install screws **(Figure 41, item 4)**.

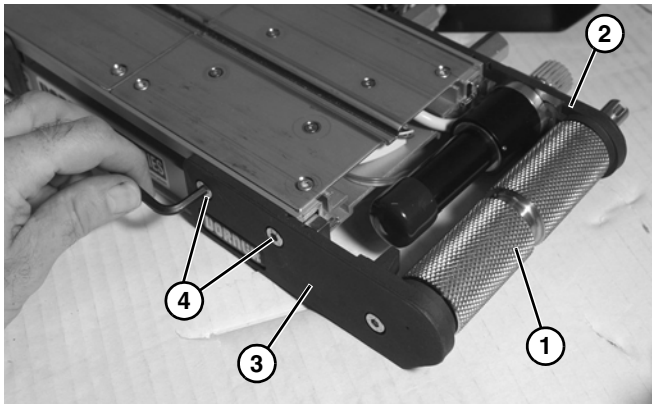


Figure 41

⚠ WARNING

Drive shaft keyway may be sharp. HANDLE WITH CARE.

2. Install driven pulley **(Figure 42, item 1)** onto conveyor shaft until flush with spindle end. Line up longer set screw **(Figure 42, item 2)** on pulley over keyway **(Figure 42, item 3)** of shaft. Tighten set screw **(Figure 42, item 2)** and set screw **(Figure 42, item 4)** to 18 in-lb (7 Nm).

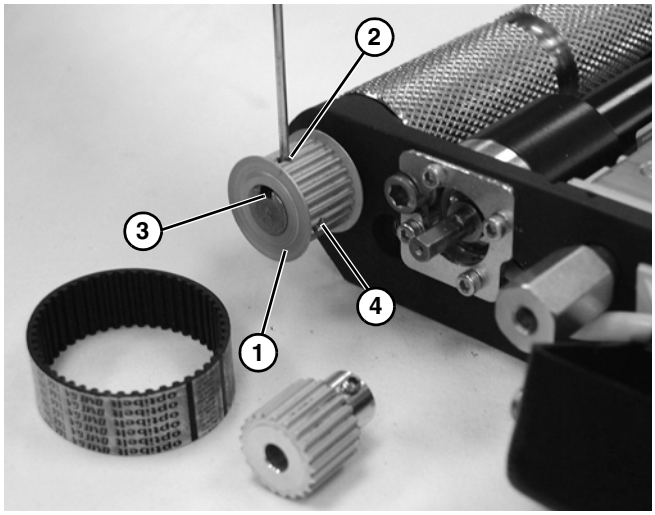


Figure 42

3. Slip timing belt **(Figure 43, item 1)** over driven pulley **(Figure 43, item 2)** and slide drive pulley **(Figure 43, item 3)** through timing belt onto gearmotor shaft.

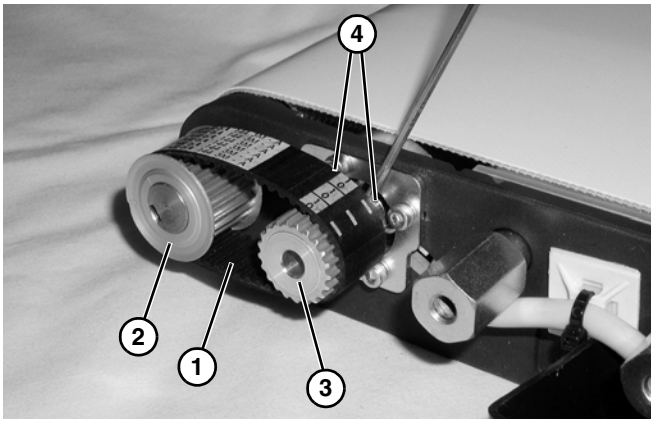


Figure 43

4. Tighten drive pulley set screws **(Figure 43, item 4)** on gearhead shaft, making sure one set screw is over flat on shaft, and drive pulley is aligned with driven pulley.
5. Tighten timing belt tension cam **(Figure 44, item 1)**, making certain that pointer **(Figure 44, item 2)** on cam is pointing towards the motor drive spindle **(Figure 44, item 2)**.

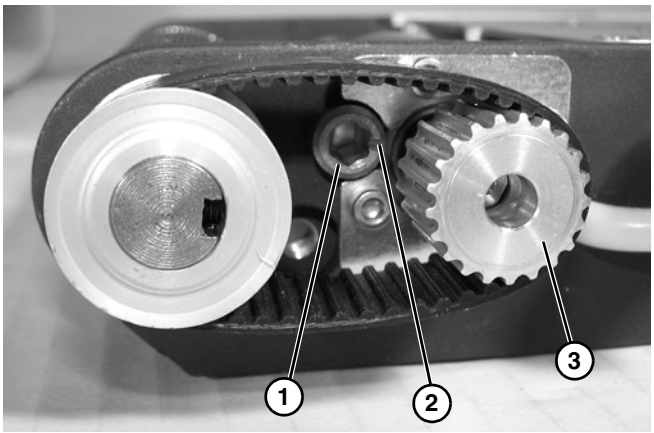


Figure 44

6. Rotate tension cam **(Figure 44, item 1)** to obtain 1/8 - 1/4" belt deflection at center of belt **(Figure 45, item 1)** with approximately 3-5 in-lb of pressure. Tighten four clamp plate screws **(Figure 45, item 2)** to 15 in-lb (1.6 Nm) to secure position.

⚠ CAUTION

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

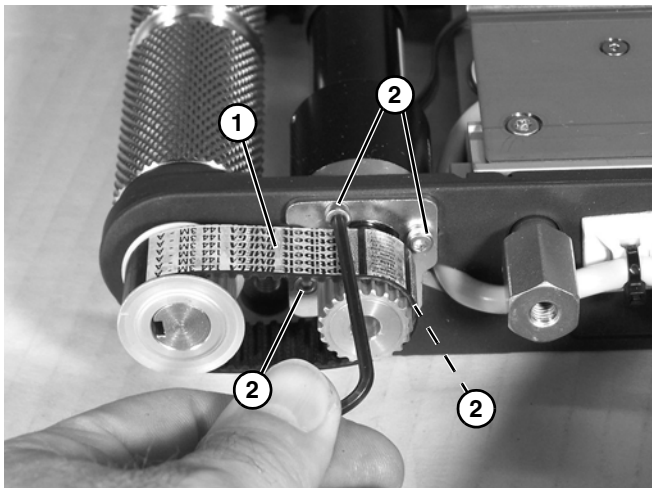


Figure 45

7. Install inframe drive side cover **(Figure 46, item 1)** with two head plate fastening screws **(Figure 46, item 2)**.

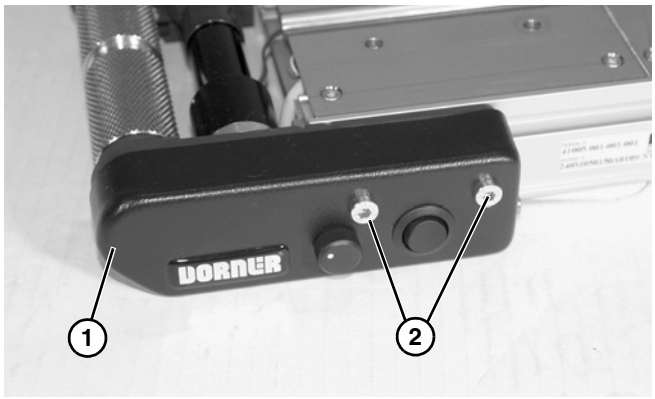


Figure 46

Nose Bar Roller Replacement

1. On both sides of conveyor, use a 4 mm hex-key wrench to loosen cam fastening screws **(Figure 47, item 1)** and slide cam assemblies toward the center of the conveyor.

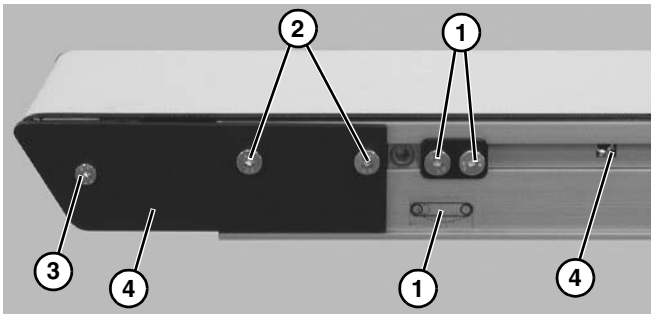


Figure 47

2. On both sides of conveyor, use a 4 mm hex-key wrench to loosen head plate fastening screws **(Figure 47, item 2)** to remove belt tension. Then remove belt from end of conveyor.
3. On one side of conveyor, use a 3 mm and 4 mm hex-key wrench to remove head plate fastening screws **(Figure 47, item 3)** and **(Figure 47, item 2)** and remove head plate **(Figure 47, item 4)**.
4. Slide nose bar rods **(Figure 48, item 1)** out side of conveyor and replace rollers **(Figure 48, item 2)** as necessary.

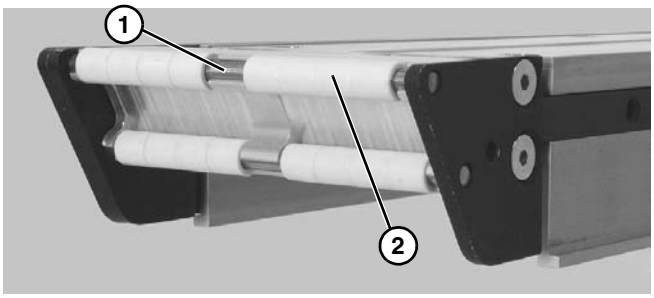


Figure 48

5. After replacing rollers, re-install head plate **(Figure 47, item 4)**. Use a 3 mm hex-key wrench to tighten one (1) fastening screw **(Figure 47, item 3)** to 30 in-lb (3.4 Nm). Leave two (2) fastening screws **(Figure 47, item 2)** loose for belt tensioning.
6. Re-install belt on end of conveyor, then tension the belt. See “Conveyor Belt Tensioning” on page 12.
7. Re-position the cam assemblies against the head plates and adjust belt tracking. See “Conveyor Belt Tracking” on page 13.

Motor Removal and Replacement

1. Remove belt. (See “Belt Installation” on page 11.)
2. To unwire motor, remove four bedplate fastening screws **(Figure 49, item 1)** with torx wrench.

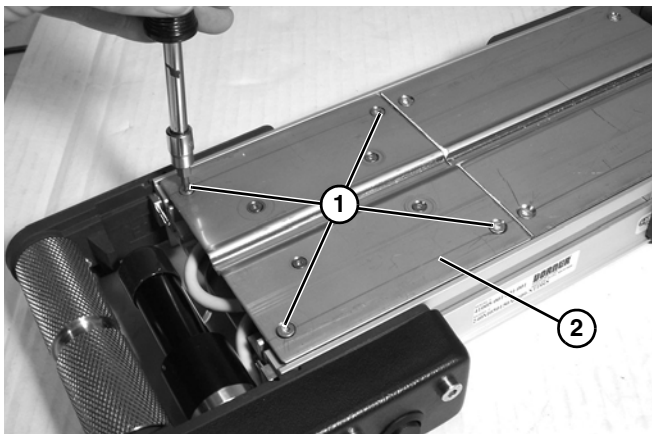


Figure 49

3. Remove bedplate **(Figure 49, item 2)** and rotate upside down on conveyor.

NOTE

Be certain to make note of wire color and location before removing wire from each wire clamp.

4. Unscrew the three terminal clamps **(Figure 50, item 1)** from three motor wires.

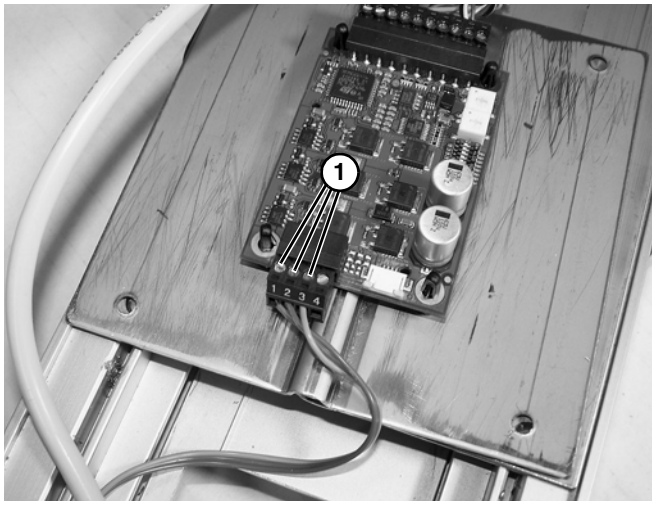


Figure 50

5. Remove inframe drive side cover **(Figure 51, item 1)** by removing two head plate fastening screws **(Figure 51, item 2)**.

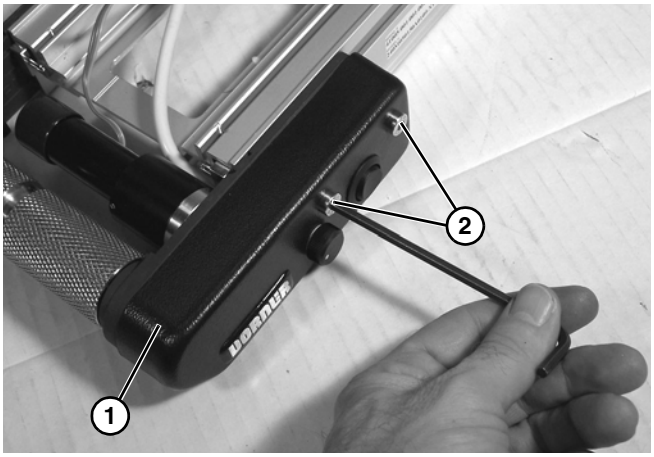


Figure 51

6. Loosen four clamp plate screws **(Figure 52, item 1)**.

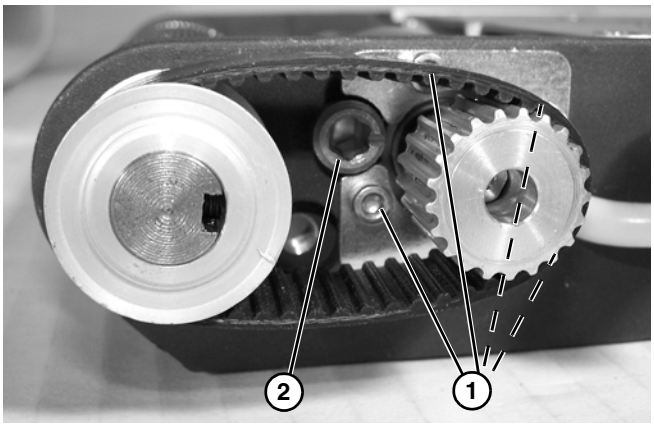


Figure 52

7. Loosen timing belt tension cam **(Figure 52, item 2)**.
8. Loosen two set screws **(Figure 53, item 1)** on drive pulley **(Figure 53, item 2)**. Slide drive pulley outward off of gearmotor shaft and remove timing belt **(Figure 53, item 3)**.

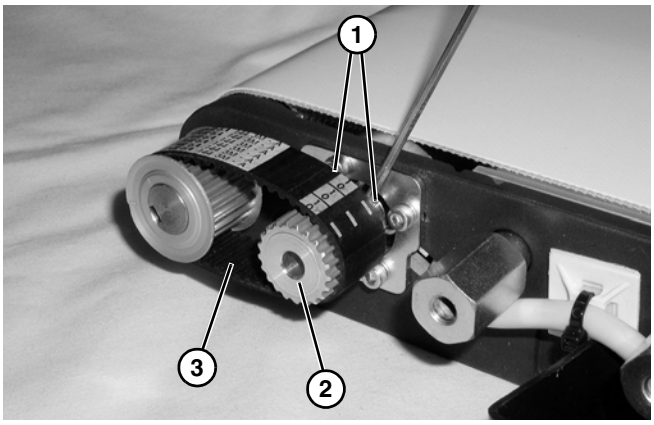


Figure 53

9. Remove four clamp plate screws **(Figure 54, item 1)** and clamp plate **(Figure 54, item 2)**.

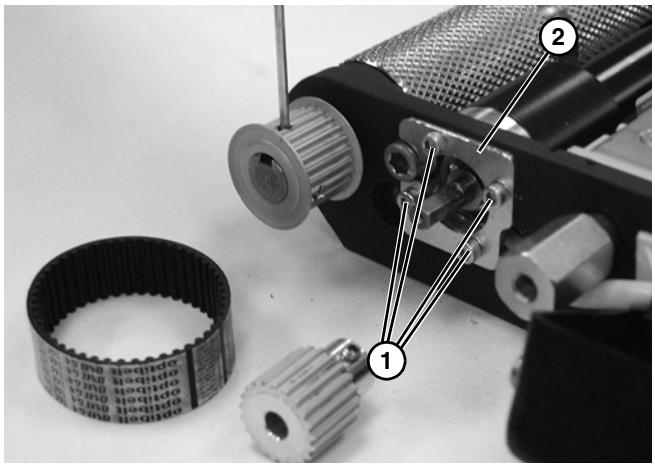


Figure 54

10. Remove motor **(Figure 55, item 1)**.

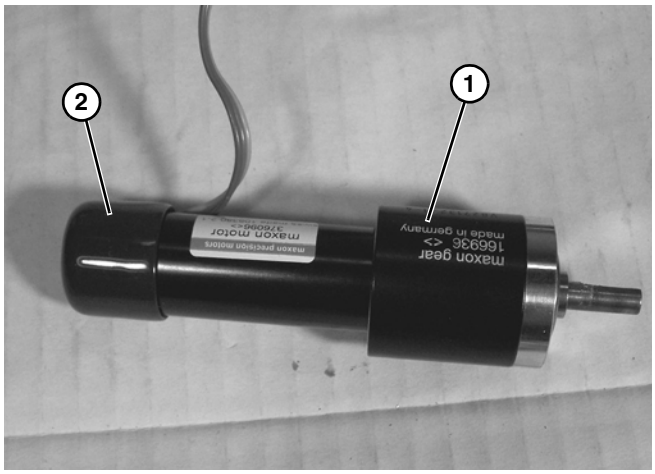


Figure 55

11. Remove cap **(Figure 55, item 2)** from motor.

NOTE

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

12. Replace motor.
13. Reinstall in reverse order of removal. (Refer to “Drive Spindle Installation” on page 17 for timing belt tensioning.)

Circuit Board Removal and Replacement

1. Remove belt. (See "Belt Removal" on page 10.)
2. Remove four bedplate fastening screws **(Figure 56, item 1)** with a torx wrench.

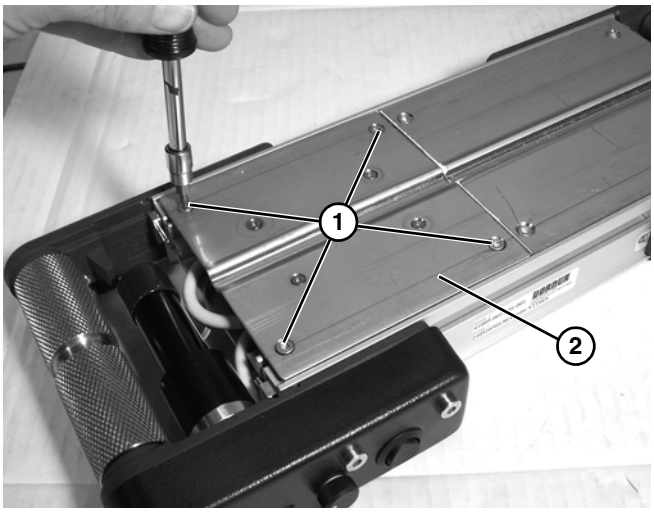


Figure 56

3. Remove bedplate **(Figure 56, item 2)** and rotate upside down on conveyor.
4. Disconnect motor plug **(Figure 57, item 1)** and control plug **(Figure 57, item 2)** from the circuit board.

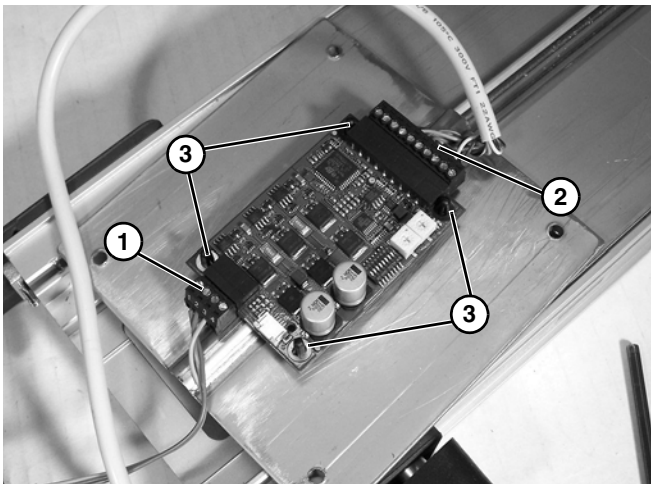


Figure 57

5. Remove four circuit board fasteners **(Figure 57, item 3)** with a hex wrench.
6. Replace circuit board.

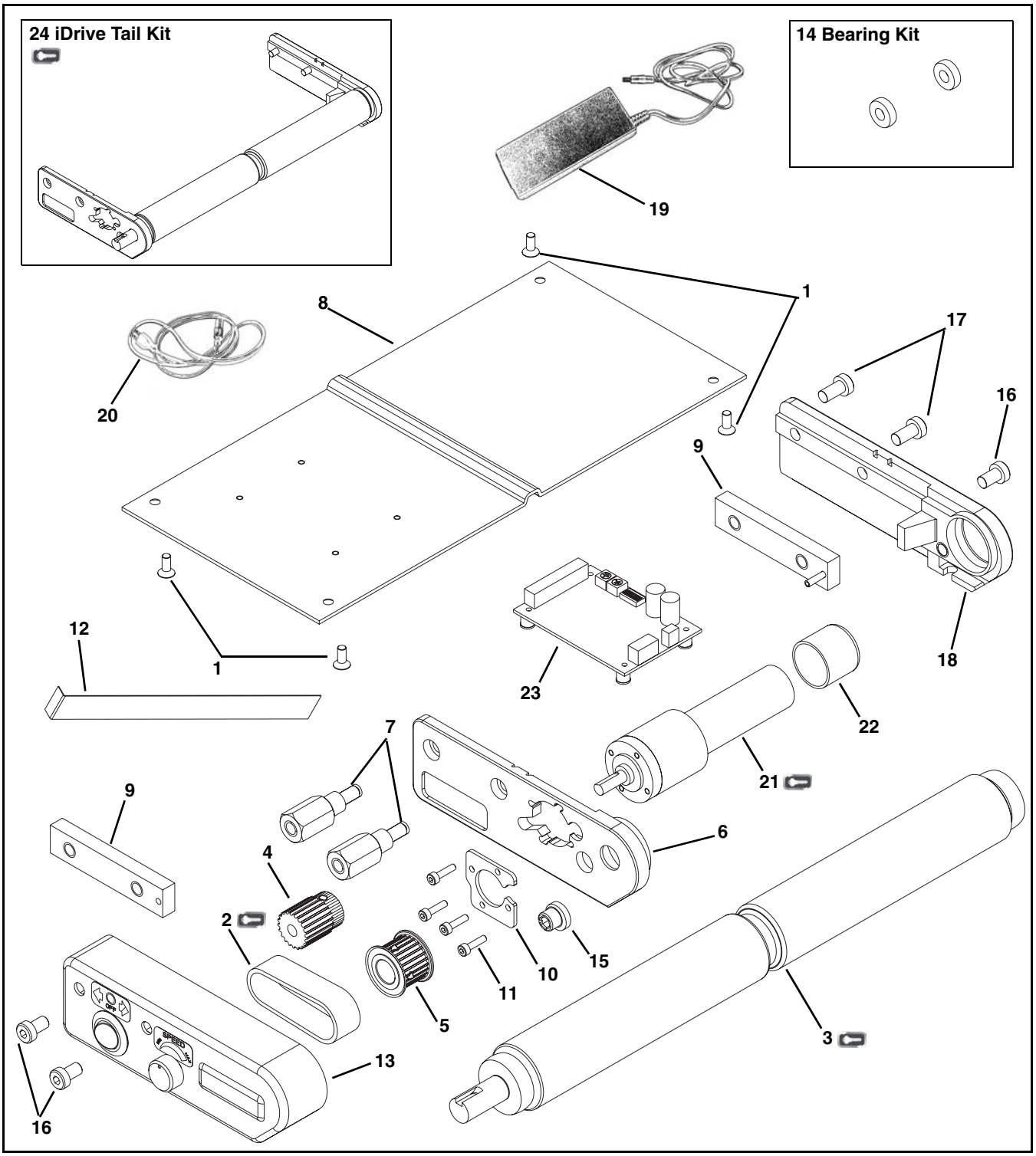
NOTE
Make sure the cord or wires are not across the circuit board when reassembling. Tuck wires and cable into the frame extrusion.

7. Reinstall in reverse order of removal.

Service Parts

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

Drive End

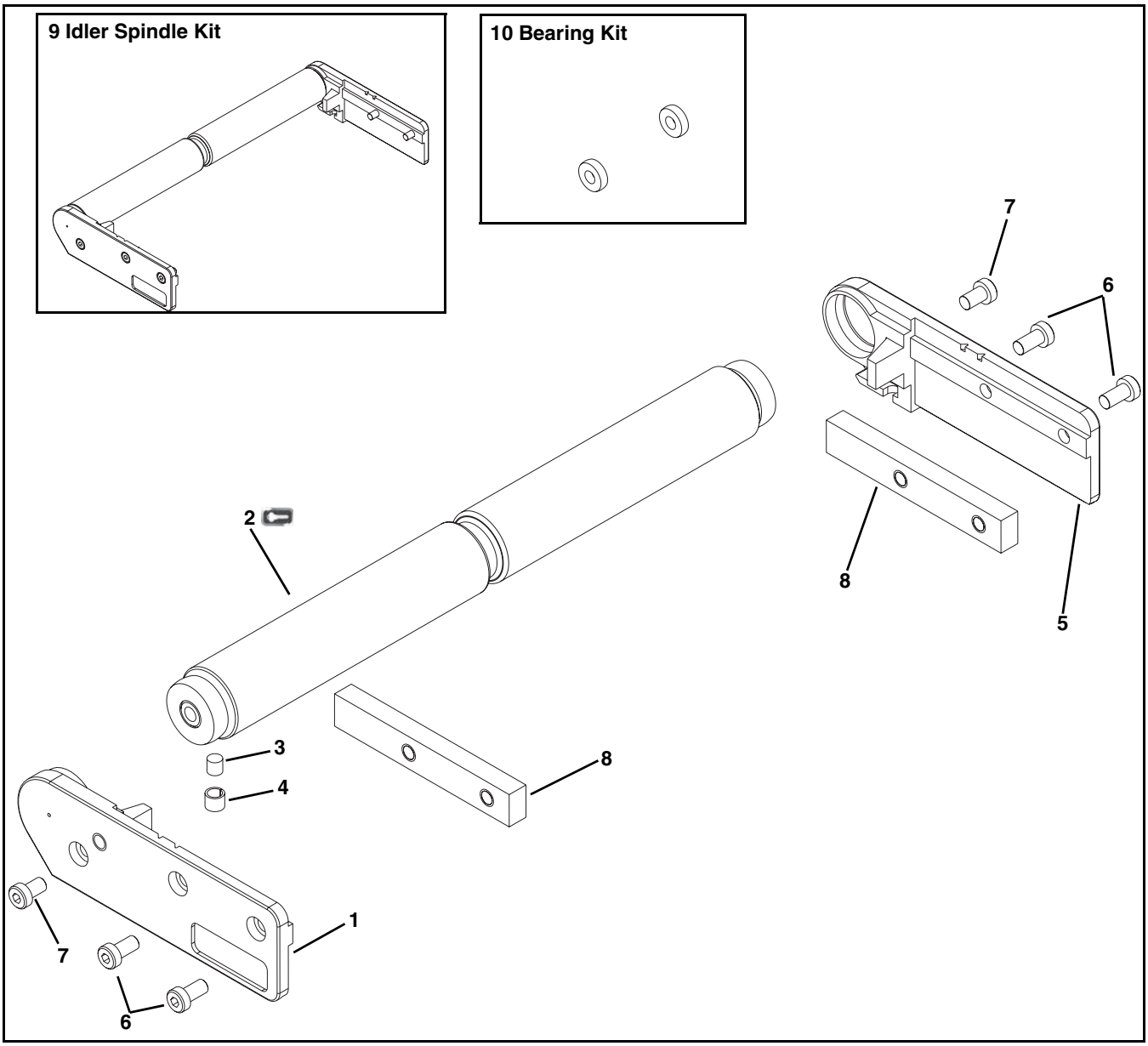


Item	Part Number	Description
1	807-1105	Flat Head Screw, M4-.70 x 10 mm
2	814-145	Timing Belt, 3 mm x 48 teeth
3	201272-WW	Knurled Spindle with Bearings
	201278-WW	Lagged Spindle with Bearings (for use with Nose Bar Idler Tail)
4	203205	High Speed Drive Pulley
	201197	Low Speed Drive Pulley
5	203203	High Speed Driven Pulley
	203204	Low Speed Driven Pulley
6	201017	Head Plate, A position
	201019	Head Plate, D position
7	201020	Hex Standoff
8	201120-WW	Central Mounting Bed Plate
9	201180	Tension Slide Bar
10	201181	Clamp Plate
11	920312M	Socket Head Screw, M3-.50 x 12 mm
12	201199	Slot Cover Strip, for 3" wide only
13	201217	Electrical Assembly, with speed direction control for A position
	201218	Electrical Assembly, with speed direction control for D position
	203217	Electrical Assembly, with customer wired control for A position
	203218	Electrical Assembly, with customer wired control for D position
14	22BK2	Bearing Kit (2 pack)
	22BK4	Bearing Kit (4 pack)
15	200039P	Timing Belt Tension Cam
16	920691M	Low Head Cap Screw, M6-1.00 x 10 mm

Item	Part Number	Description
17	920692M	Low Head Cap Screw, M6-1.00 x 12 mm
18	201016	Non-Drive Head Plate, for 3" wide D position
	201018	Non-Drive Head Plate, for 3" wide A position
	203208	Non-Drive Head Plate, for 4" wide D position
	203209	Non-Drive Head Plate, for 4" wide A position
	240425F	Non-Drive Head Plate, for 5" wide and wider D position
	240426F	Non-Drive Head Plate, for 5" wide and wider A position
19	831-139	Power Supply
20	818-164	Cord
21	22M023PLD2DEN	Motor
22	807-1849	Motor Cap
23	201280	Controller Assembly for 3”-6” wide
	201281	Controller Assembly for 8”-18” wide
24	22AF-WW	iDrive Tail Kit for A position with Knurled Spindle (Includes Items 3, 6, 17 and 18)
	22DF-WW	iDrive Tail Kit for D position with Knurled Spindle (Includes Items 3, 6, 17 and 18)
	22NAF-WW	iDrive Tail Kit for A position with Lagged Spindle (Includes Items 3, 6, 17 and 18)
	22NDF-WW	iDrive Tail Kit for D position with Lagged Spindle (Includes Items 3, 6, 17 and 18)
WW = Conveyor width reference: 03, 04, 05, 06, 08, 10, 12 & 18		

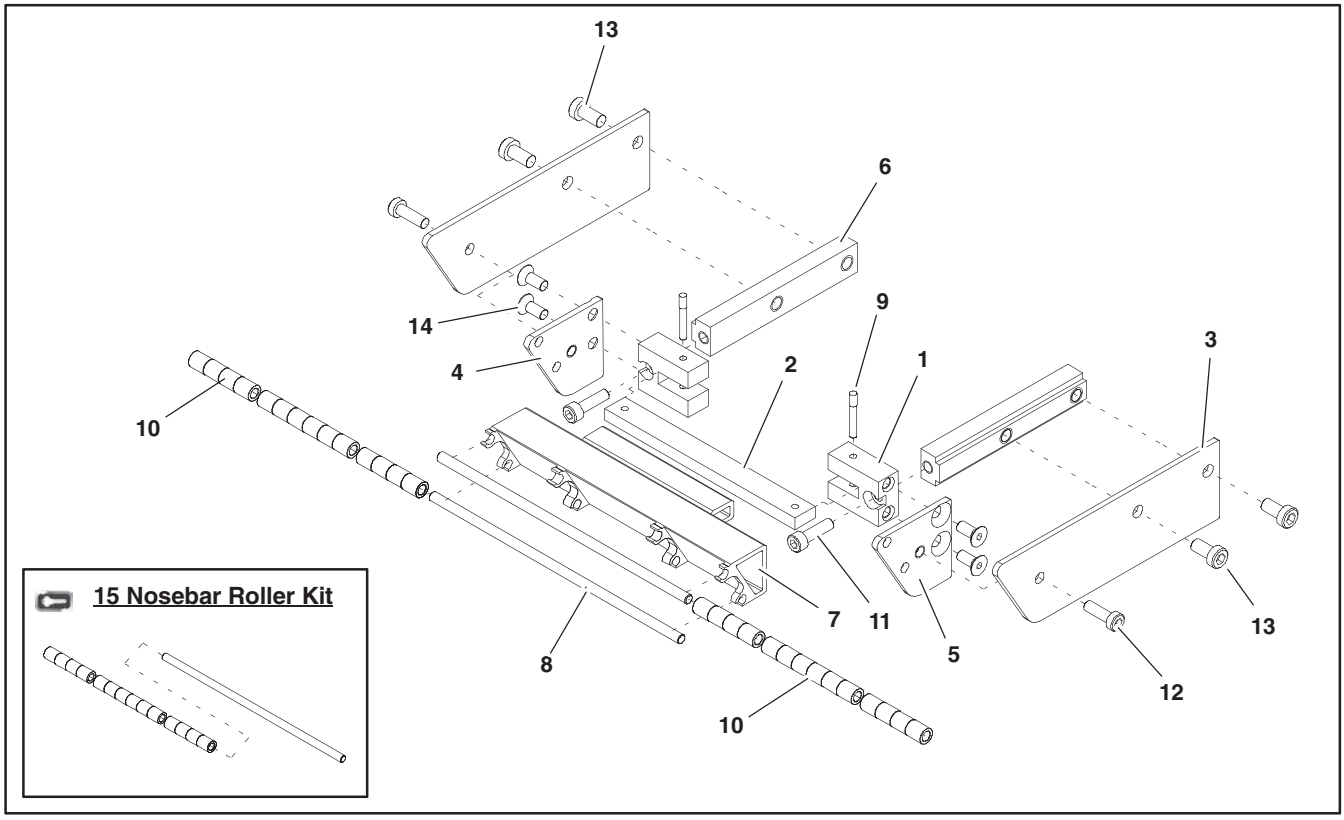
Service Parts

Idler End



Item	Part Number	Description
1	240425	Head Plate, Left Hand
2	201273-WW	Spindle Kit with Bearings
3	808-020	Magnet, 0.25" diameter x 0.25" long
4	450226SSP	Sleeve
5	240426	Head Plate, Right Hand
6	920692M	Socket Head Screw, M6 x 12 mm
7	920691M	Socket Head Screw, M6 x 10 mm
8	240329	Tension Slide Bar
9	22T-WW	Idler Spindle Kit, (Includes Items 1 through 7)
10	22BK2	Bearing Kit (2 pack)
	22BK4	Bearing Kit (4 pack)
WW = Conveyor width reference: 03, 04, 05, 06, 08, 10, 12 & 18		

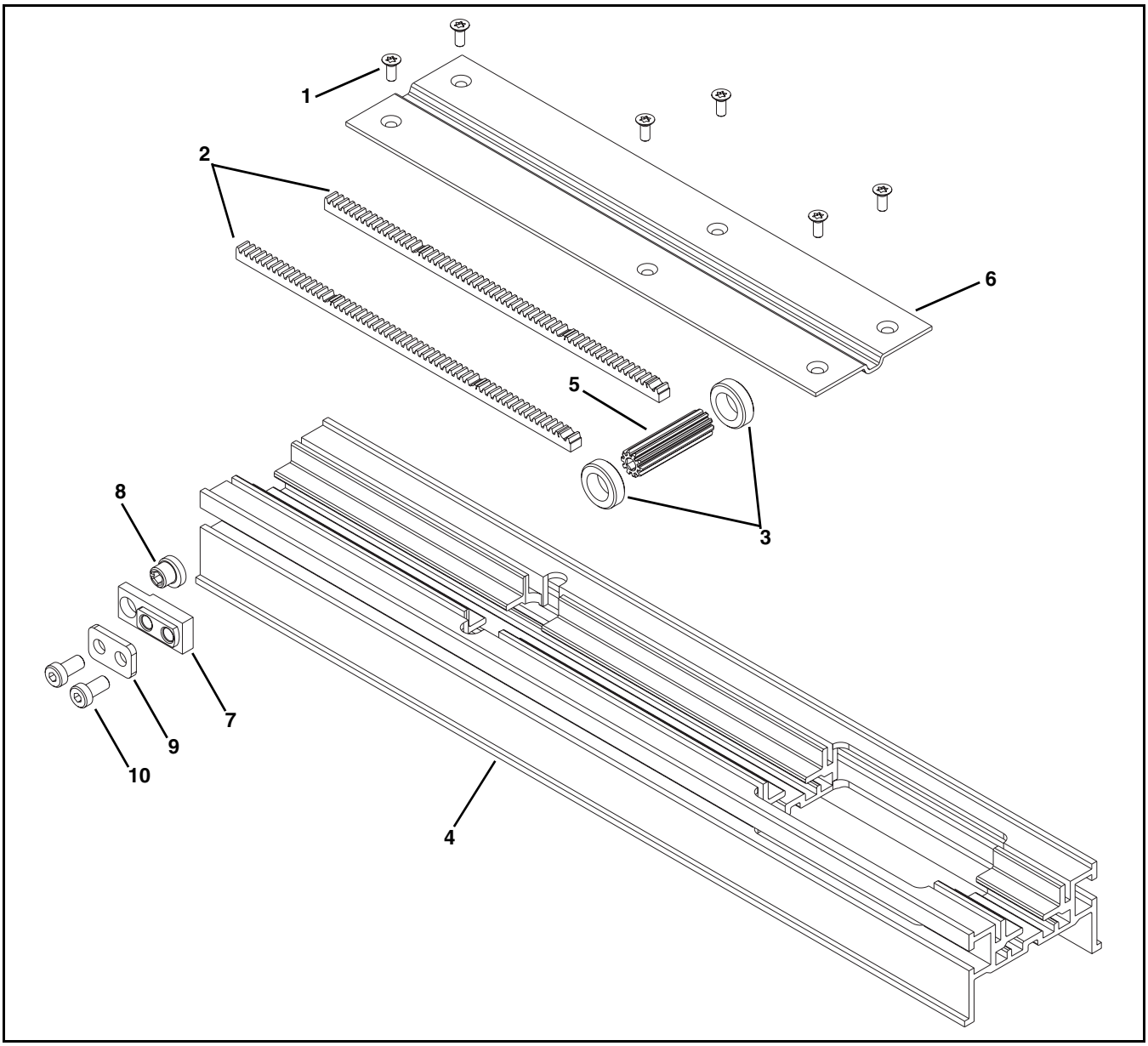
Nose Bar Idler End



Item	Part Number	Description
1	201965M	Mounting Block, PLT Spindle
2	2076WW	Flex–Link Bar
3	241125	Outer Side Plate
4	241126	Inner Side Plate LH
5	241127	Inner Side Plate RH
6	241128	Head Plate Bar
7	2412WW	Nose Bar
8	2413WW	Nose Bar Rod
9	200695P	Knurl Pin 0.125” DIA x 0.937” Lg
10	801–122	Nose Bar Roller
11	920518M	Socket Head Screw, M5 x 18 mm
12	920593M	Socket Head Screw, M5 x 16 mm
13	920692M	Socket Head Screw, M6 x 12 mm
14	930512M	Flat Head Screw, M5 x 12 mm
15	22N–WW	Nose Bar Roller Kit (Includes Items 8 and 10)
WW = Conveyor width reference: 03, 04, 05, 06, 08, 10, 12 & 18		

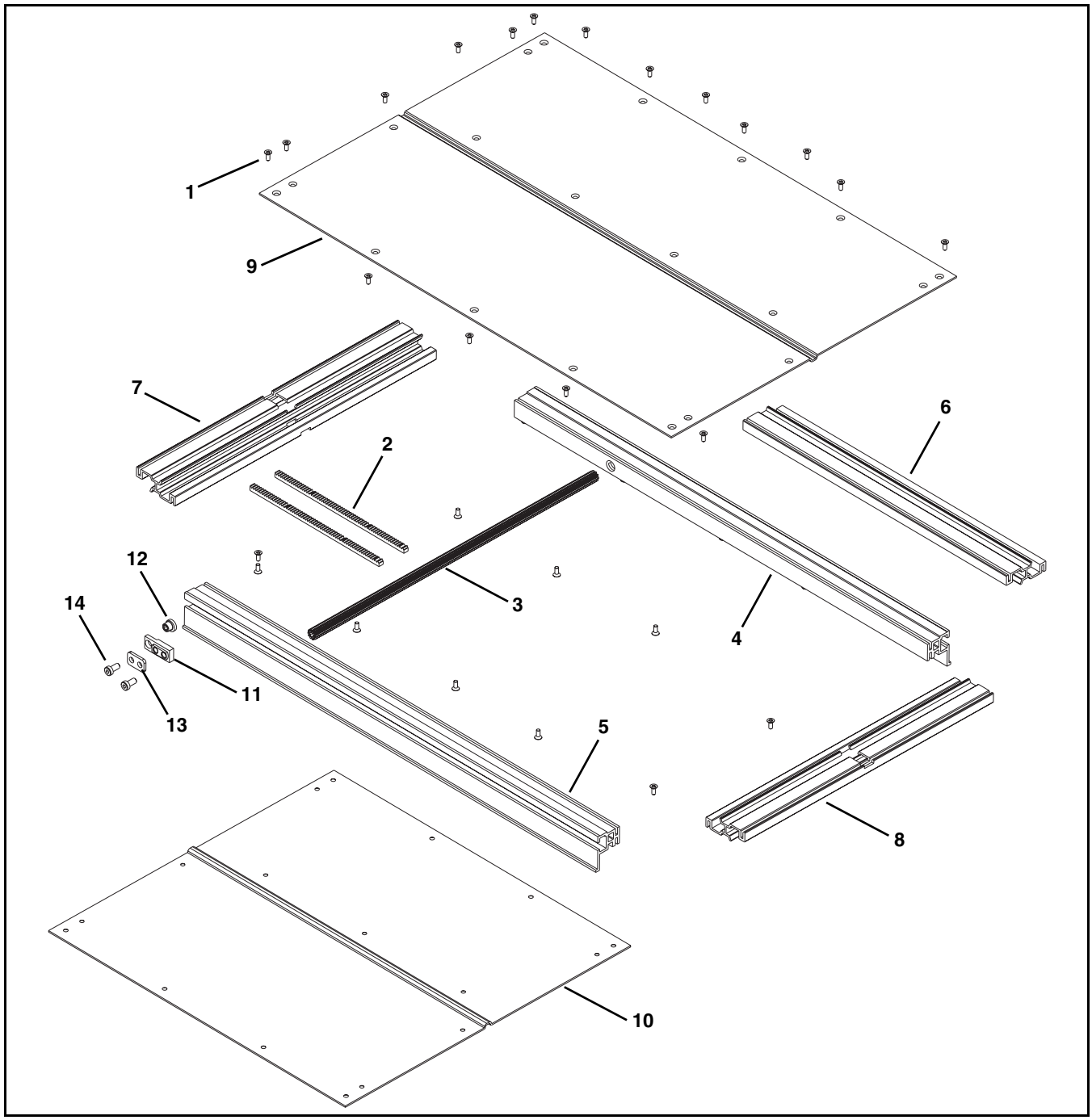
Service Parts

3” (76 mm) to 6” (152 mm) Frame Assembly



Item	Part Number	Description
1	807-1105	Flat Head Torx Screw, M6 x 10 mm
2	240420	Rack Gear, 14.5 Degree PA x 24P
3	240421	Pinion Bushing
4	2012WW-LLLLL	Frame
5	2030WWM	Pinion Gear
6	2405WW-LLLLL	Bed Plate
7	201254	Retaining Block, Drive End, for 3" wide conveyors only
	200341M	Retaining Block
8	200039P	Tracking Belt Cam
9	200038	Clamping Plate
10	920692M	Socket Head Screw, M6 x 12 mm
WW = Conveyor width reference: 03, 04, 05 & 06		
LLLLL = part length in inches with 2 decimal places		
Example: Part Length = 35.25" LLLLL = 03525		

8” (203 mm) to 18” (457 mm) Wide Frame Assembly

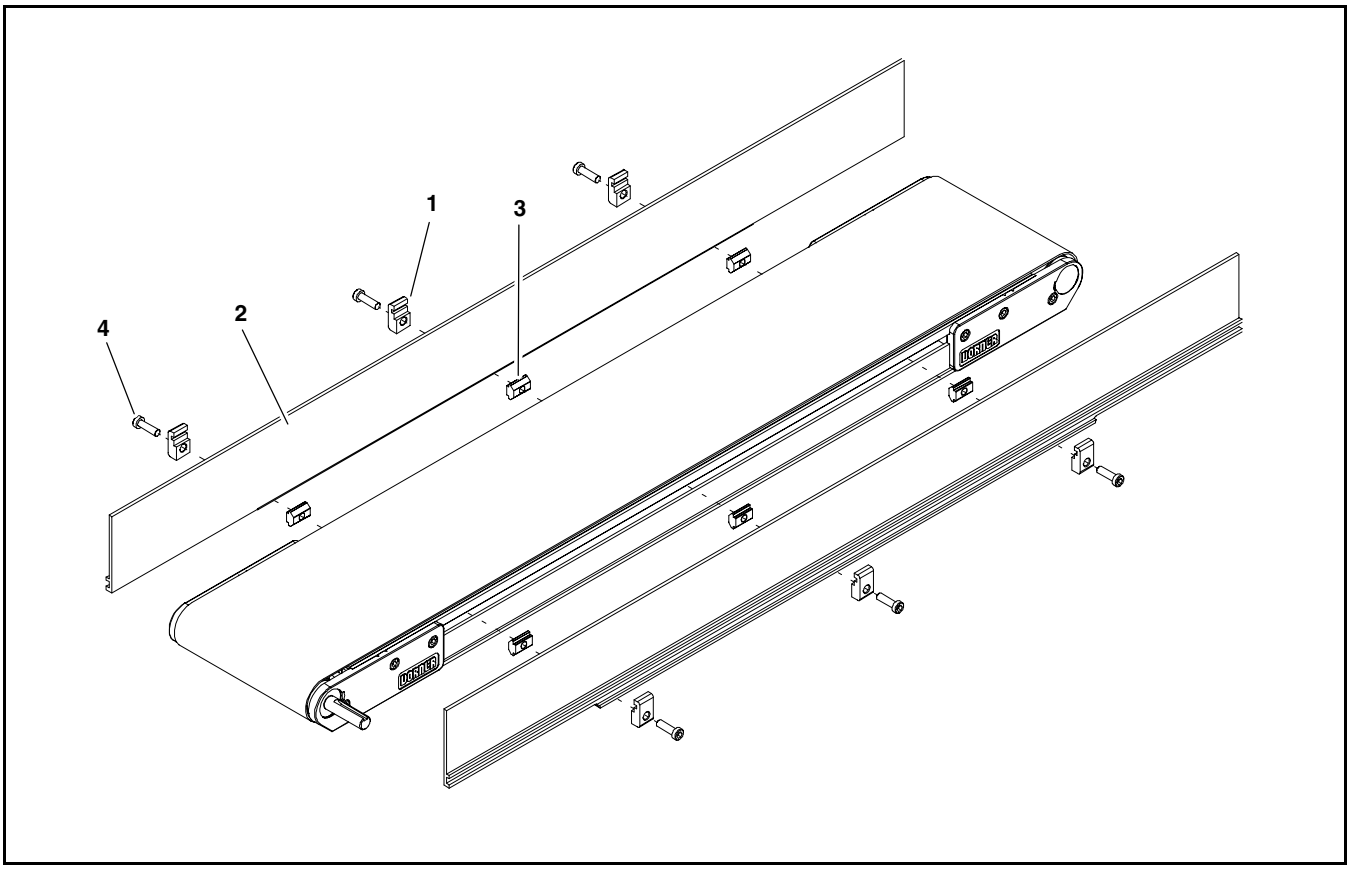


Item	Part Number	Description
1	807-1105	Flat Head Torx Screw, M6 x 10 mm
2	240420	Rack Gear, 14.5 Degree PA x 24P
3	2030WWM	Pinion Gear
4	240412-LLLLL	Side Rail, Right Hand
5	240413-LLLLL	Side Rail, Left Hand
6	240414-LLLLL	Center Rail
7	240417	Center Rail Cross Support, for 16" & 18" wide conveyors only
8	201255	Center Rail Cross Support
9	2405WW-LLLLL	Top Bed Plate

Item	Part Number	Description
10	2405WW-LLLLL	Bottom Bed Plate
11	200341M	Retaining Block
12	200039P	Tracking Belt Cam
13	200038	Clamping Plat
14	920692M	Socket Head Screw, M6 x 12 mm
WW = Conveyor width reference: 08, 10, 12 & 18		
LLLLL = part length in inches with 2 decimal places		
Example: Part Length = 35.25" LLLLL = 03525		

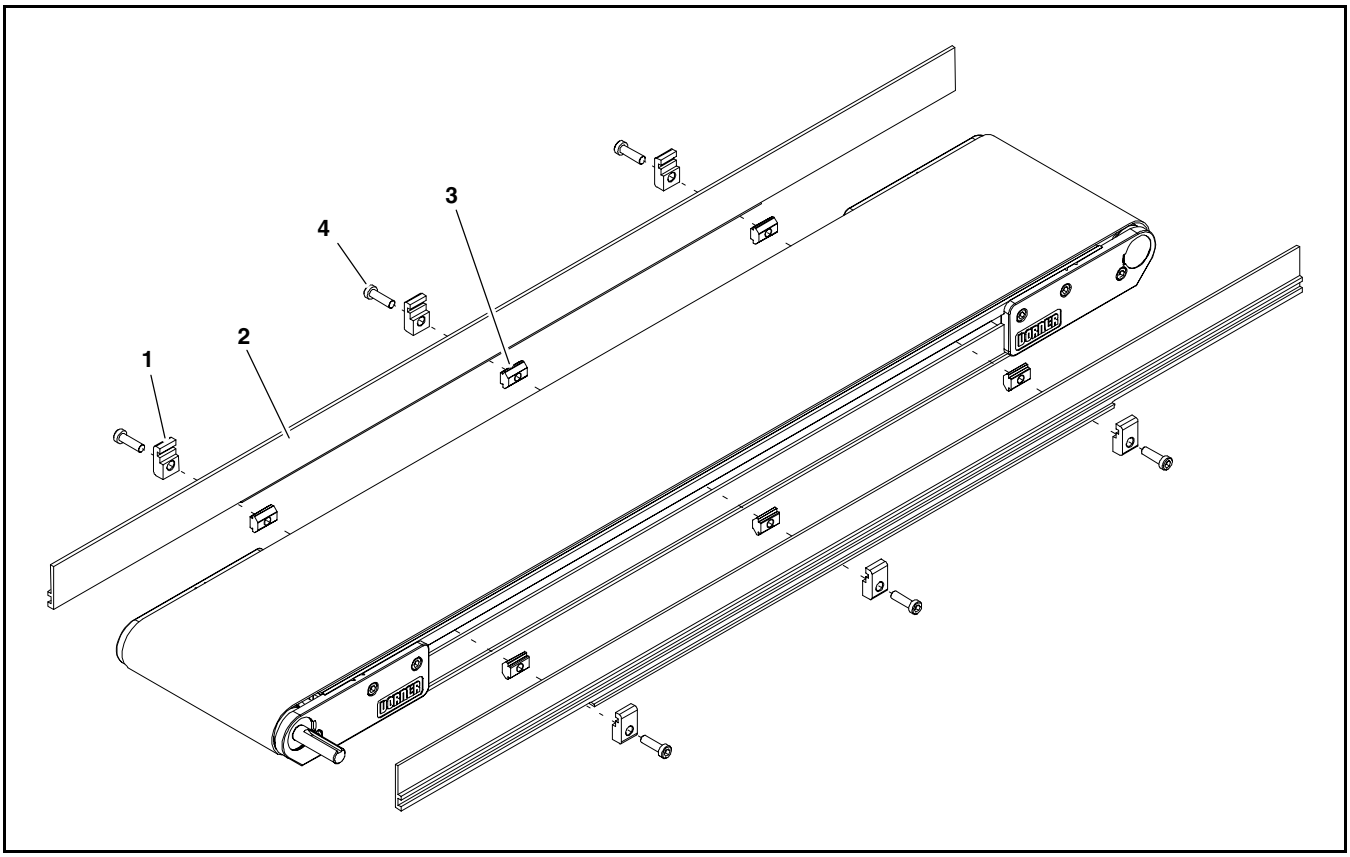
Service Parts

–04 3” (76 mm) Aluminum Side



Item	Part Number	Description
1	200121	Guide Retaining Clip
2	280403-LLLLL	3” (76 mm) High Side Guides
3	200695P	Single Drop–in Tee Bar
4	920694M	Socket Head Screw, M6 x 20 mm
LLLLL = part length in inches with 2 decimal places		
Example: Part Length = 35.25" LLLLL = 03525		

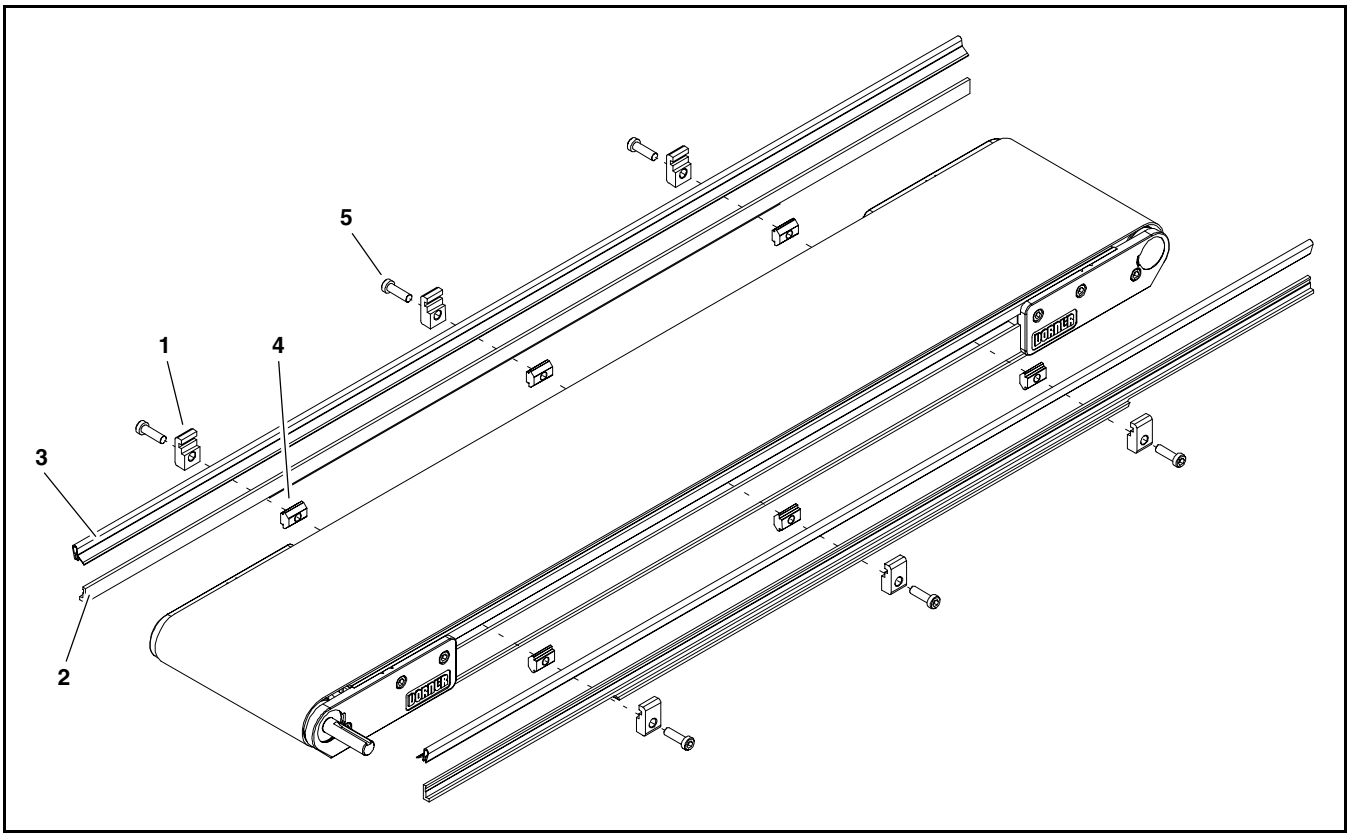
–05 1.5” (38 mm) Aluminum Side



Item	Part Number	Description
1	200121	Guide Retaining Clip
2	280503-LLLLL	1.5” (38 mm) High Side Guides
3	639971M	Single Drop–in Tee Bar
4	920694M	Socket Head Screw, M6 x 20 mm
LLLLL = part length in inches with 2 decimal places		
Example: Part Length = 35.25" LLLLL = 03525		

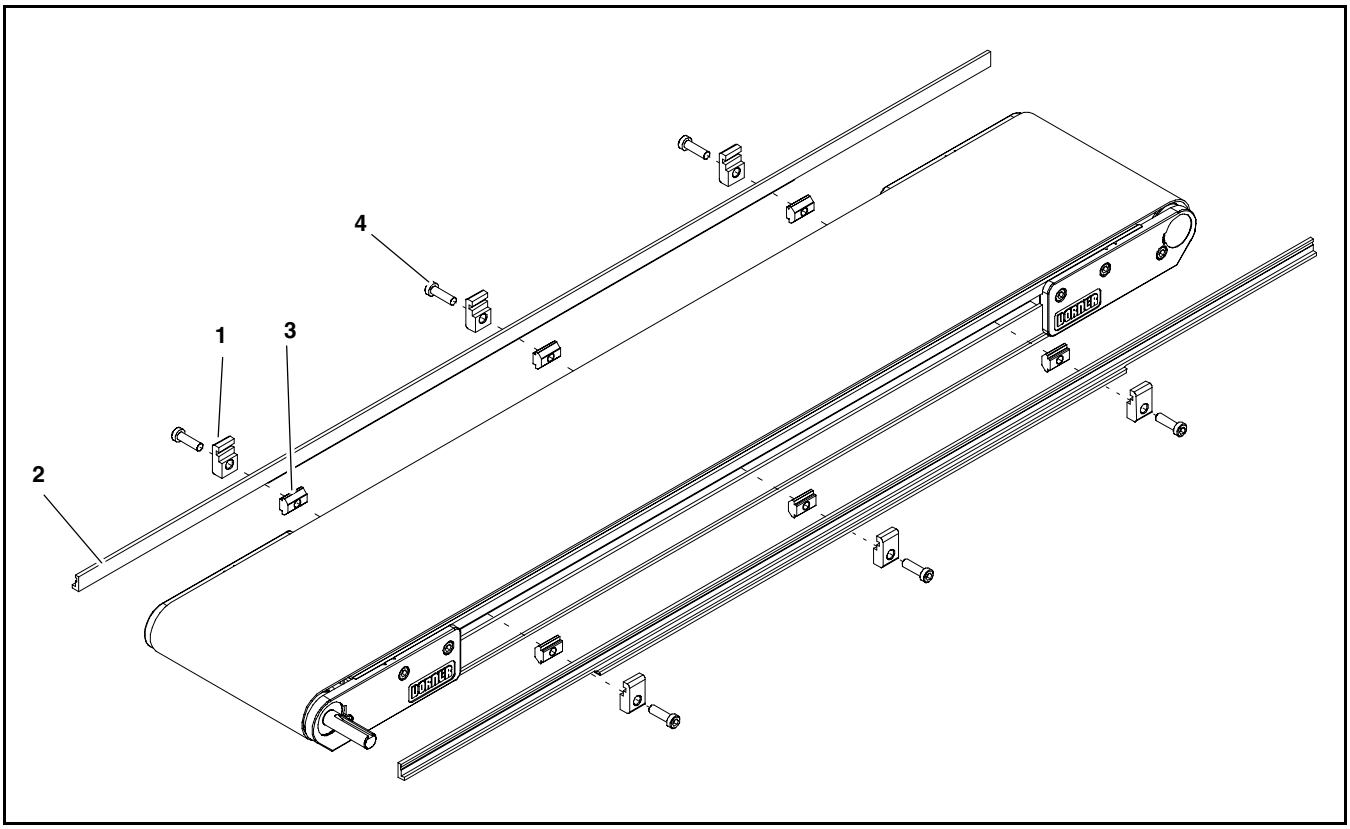
Service Parts

–07 Low to Side Wiper



Item	Part Number	Description
1	200121	Guide Retaining Clip
2	280903-LLLLL	0.5” (13 mm) High Side Guides
3	41–00–24	Side Wiper Nylatron (per foot)
4	639971M	Single Drop–in Tee Bar
5	920694M	Socket Head Screw, M6 x 20 mm
LLLLL = part length in inches with 2 decimal places		
Example: Part Length = 35.25" LLLLL = 03525		

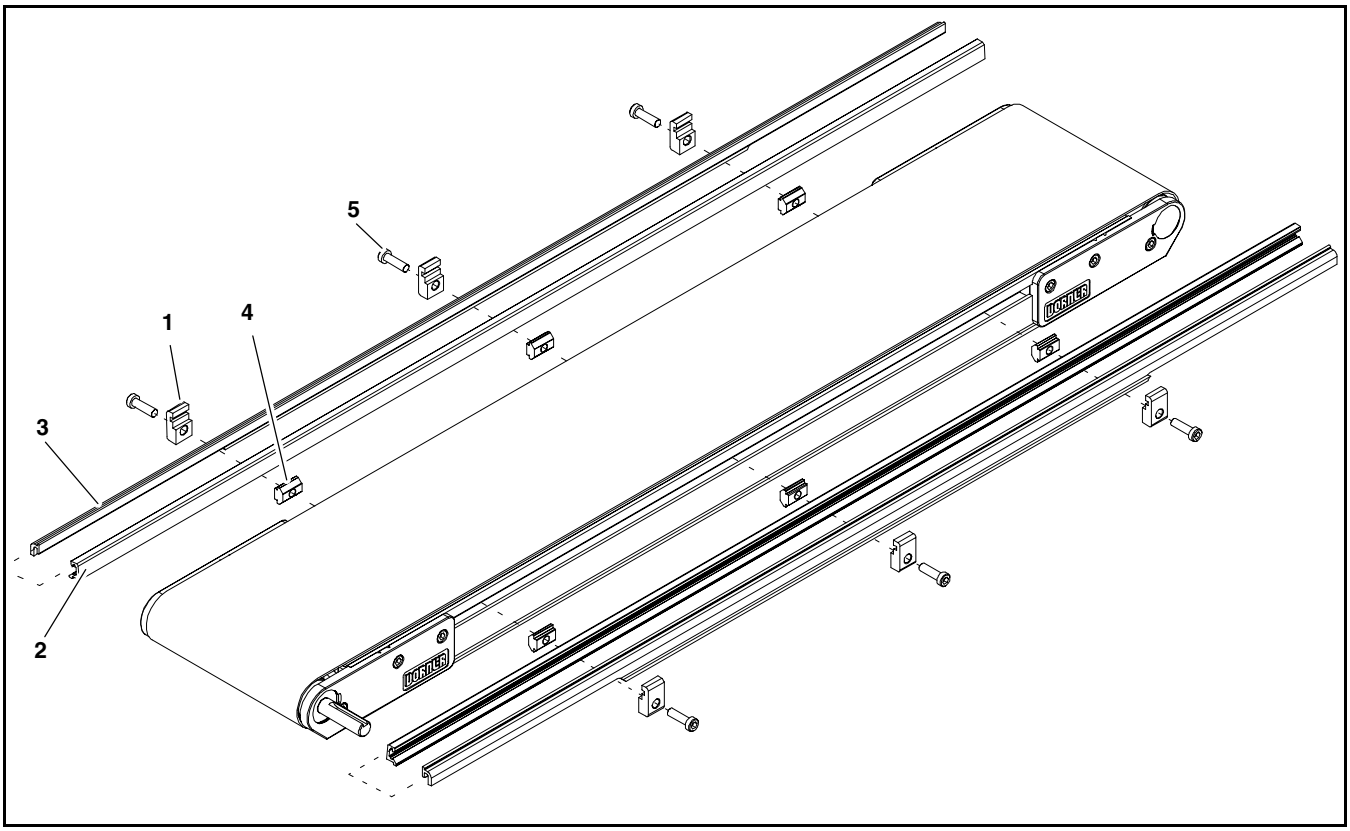
–09 Low to High Side



Item	Part Number	Description
1	200121	Guide Retaining Clip
2	280903-LLLLL	0.5” (13 mm) High Side Guides
3	639971M	Single Drop–in Tee Bar
4	920694M	Socket Head Screw, M6 x 20 mm
LLLLL = part length in inches with 2 decimal places		
Example: Part Length = 35.25" LLLLL = 03525		

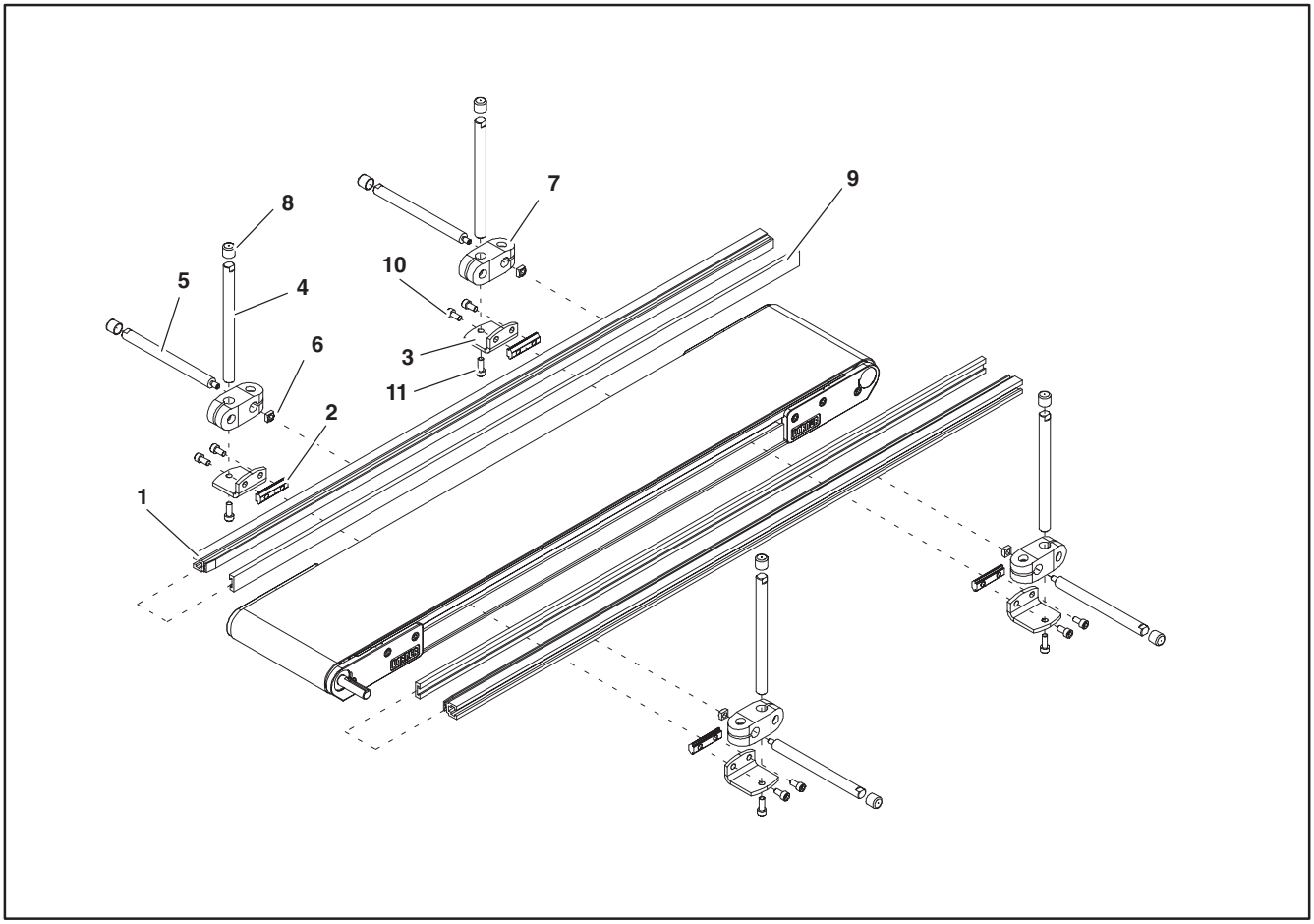
Service Parts

–10.5” (13 mm) Extruded Plastic



Item	Part Number	Description
1	200121	Guide Retaining Clip
2	200054P	Snap–On Guide (per foot)
3	281003-LLLLL	0.5” (13 mm), Plastic Guides
4	639971M	Single Drop–in Tee Bar
5	920694M	Socket Head Screw, M6 x 20 mm
LLLLL = part length in inches with 2 decimal places		
Example: Part Length = 35.25" LLLLL = 03525		

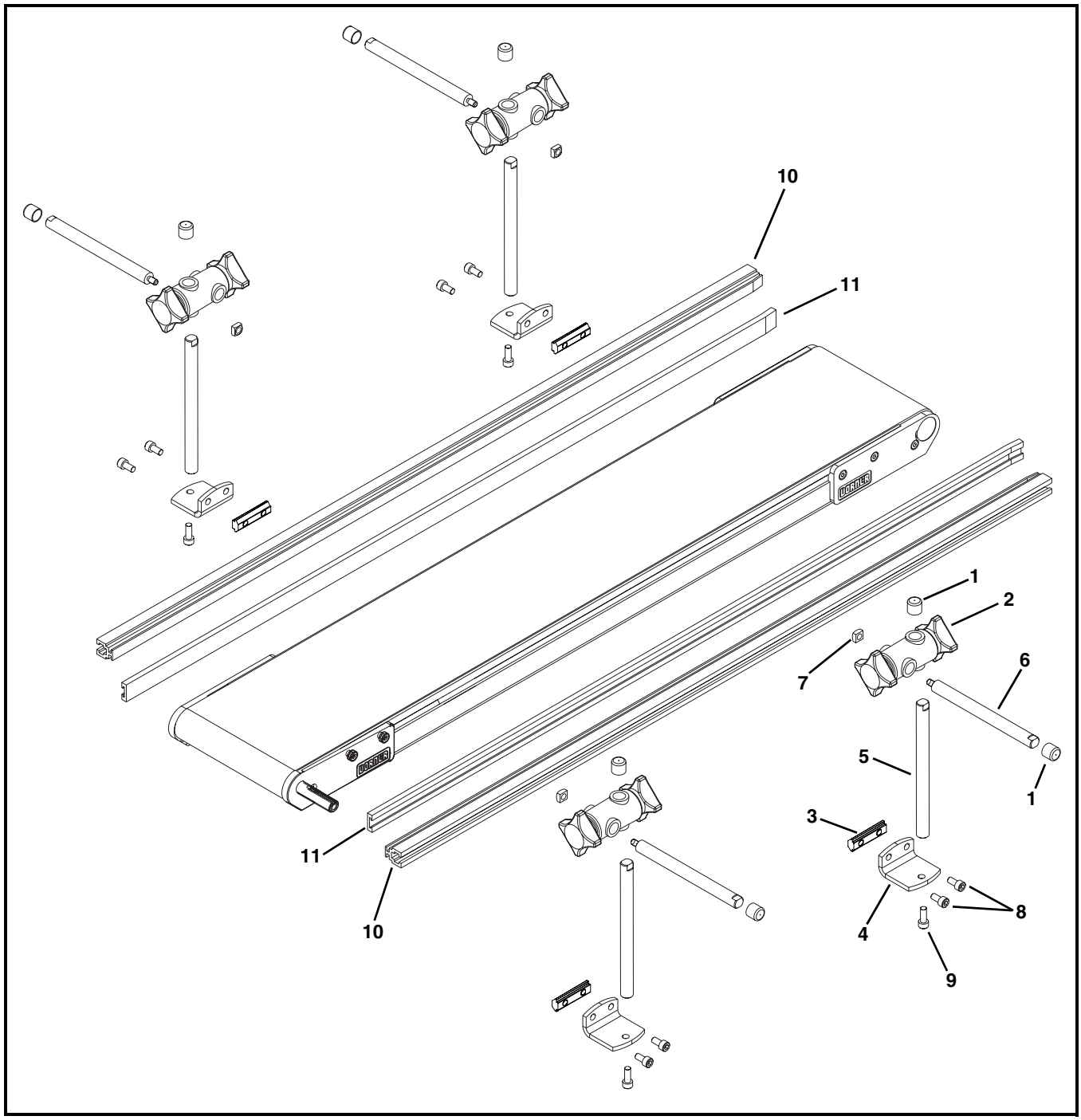
–13 Adjustable Guiding



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

Service Parts

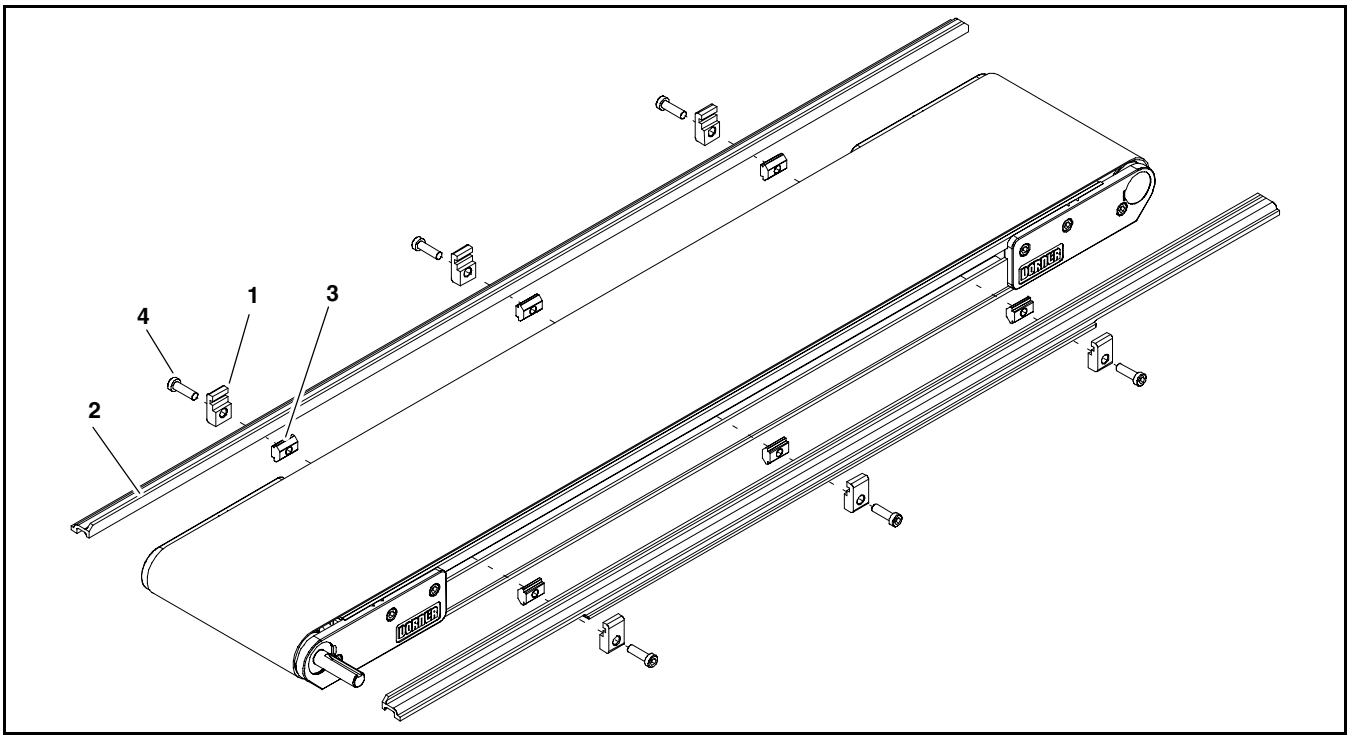
–14 Tool-Less Adjustable Guiding



Item	Part Number	Description
1	807-948	Shaft Cap
2	807-1470	Cross Block
3	200830M	Drop-In Tee Bar
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
9	920616M	Socket Head Screw, M6-1.00 x 16 mm
10	460063-LLLLL	Aluminum Profile Guide
11	614068P-LLLLL	Extruded Guide
LLLLL = Length in inches with 2 decimal places.		
Length Example: Length = 95.25" LLLLL = 09525		

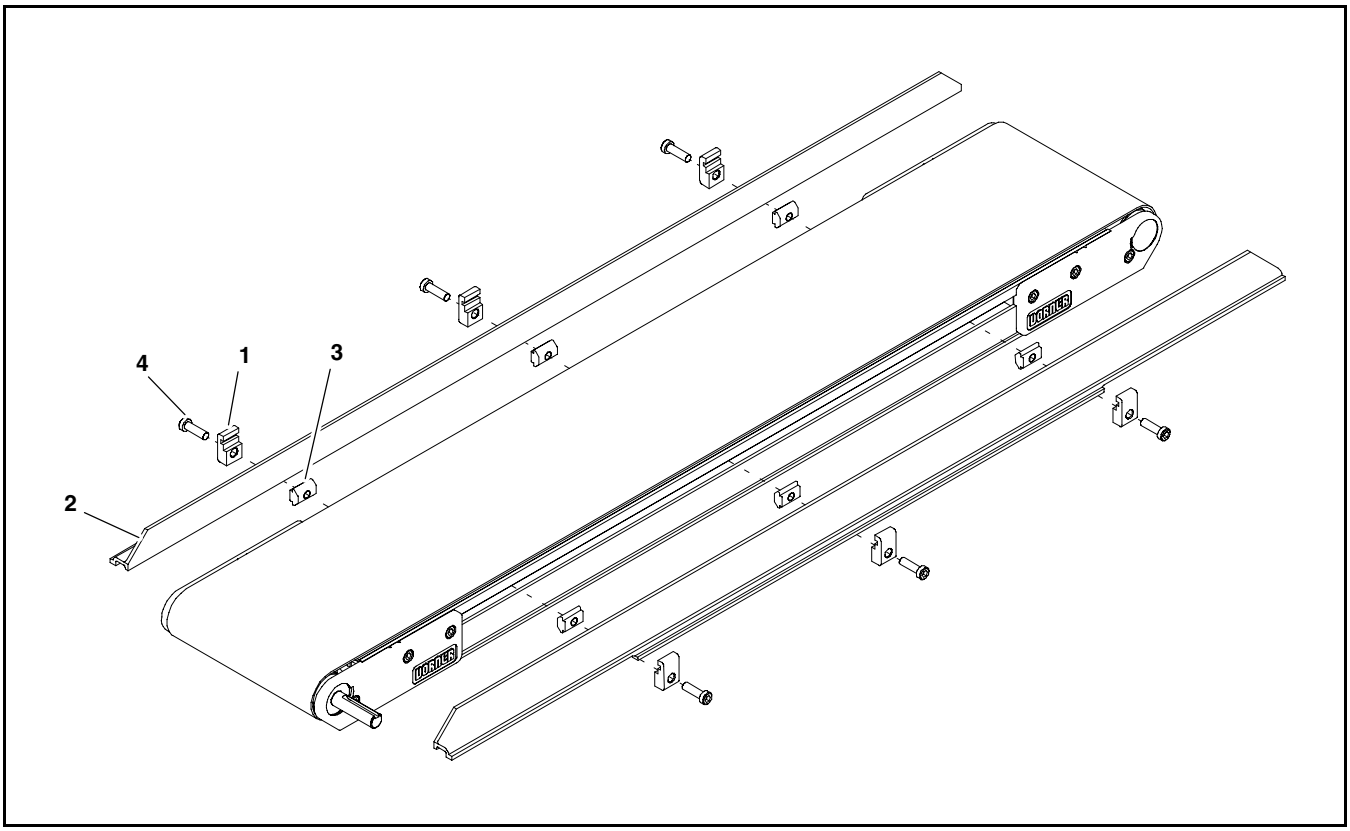
0.5” (13 mm) Cleated Belt Guiding



Item	Part Number	Description
1	200121	Guide Retaining Clip
2	281603-LLLLL	0.47” (13 mm) Cleated Guiding
3	639971M	Drop–In Tee Bar
4	920694M	Socket Head Screw, M6 x 20 mm
LLLLL = part length in inches with 2 decimal places		
Example: Part Length = 35.25" LLLLL = 03525		

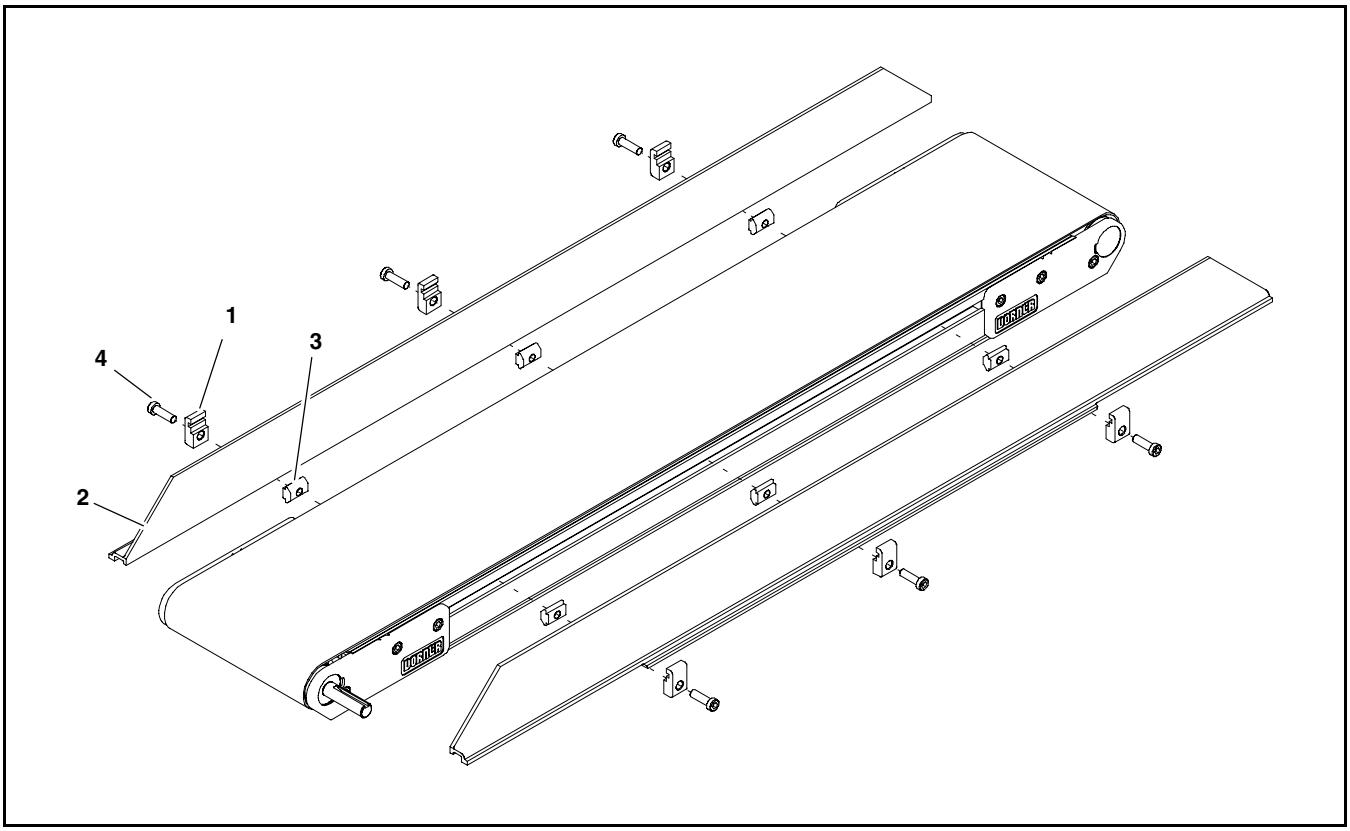
Service Parts

1” (25 mm) Cleated Belt Guiding



Item	Part Number	Description
1	200121	Guide Retaining Clip
2	281703-LLLLL	1” (25 mm) Cleated Guiding
3	639971M	Drop–In Tee Bar
4	920694M	Socket Head Screw, M6 x 20 mm
LLLLL = part length in inches with 2 decimal places		
Example: Part Length = 35.25" LLLLL = 03525		

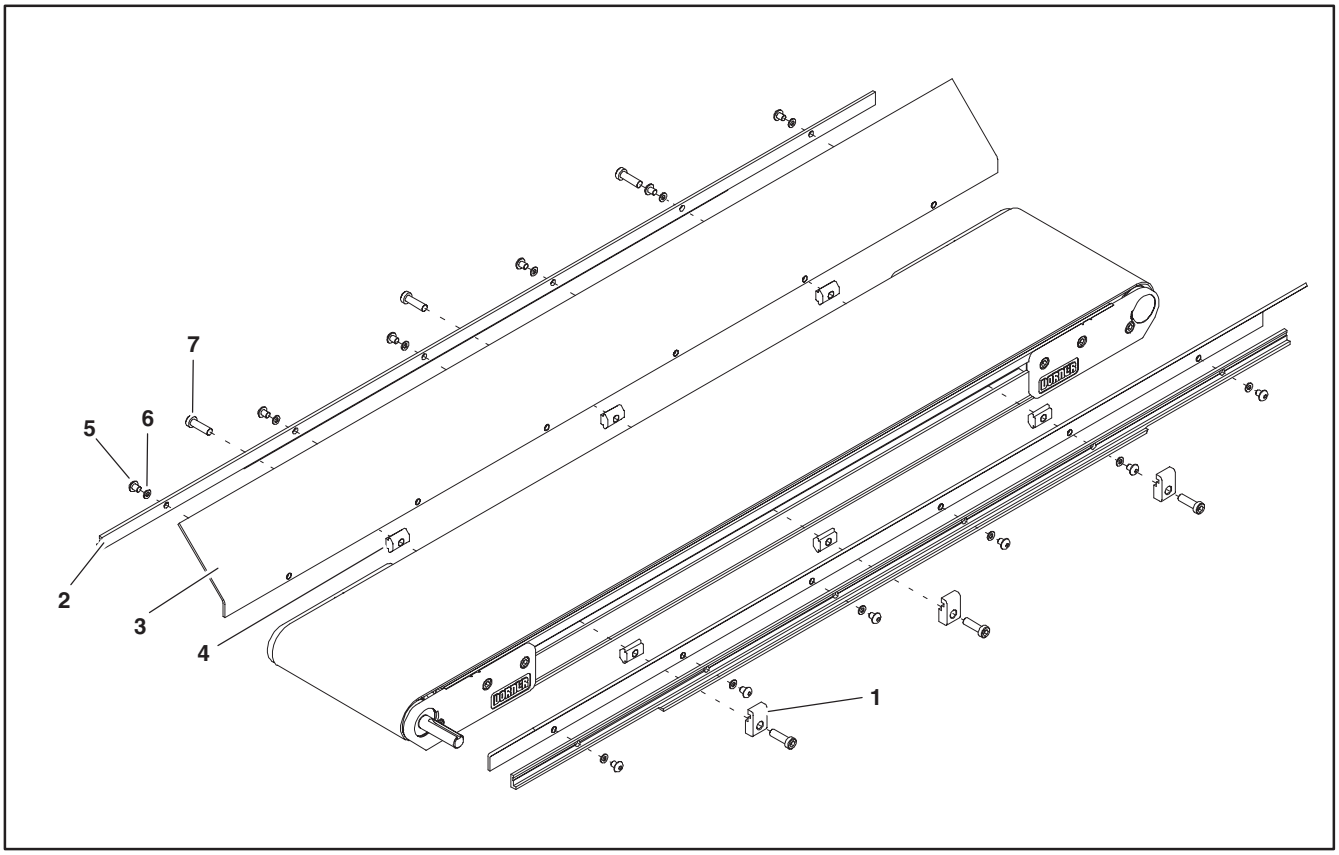
2” (51 mm) Cleated Belt Guiding



Item	Part Number	Description
1	200121	Guide Retaining Clip
2	281903-LLLLL	2.3” (58 mm) Cleated Guiding
3	639971M	Drop–In Tee Bar
4	920694M	Socket Head Screw, M6 x 20 mm
LLLLL = part length in inches with 2 decimal places		
Example: Part Length = 35.25" LLLLL = 03525		

Service Parts

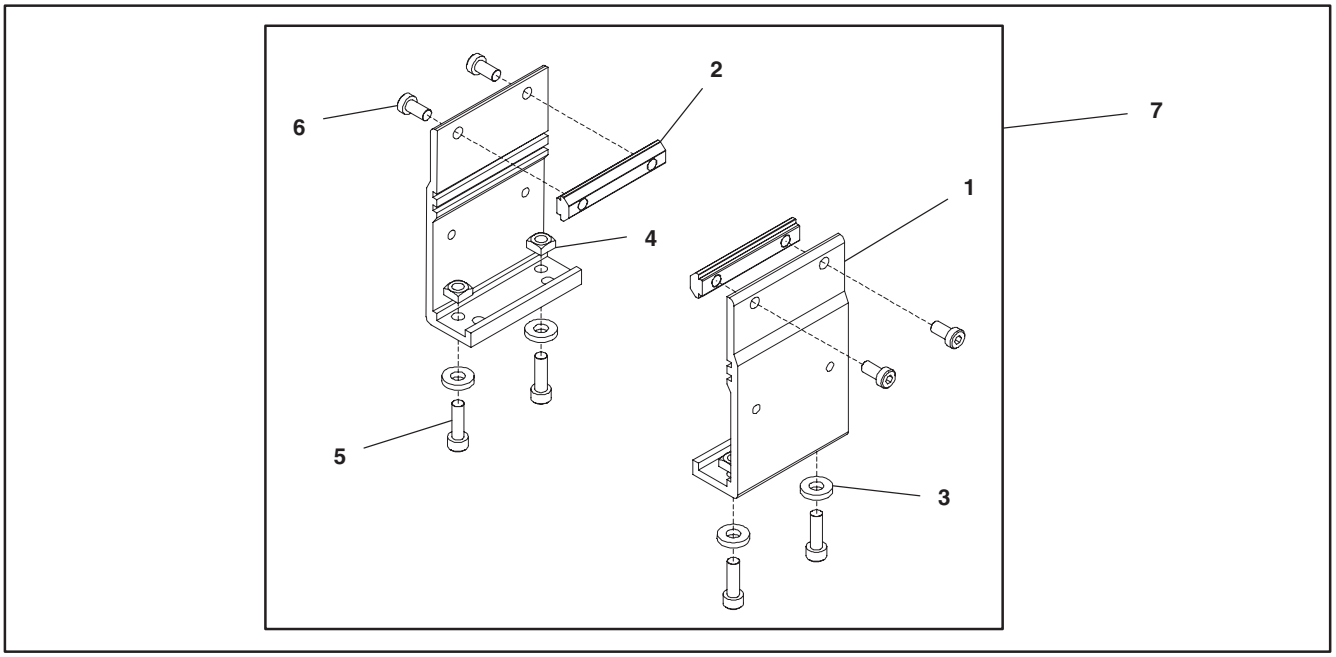
Flared Side Guiding



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

Item	Part Number	Description
3	202522M	Flared Guide 45° 2’ (610 mm)
	202523M	Flared Guide 45° 3’ (914 mm)
	202523M	Flared Guide 45° 4’ (1219 mm)
	202523M	Flared Guide 45° 5’ (1524 mm)
	202523M	Flared Guide 45° 6’ (1829 mm)
4	639971	Drop–In Tee Bar
5	910506M	Button Head Screw, M5 x 6 mm
6	911–512	Washer
7	920694M	Cap Low–Head Screw, M6 x 20 mm

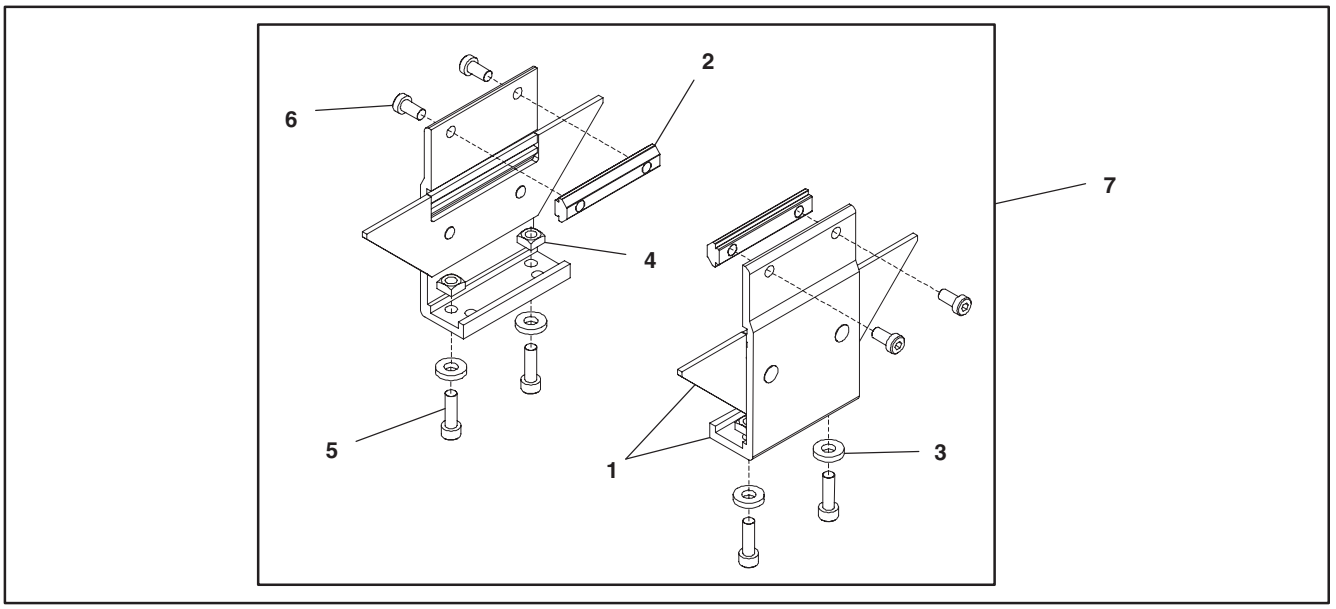
Flat Belt Stand Mount Assembly



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 20 mm
6	920692M	Socket Low Head Screw, M6 x 12 mm
7	240839	Flat Belt Stand Mount Assembly

Cleated Belt Stand Mount Assembly

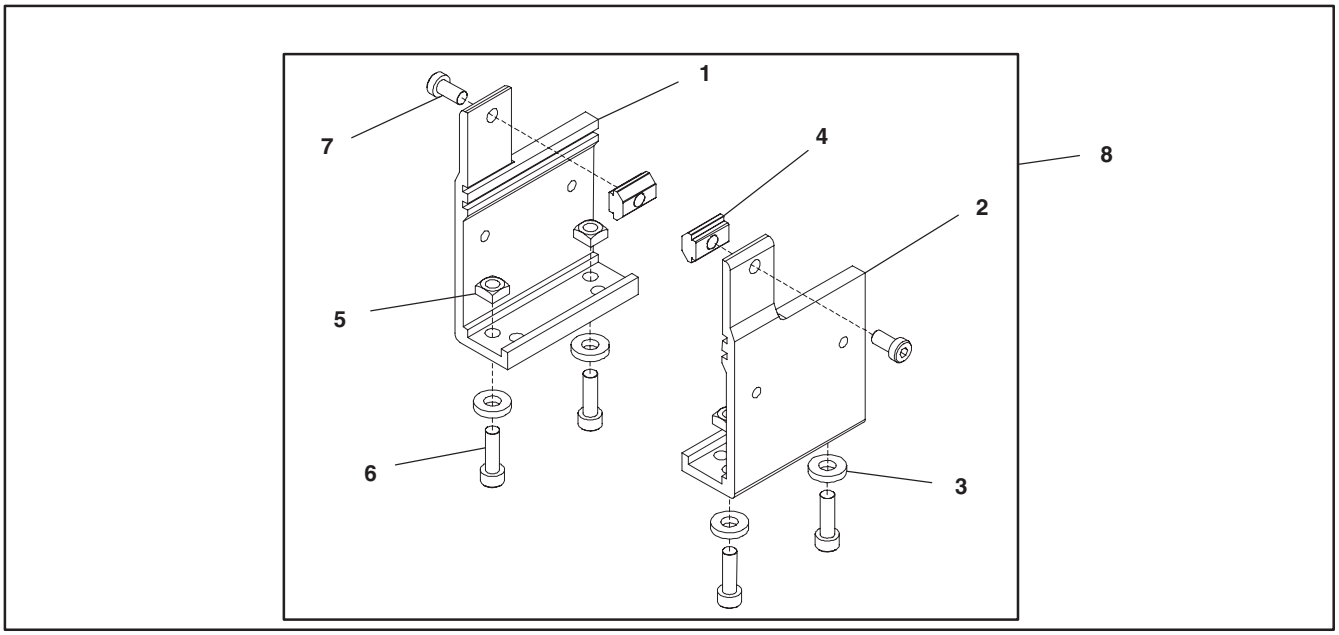


Item	Part Number	Description
1	240836	Cleated Mount Assembly
2	300150M	Drop−In Tee Bar
3	605279P	Washer
4	807−920	Square Nut, M6
5	920620M	Socket Head Screw, M6 x 20 mm

Item	Part Number	Description
6	920692M	Socket Low Head Screw, M6 x 12 mm
7	240838	Cleated Stand Mount Assembly

Service Parts

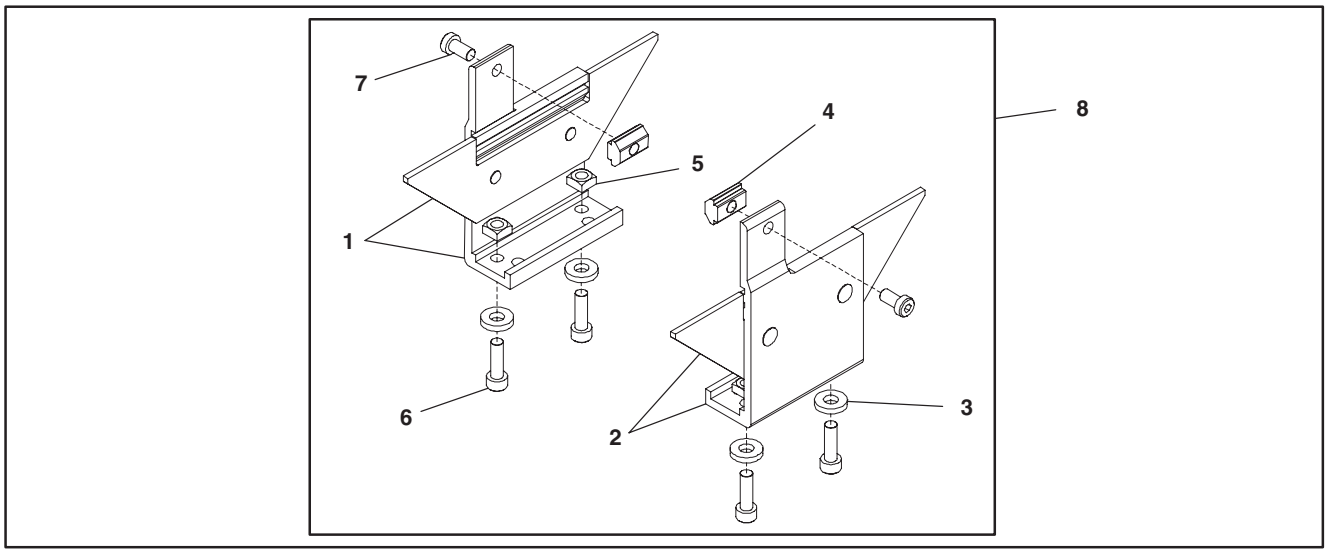
Flat Belt Stand Mount Assembly for 2’ (610 mm) Conveyors



Item	Part Number	Description
1	240833	Stand Mount, LH 2’ (610 mm)
2	240834	Stand Mount, RH 2’ (610 mm)
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 20 mm
7	920692M	Socket Low Head Screw, M6 x 12 mm
8	240847	Flat Belt Stand Mount Assembly for 2’ (610 mm) Conveyors

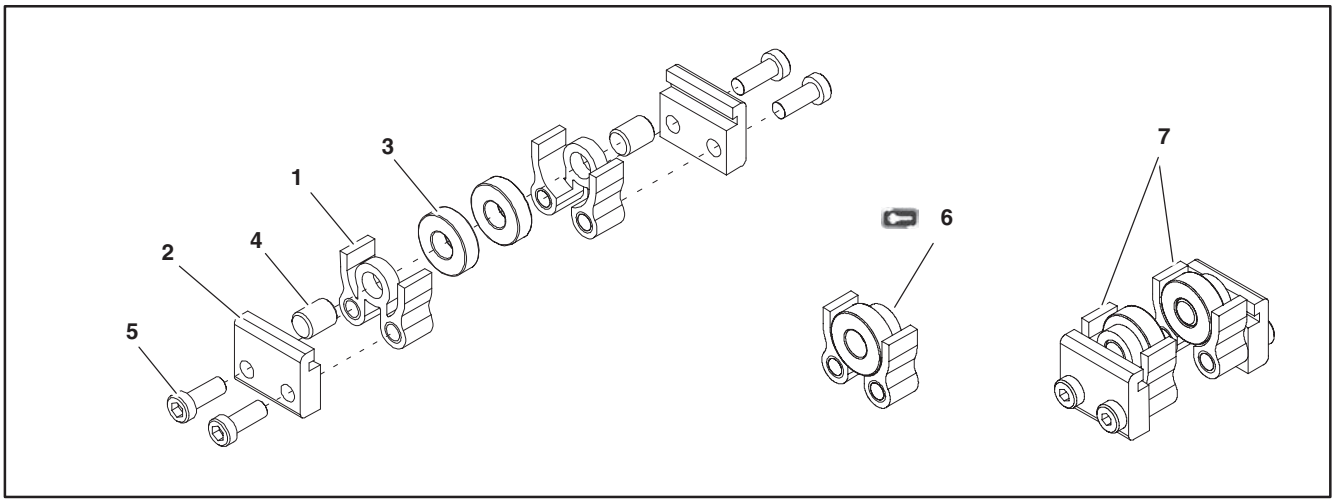
Cleated Belt Stand Mount Assembly for 2’ (610 mm) Conveyors



Item	Part Number	Description
1	240852	Cleated Stand Bracket Assembly LH 2’ (610 mm) Conveyor
2	240853	Cleated Stand Bracket Assembly RH 2’ (610 mm) Conveyor
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 20 mm
7	920692M	Socket Low Head Screw, M6 x 12 mm
8	240851	Cleated Belt Stand Mount Assembly for 2’ (610 mm) Conveyors

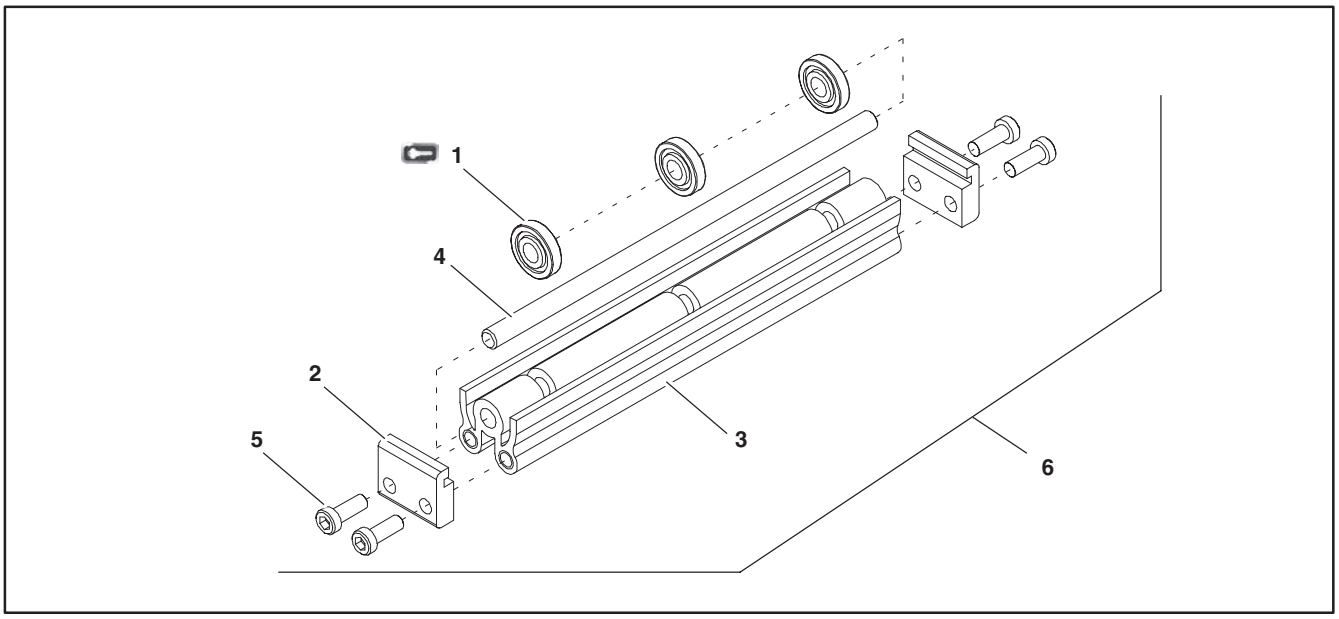
3” (70 mm) to 6” (152 mm) Flat Belt Return Roller



Item	Part Number	Description
1	240825	Return Roller Guard – Short
2	240827	Return Roller Clip
3	802–027	Bearing
4	913–100	Dowel Pin

Item	Part Number	Description
5	920693M	Socket Low Head Screw, M6 x 16 mm
6	240840	Roller Assembly (Includes Items 1, 3 and 4)
7	240830	2” (51 mm) to 6” (152 mm) Flat Belt Return Roller Assembly

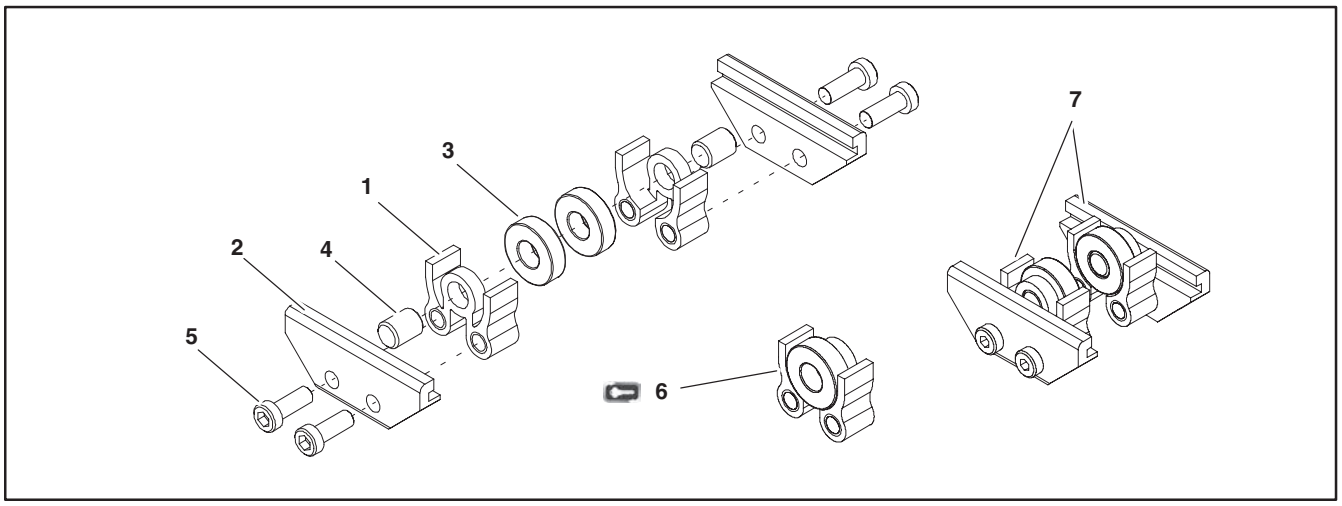
8” (203 mm) to 18” (457 mm) Flat Belt Return Roller



Item	Part Number	Description
1	240826	Return Roller
2	240827	Return Roller Clip
3	2409WW	Return Roller Guard
4	2410WW	Return Roller Rod
5	920693M	Socket Low Head Screw, M6 x 16 mm
6	2408WW	8” (203mm) to 24” (610mm) Flat Belt Return Roller Assembly
WW= Conveyor width reference: 03, 04, 05, 06, 08, 10, 12 & 18		

Service Parts

Cleated Belt Return Roller



Item	Part Number	Description
1	240825	Return Roller Guard – Short
2	240828	Cleated Return Roller Clip
3	802–027	Bearing
4	913–100	Dowel Pin

Item	Part Number	Description
5	920693M	Socket Low Head Screw, M6 x 16 mm
6	240840	Roller Assembly (Includes Items 1, 3 and 4)
7	240832	Cleated Belt Return Roller Assembly

Conveyor Belt Part Number Configuration

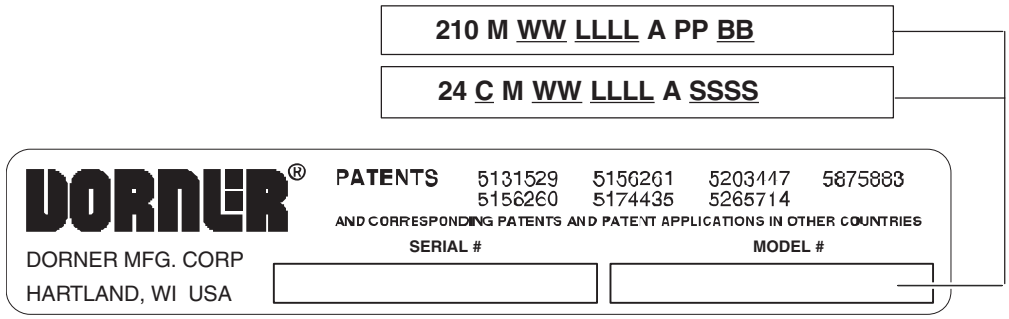


Figure 58

Flat Belt Part Number Configuration

Refer to Dorner patent plate **(Figure 58)**. 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 58)**. 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)

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	30%
MPB, 7200, 7300 Series, cleated and specialty belt	50%
AquaGard & AquaPruf Series conveyors	non-returnable items
Engineered to order products	case by case
Drives and accessories	30%
Sanitary stand supports	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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