2200 and 2300 Series Modular Belt iDrive Conveyors

Installation, Maintenance & Parts Manual

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851-728 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 & 2300 series conveyors are covered by Patent Numbers 5,174,435, 6,298,981, 6,422,382 and corresponding patents and patent applications in other countries.

Dorner reserves the right to make changes at any time without notice or obligation.

⚠ WARNING

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

⚠ DANGER

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

⚠ DANGER

DO NOT OPERATE CONVEYORS IN AN EXPLOSIVE ENVIRONMENT.

⚠ WARNING

Gearmotors may be HOT.

DO NOT TOUCH Gearmotors.

⚠ WARNING

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

⚠ WARNING

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

DO NOT REVERSE CONVEYORS.

⚠ WARNING

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

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

⚠ WARNING

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

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

Product Description

Typical Conveyor Components Figure 1:

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

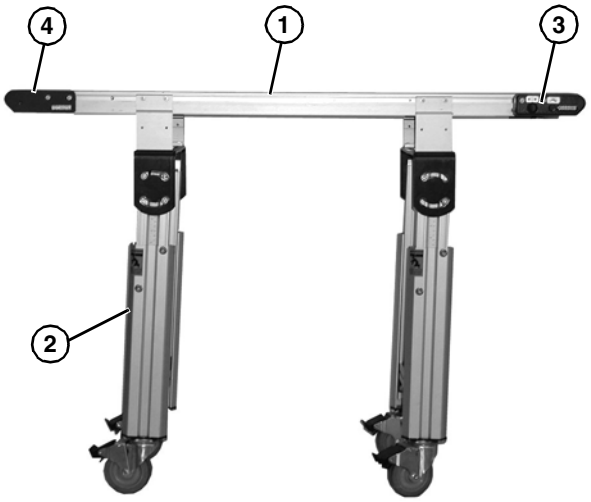


Figure 1

Typical Controller Components Figure 2:

1	Speed Control
2	Directional On/Off Switch

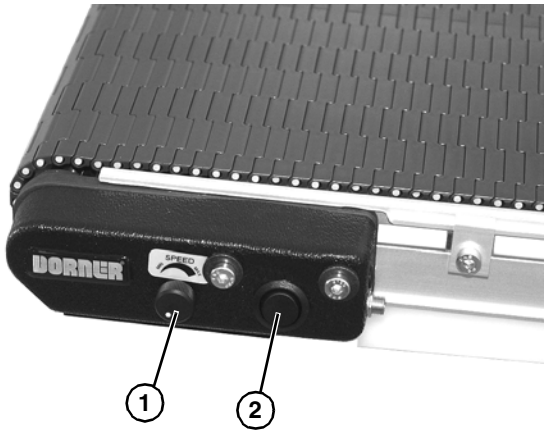
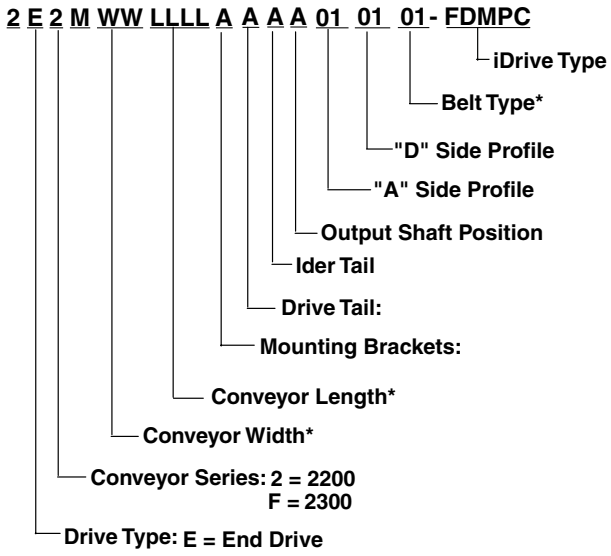


Figure 2

Specifications

Models

iDrive Conveyors



CE Specifications

1. CE Marked Models are “U” Document Language code only.
2. CE Marked Models are not equipped with high voltage power supply. Conveyor operates on 24VDC. Selection and final installation of CE rated power supply are the responsibility of the end user.
3. CE Marked Models operate on 24VDC. Emergency stops, wiring, and control circuits are not provided. Selection and final installation of CE rated emergency stops and control circuits are the responsibility of the end user.
4. CE Marked Models contain no application control circuits. If power is disconnected and reconnected this machine will restart automatically. Selection and final installation of CE rated control circuits are the responsibility of the end user.

Conveyor Supports:

Maximum Distances

1 = 18” (457 mm)

2 = 18” (457 mm)

3 = 72” (1828 mm)

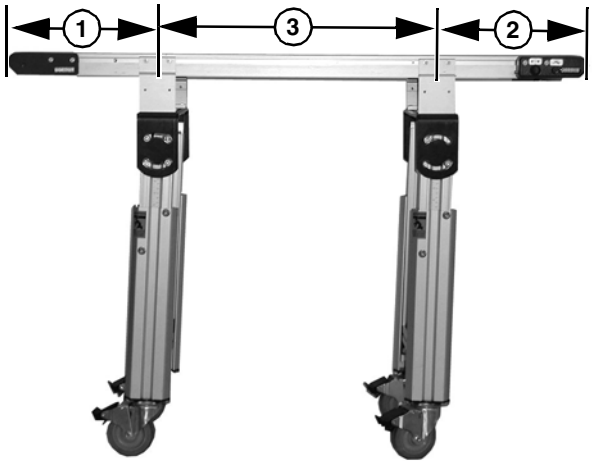


Figure 3

Specifications

Conveyor Width Reference (WW)	04	08	12	24
Conveyor Belt Width	4.0” (102 mm)	8.0” (203 mm)	12.0” (305 mm)	24.0” (610 mm)
Maximum Conveyor Load	See Load Capacity Chart			
Belt Travel	7.0” (120 mm) per revolution of spindle			
Maximum Belt Speed*	82 ft/minute (25 m/minute)			
Conveyor Length Reference (LLLL)	0200 - 1000 in 0001 increments			
Conveyor Length	2 ft (610 mm) to 10 ft (3048 mm) in 0.12” (3 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	25 watt	25 watt
Motor Voltage	24 volt DC, 0.8 amp	24 volt DC, 0.8 amp
Transformer Voltage	100-240 VAC, 50/60 Hz	100-240 VAC, 50/60 Hz
Gearmotor Ratio	23:1	66:1
Motor Type	Brushless DC	Brushless DC
Belt Speeds	8-82 Ft./Min., 6-59 Ft./Min.	2.8-28 Ft./Min., 2-20 Ft./Min.
Duty Cycle	Non-Continuous Duty	Non-Continuous Duty
Index Capability	Up to 30 per Minute	Up to 30 per Minute

Specifications

iDrive Load Capacity (lbs)

		8 - 82 Ft./Min.								
		LENGTH								
		2	3	4	5	6	7	8	9	10
WIDTH	4	13	20	26	25	25	25	24	24	23
	8	25	24	23	23	22	21	20	20	19
	12	21	20	19	18	17	16	15	14	13
	24	0	0	0	0	0	0	0	0	0

		6 - 69 Ft./Min.								
		LENGTH								
		2	3	4	5	6	7	8	9	10
WIDTH	4	13	20	27	33	40	47	46	46	45
	8	27	38	37	37	36	35	34	34	33
	12	35	34	33	32	31	30	29	28	27
	24	32	30	29	27	25	23	21	19	18

		2.8 - 28 Ft./Min.								
		LENGTH								
		2	3	4	5	6	7	8	9	10
WIDTH	4	13	20	27	33	40	47	53	60	67
	8	27	40	53	67	67	66	65	65	64
	12	40	60	64	63	62	61	60	59	58
	24	63	61	59	58	56	54	52	50	49

		2 - 20 Ft./Min.								
		LENGTH								
		2	3	4	5	6	7	8	9	10
WIDTH	4	13	20	27	33	40	47	53	60	67
	8	27	40	53	67	75	75	75	75	75
	12	40	60	75	75	75	75	75	75	75
	24	75	75	75	75	75	75	75	75	75

⚠ WARNING

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

DO NOT REVERSE CONVEYORS.

NOTE

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

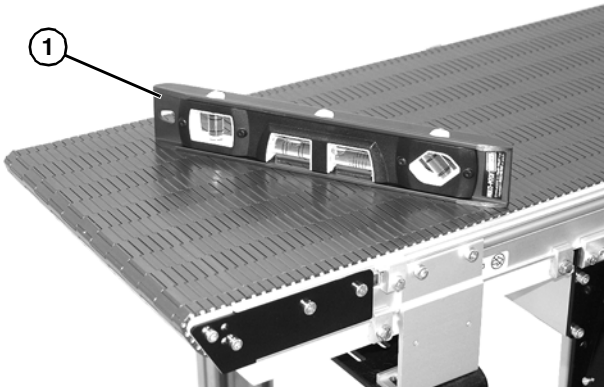


Figure 4

Required Tools

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

Recommended Installation Sequence

- Install support stands (see accessory instructions)
- Assemble conveyor frame (if required) (page 7)
- Attach mounting brackets to conveyor frame and stands (page 8)
- Install Belt (page 9)
- Mount gearmotor mounting package (see accessory instructions)
- Attach guides/accessories (See “Service Parts” on page 30. for details)

Conveyors Up to 10 ft (3048 mm)

No assembly is required. Install mounting brackets. Refer to “Mounting Brackets” on page 8.

Conveyors Longer Than 10 ft (3048 mm)

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

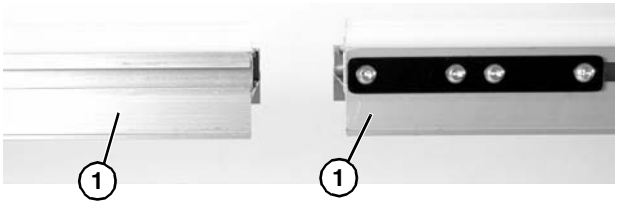


Figure 5

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

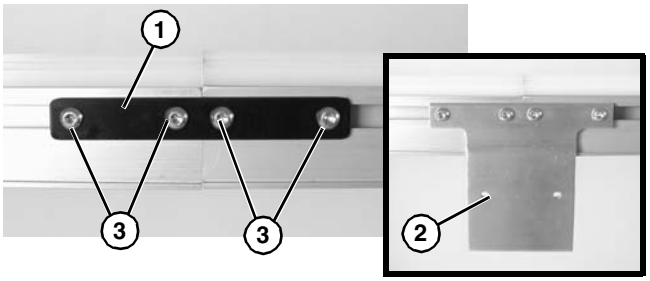


Figure 6

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

Installation

2200 Series Mounting Brackets

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

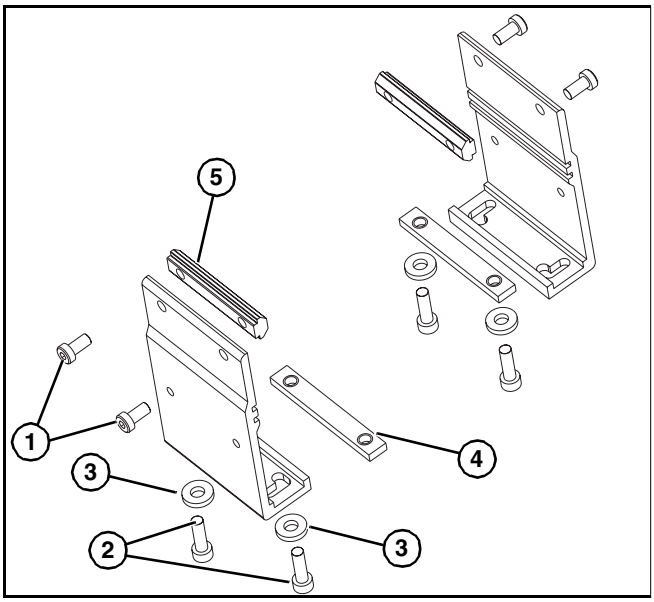


Figure 7

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

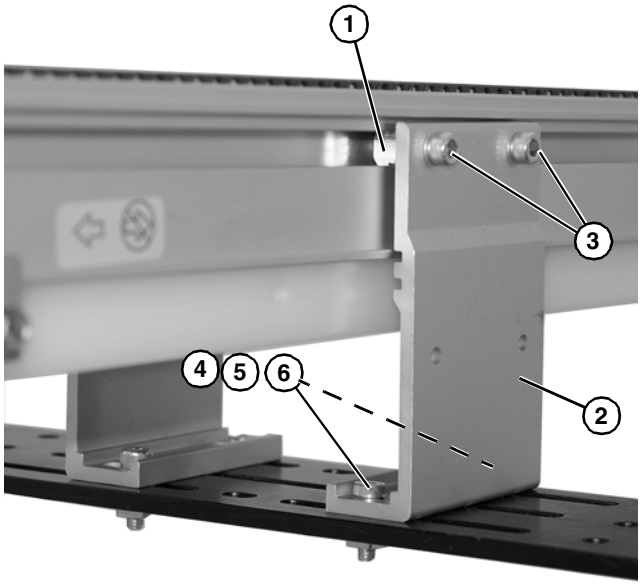


Figure 8

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

2300 Series Mounting Brackets

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

⚠WARNING

Installing self-drilling screws into the DustPruf side rail requires substantial force.

Failure to properly support the conveyor while installing self-drilling screws may cause the operator or conveyor to slip, causing severe injury.

SUPPORT CONVEYOR FRAMES WHILE INSTALLING SELF-DRILLING SCREWS.

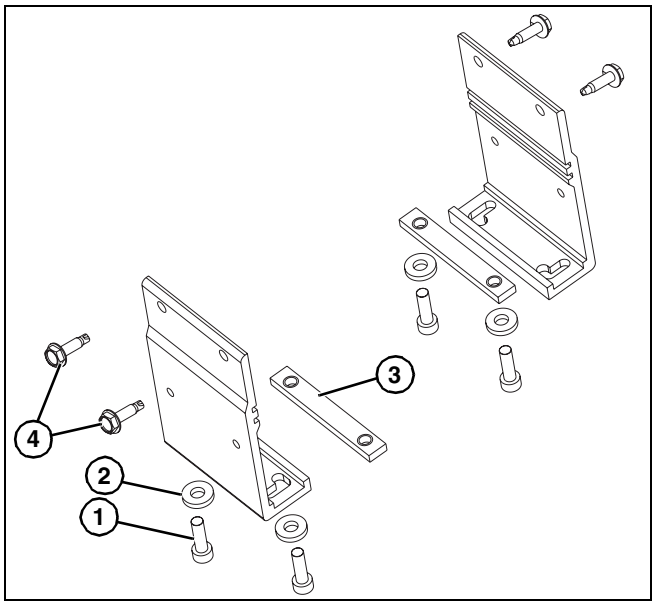


Figure 9

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

IMPORTANT

For proper methods of attachment to conveyor side rail for 2300 series see page 10.

3. Locate and retain self-drilling screws **(Figure 9, item 4)**.

NOTE

For maximum support distance see page 5.

4. Measure an equal distance **(Figure 10, item 1)** from end of head plate (on both sides of conveyor) and mark placement of mounting brackets **(Figure 10, item 2)**. Fasten mounting brackets to conveyor with mounting screws **(Figure 10, item 3)** following proper methods of attachment instructions on page 10.

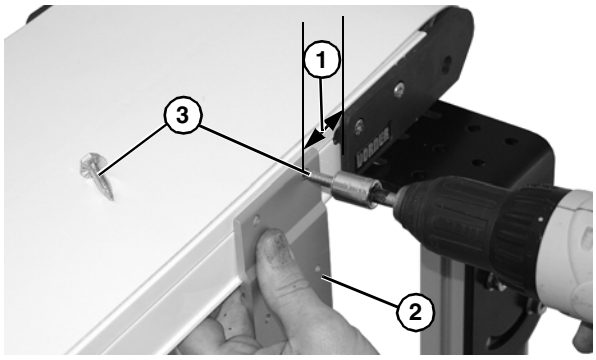


Figure 10

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

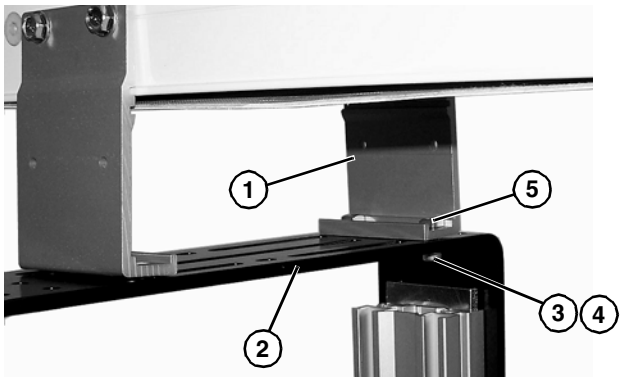


Figure 11

Installing Plastic Belt

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

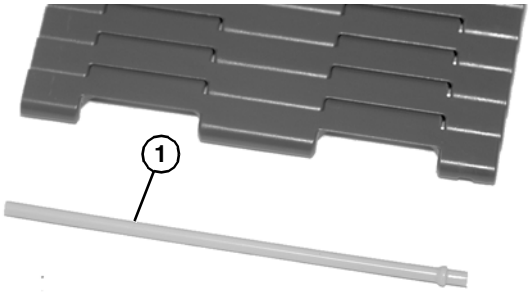


Figure 12

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

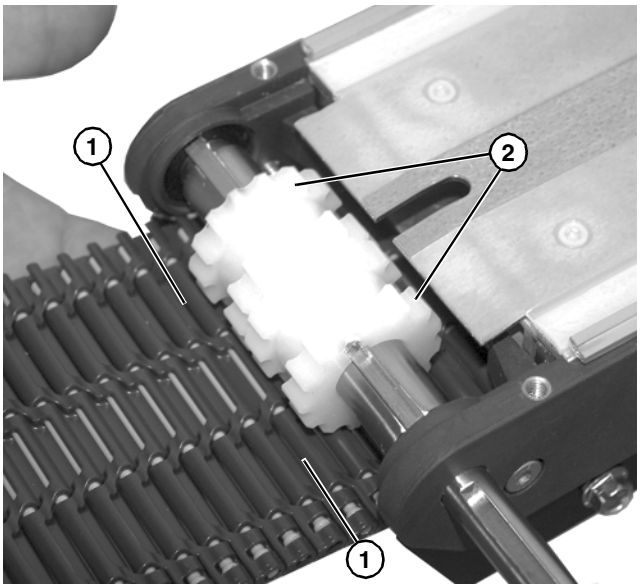


Figure 13

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

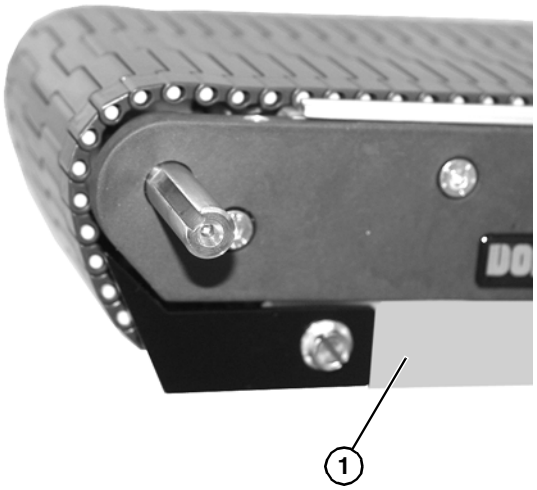


Figure 14

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

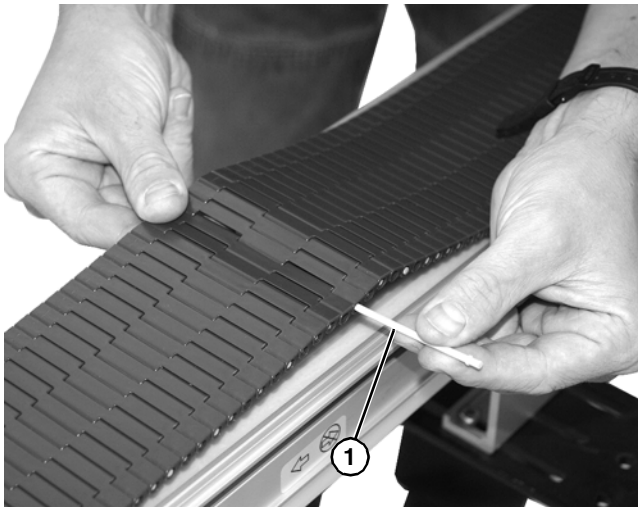


Figure 15

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

⚠WARNING

Installing self-drilling screws into the dustpruf side rail requires substantial force.

Failure to properly support the conveyor while installing self-drilling screws may cause the operator or conveyor to slip, causing severe injury.

SUPPORT CONVEYOR FRAMES WHILE INSTALLING SELF-DRILLING SCREWS.

The 2300 DustPruf side rail is designed for self-drilling attachment of brackets and accessories. This can be done in two methods: self-drilling screws or pre-drill for standard screws.

Self-Drilling Screws

All Dorner accessories are provided with 1/4-20 self-drilling screws.

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

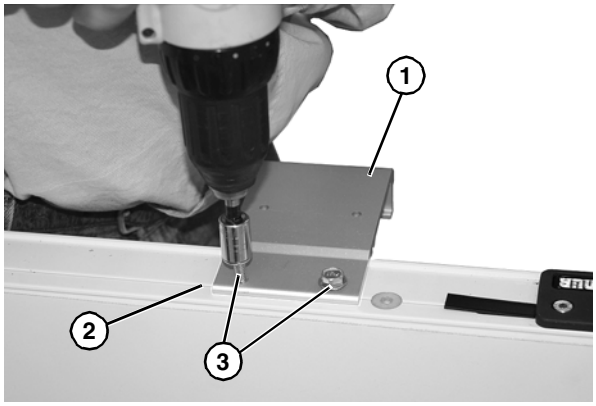


Figure 16

2. With a cordless drill or equivalent install self-drilling screws **(Figure 16, item 3)**. Use high speed setting to drill through side wall. Once the tap portion is started switch drill power to a lower speed. Do not fully tighten with drill.
3. Hand tighten the screws to secure **(Figure 17)**. Recommended torque is 150 in.lbs (17 Nm).

Figure 17

Pre-Drill for Standard Screws

The DustPruf side rail will also accept standard screws. M6-1.0 and 1/4-20 are acceptable. Strength grade 8 is recommended.

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

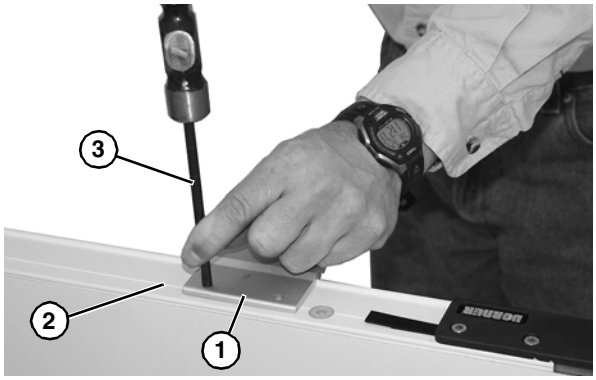


Figure 18

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

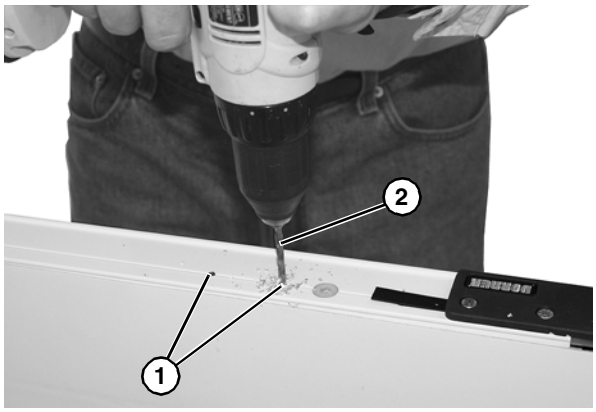


Figure 19

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

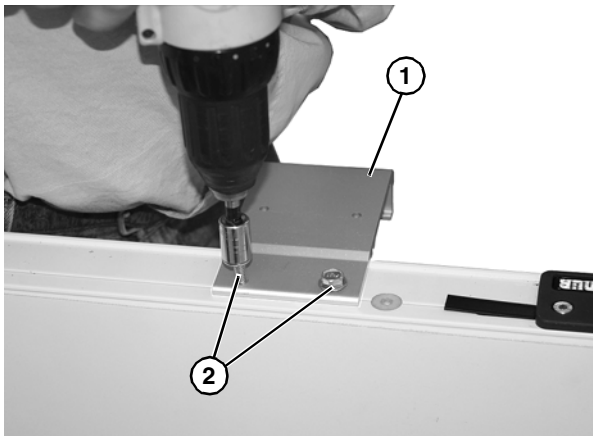


Figure 20

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

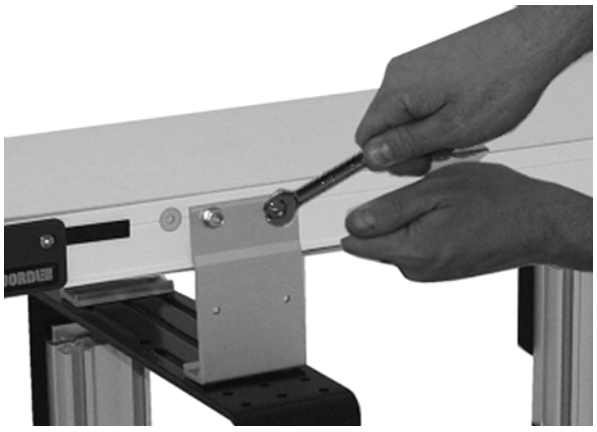


Figure 21

Guiding (2300 Series Only)

⚠ WARNING

Installing self-drilling screws into the DustPruf side rail requires substantial force.

Failure to properly support the conveyor while installing self-drilling screws may cause the operator or conveyor to slip, causing severe injury.

SUPPORT CONVEYOR FRAMES WHILE INSTALLING SELF-DRILLING SCREWS.

Due to the DustPruf construction ALL guiding must be located and installed by the end user. Take care in locating retaining clips prior to final installation.

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

NOTE

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

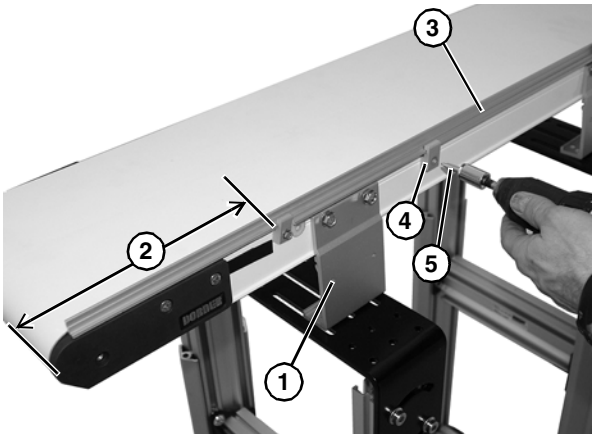


Figure 22

2. Hold guide **(Figure 22, item 3)** and retaining clips **(Figure 22, item 4)** to conveyor side rail. Install self-drilling screws **(Figure 22, item 5)** following the "Proper Methods of Attachment to Side Rails (2300 Series Only)" on page 10 procedure.

Wiring

⚠ WARNING

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

The 2200 and 2300 series iDrive is available in 3 models:

A. Cover Mounted Controls*

B. Cover Mounted Controls with Remote Start/Stop Cable*

C. Customer Wired Controls with Flying Leads

*Both options A and B are available with AC power supply or customer supplied power supply.

Cover Mounted Controls with 115 volt Power Supply

1. No wiring is required. Attach quick disconnect end of power supply **(Figure 23, item 1)** to power jack **(Figure 23, item 2)**.

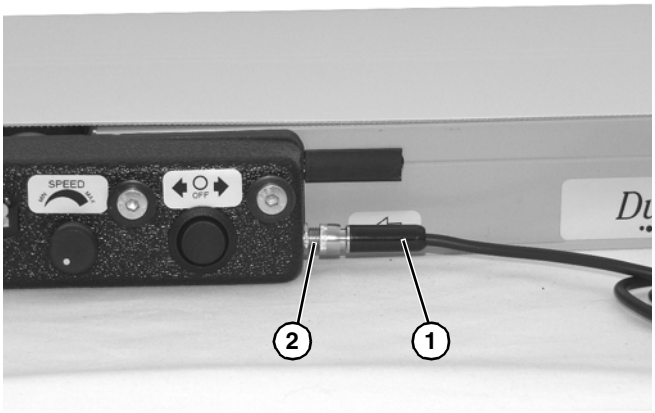


Figure 23

Cover Mounted Controls with Customer Provided Power Supply

1. Locate the male disconnect plug **(Figure 25, item 1)** provided.

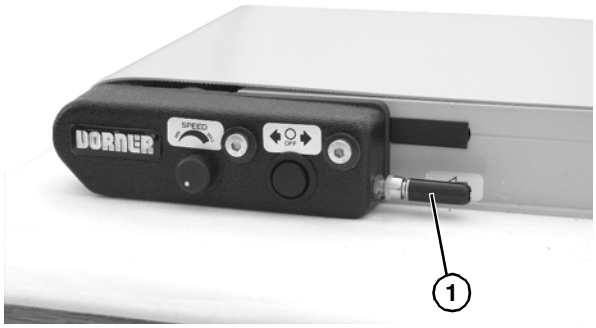


Figure 24

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

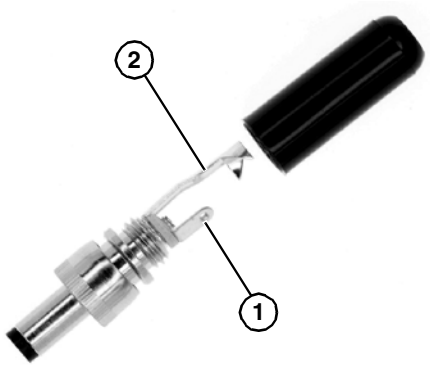


Figure 25

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

Cover Mounted Controls

1. Connect power supply to cover. See page 12.
2. Select conveyor running direction with directional switch **(Figure 26, item 1)**.

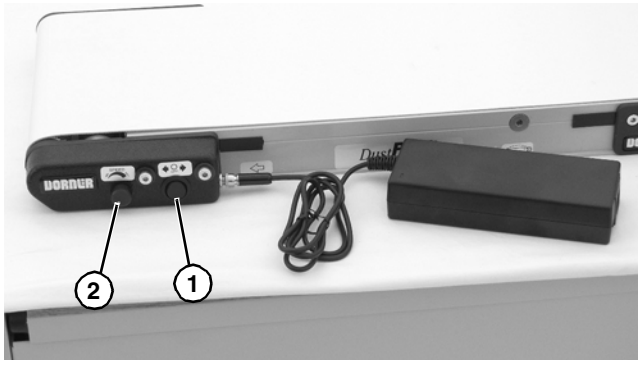


Figure 26

3. Select conveyor speed with speed control knob **(Figure 26, item 2)**.

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

Cover Mounted Controls with Remote Start/Stop Cable

1. Connect power supply to cover. See page 13.
2. Select conveyor running direction with directional switch **(Figure 27, item 1)**.

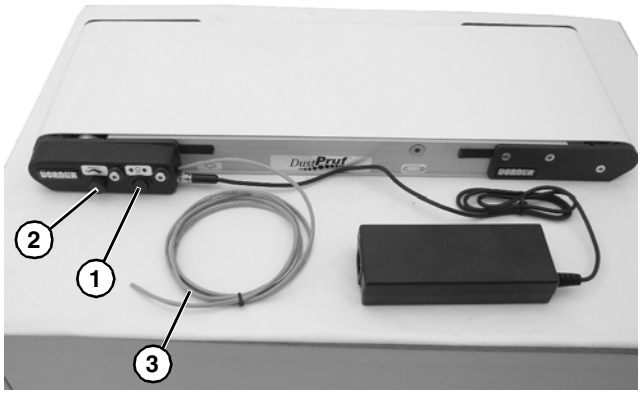


Figure 27

3. Select conveyor speed with speed control knob **(Figure 27, item 2)**.
4. Remote start/stop cable **(Figure 27, item 3)** comes with wire nut over remote leads to allow test running conveyor.
5. Remove wire nut and connect red and black wires to switching device. Switching device minimum rating 1 amp @ 24 VDC.

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

Cover Mounted Controls with Photo Eye Option

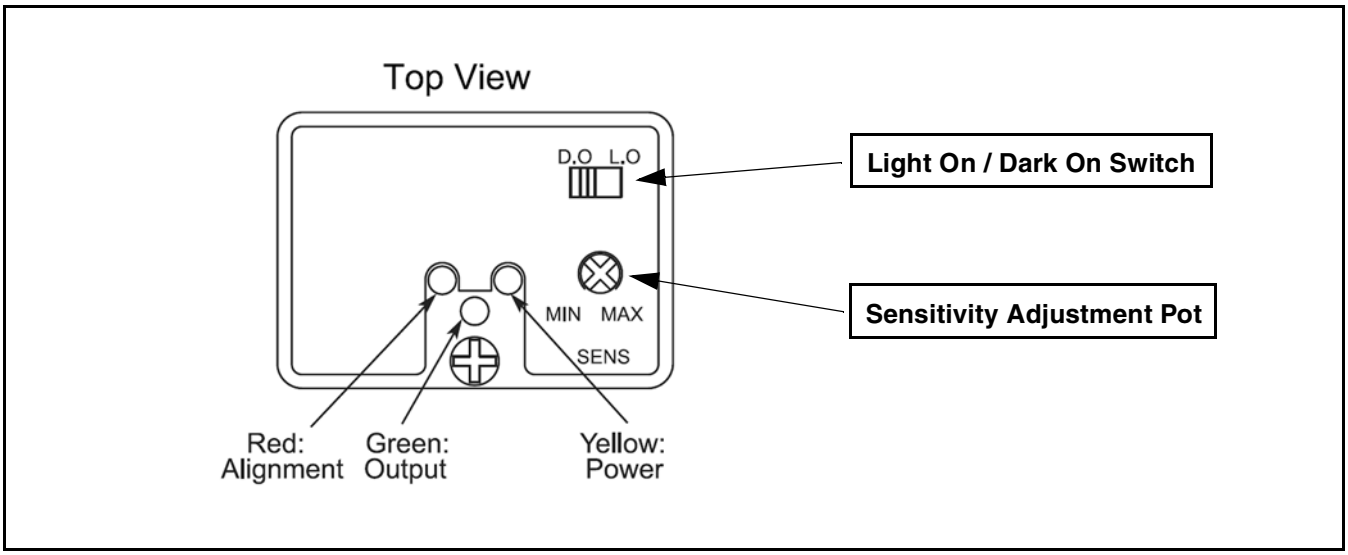


Figure 28

1. Mount photo eye and reflector bracket to side of conveyor close to zone to be sensed.
2. Connect power supply to AC input power, photo eye plug, and to conveyor drive cover. Adjust conveyor running direction switch to off (center) position. Photo eye should have yellow LED lit.
3. Adjust reflector to align with red beam emitted from photo eye and be at a 90 degree +/- 15 degree angle to photo eye face. When reflector is properly aligned, photo eye will have yellow and red LED lit. Green LED indicates output relay is energized.
4. Adjust photo eye sensitivity by placing a sample object in the beam. Unscrew clear cover on photo eye top and slowly turn the gain adjustment clockwise (see caution below concerning pot adjustment) until the green (output) LED activates (assuming the sensor is in the light operate mode). Note the position and remove the sample object. Now continue turning the sensitivity setting clockwise to find the position where the green LED activates from the background reflection. Reset the sensitivity midway between the two positions.

⚠ CAUTION

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

5. Photo eye comes preset to Light-On operation which causes the conveyor to run when the sensed zone is clear and stop when the sensed zone is blocked. For Dark-On operation move selector to D.O. position (**Figure 28**).
6. Select conveyor running direction with directional switch (**Figure 26, item 1**). If Dark-On operation is selected, temporarily block photo eye to energize conveyor.
7. Select conveyor speed with speed control knob (**Figure 26, item 2**).

Customer Wired Controls with Flying Leads

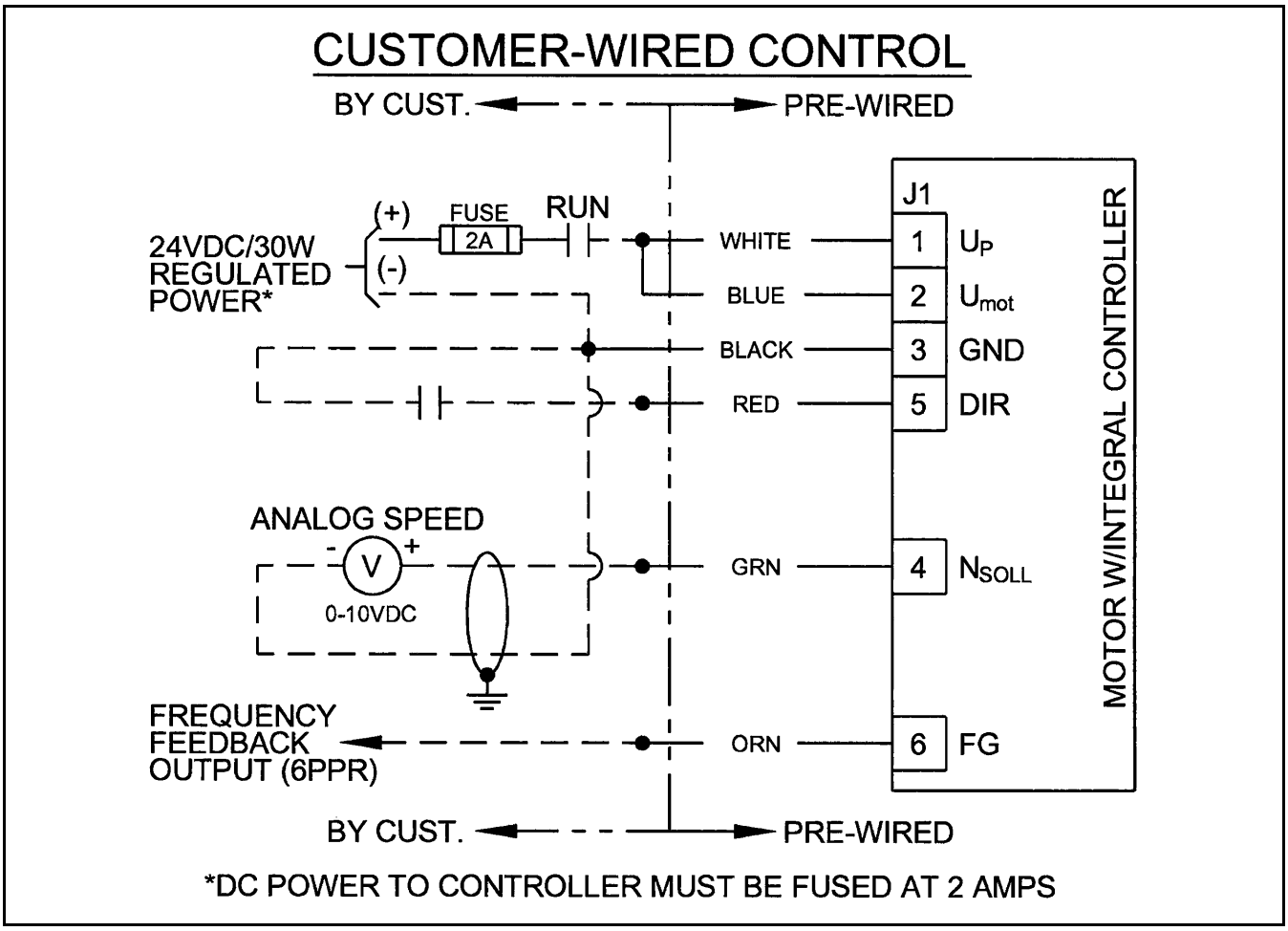


Figure 29

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

1. Locate lead wires (**Figure 30, item 1**) extending from iDrive cover. Determine wiring diagrams based on diagrams above (**Figure 29**).

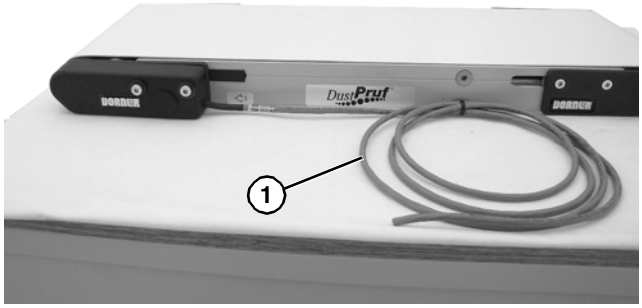


Figure 30

2. For A position drive, connect black and red wires.
3. For D position drive, remove red wire.

NOTE
Plastic chain should never run in push direction.

Required Tools

Standard Tools

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

Special Tools

- 807-1716 Bearing Puller Tool (or equivalent)
- 450293 Bearing Installation Tool (Bearing Pusher)
- 456063 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

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

Belt Removal

1. Choose one link on either end of the conveyor to remove belt pin. Locate end of rod without retaining feature (**Figure 31, item 1**).

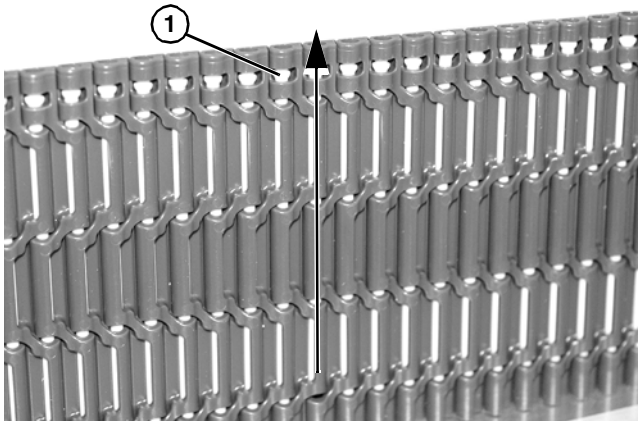


Figure 31

IMPORTANT

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

2. Insert punch **(Figure 32, item 1)** into non-retaining side of belt, pushing rod out.

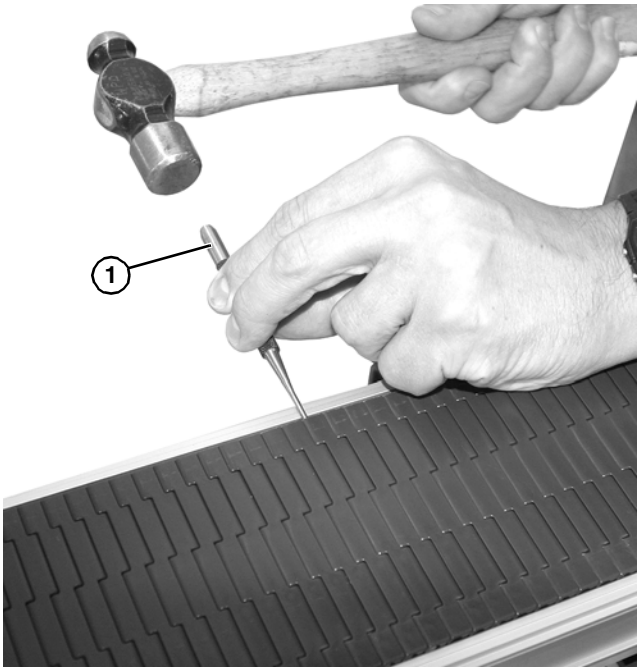


Figure 32

3. Remove rod **(Figure 33, item 1)** and separate belt.

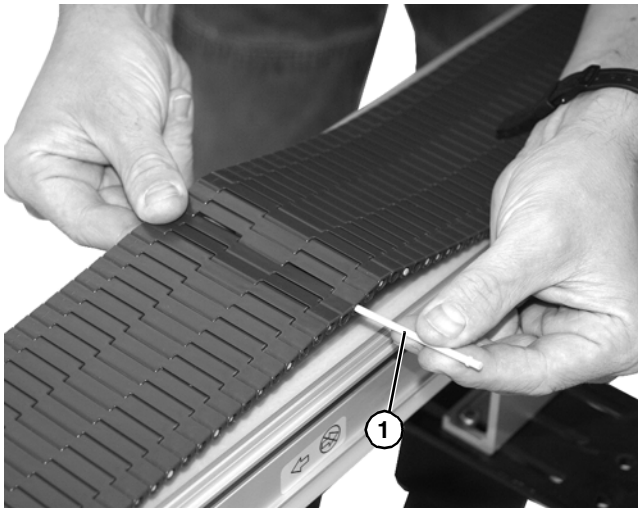


Figure 33

4. Pull back topside of belt to the drive end of the conveyor. See Figure 34.

Figure 34

5. Remove belt by pulling belt out of bottom wear strips **(Figure 35, item 1)**.

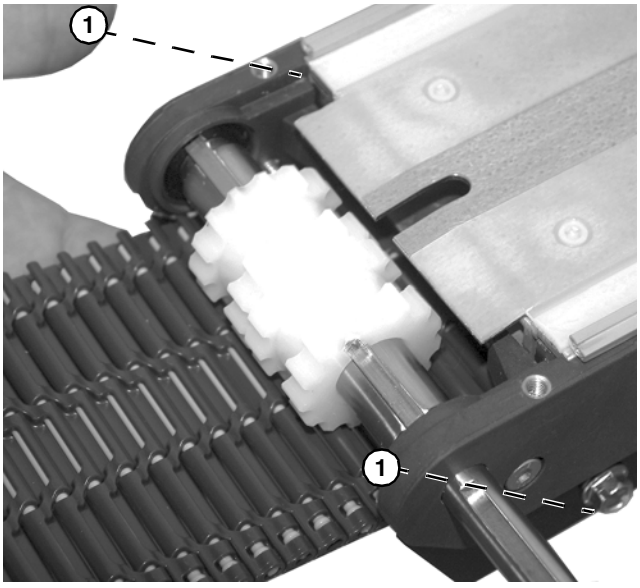


Figure 35

Belt Installation

1. See “Installing Plastic Belt” page 9.

Preventive Maintenance and Adjustment

Conveyor Belt Tension

⚠WARNING

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

NOTE

The Modular Belt Conveyor is designed to operate with minimal belt tension. Conveyor will come with proper amount of belt sag at drive end of conveyor belt. See Figure 36. As belt stretches, it may be necessary to remove links to avoid too much belt sag. See Figure 37.

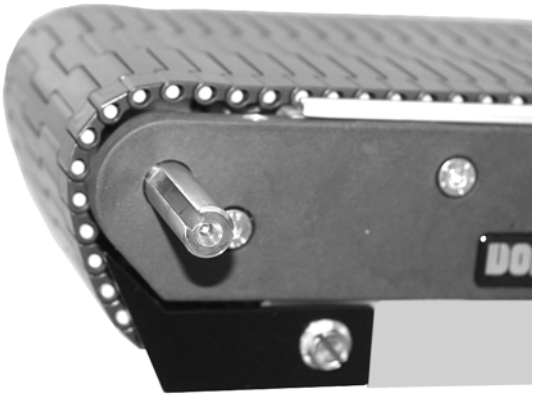


Figure 36

Figure 37

⚠WARNING

Operating conveyor with belt sag beyond maximum shown in Figure 37 will create belt pinch points which can cause injury.

REMOVE BELT LINKS IF MAXIMUM SAG IS REACHED

Removal of Belt Links

1. Choose one link on either end of the conveyor to remove belt pin. Locate end of rod without retaining feature (**Figure 38, item** 1).

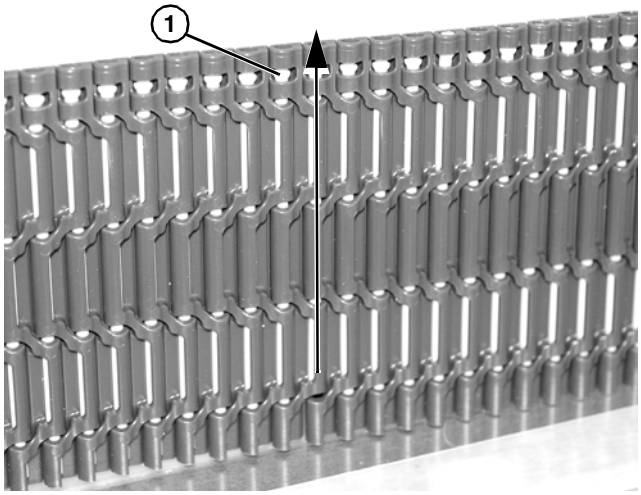


Figure 38

IMPORTANT

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

2. Insert punch **(Figure 39, item 1)** into non-retaining side of belt, pushing rod out.

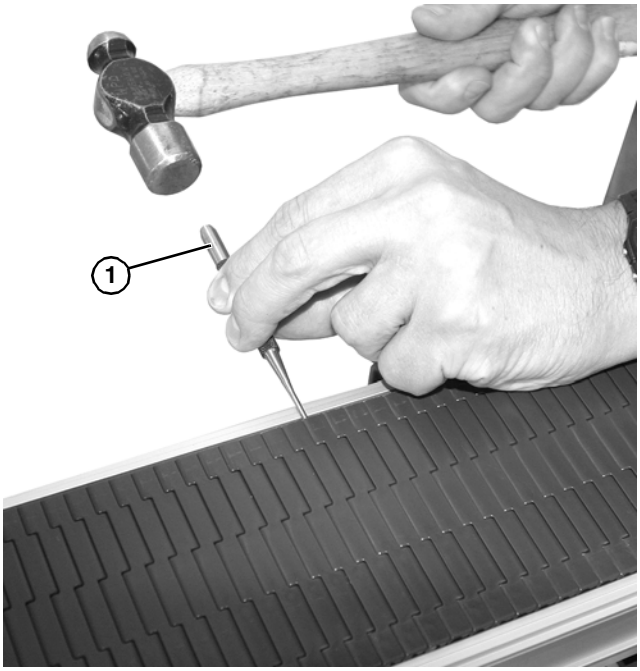


Figure 39

3. Remove rod **(Figure 40, item 1)** and separate belt.

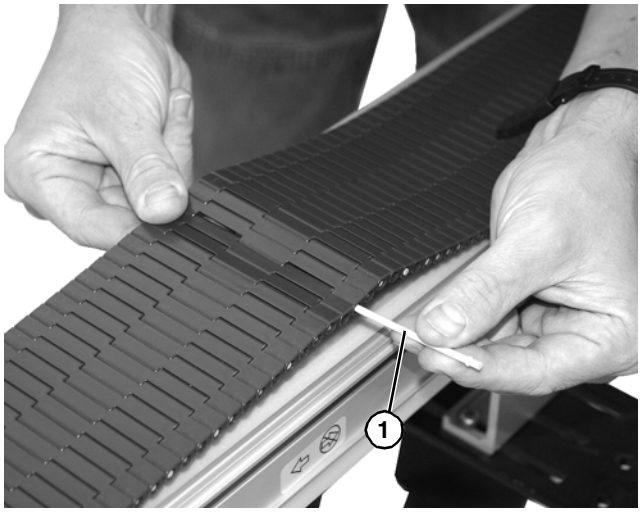


Figure 40

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

5. Splice the belt together by pushing the plastic rod **(Figure 41, item 1)** through the side hole on the rod retaining side of belt.

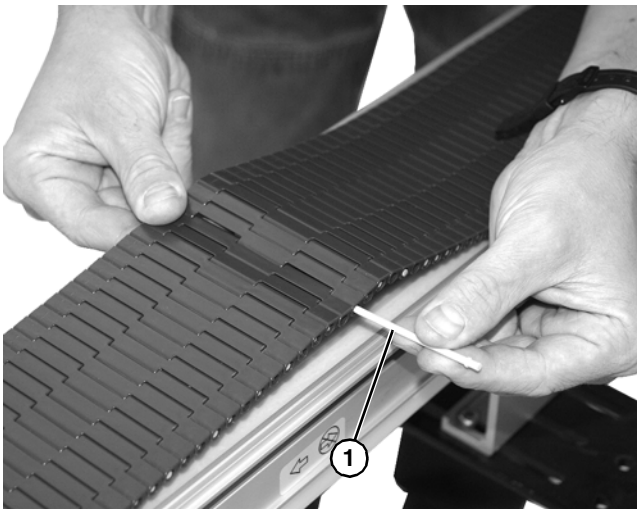


Figure 41

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

Pulley and Sprocket Removal

⚠WARNING

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

iDrive Tail

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 16.)

2. Remove inframe drive side cover **(Figure 42, item 1)** by removing two iDrive cover screws **(Figure 42, item 2)**.

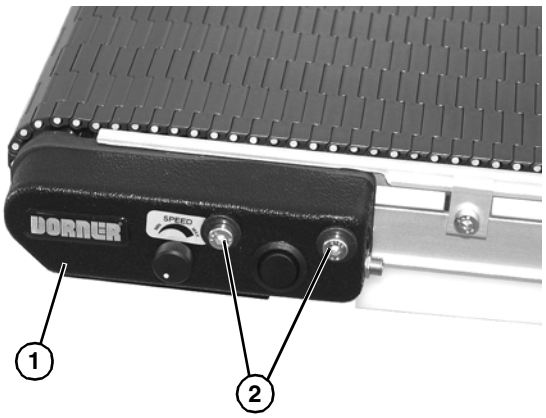


Figure 42

3. Unplug motor connector **(Figure 43, item 1)** from cover wiring connector **(Figure 43, item 2)**.

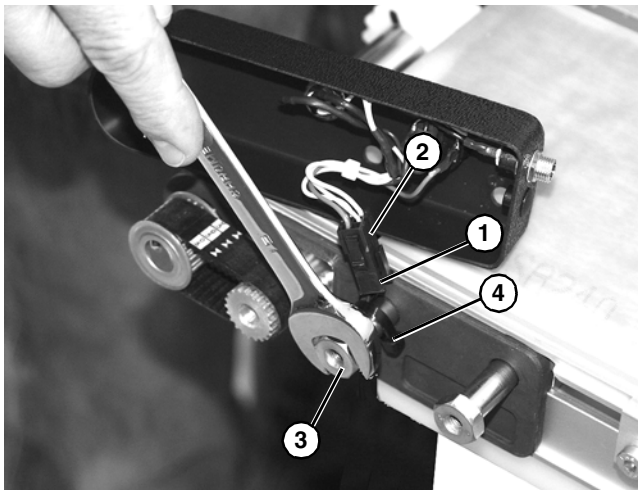


Figure 43

4. Remove hex standoff **(Figure 44, item 3)** and remove tie strap **(Figure 44, item 4)** and wiring harness from hex standoff.
5. Loosen four clamp plate screws **(Figure 44, item 1)**.

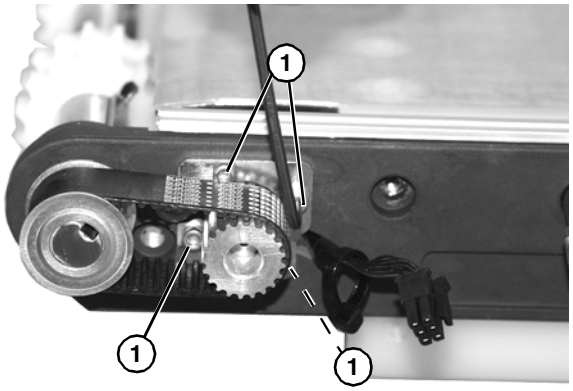


Figure 44

6. Loosen timing belt tension cam **(Figure 45, item 1)**.

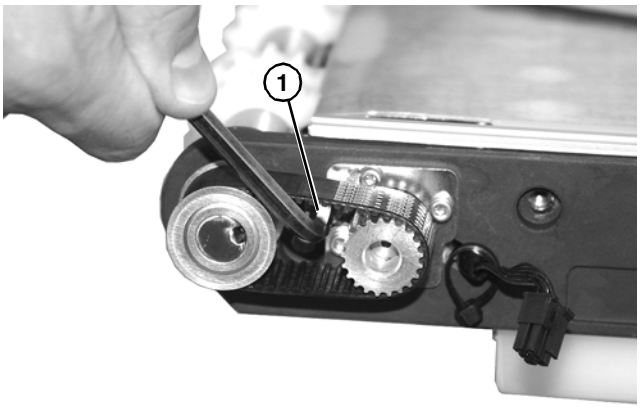


Figure 45

7. Loosen two set screws **(Figure 46, item 1)** on drive pulley **(Figure 46, item 2)**. Slide drive pulley outward off of the gearmotor shaft, and remove timing belt **(Figure 46, item 3)**.

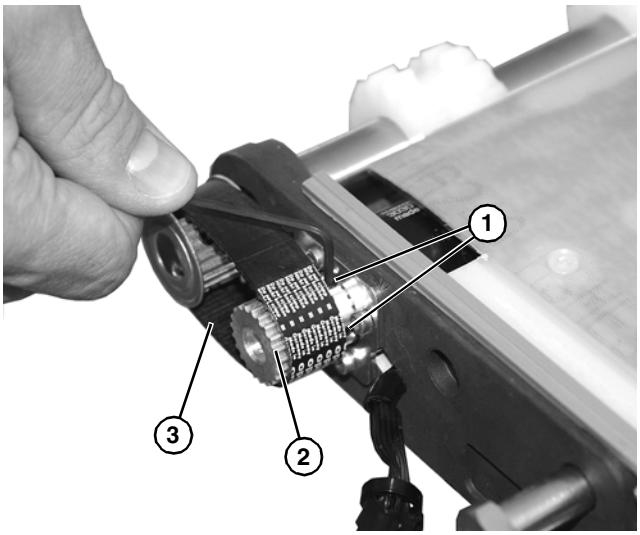


Figure 46

⚠ WARNING

Drive shaft keyway may be sharp. HANDLE WITH CARE.

8. Loosen two set screws **(Figure 47, item 1)** on driven pulley **(Figure 47, item 2)**, and slide off of shaft to remove.

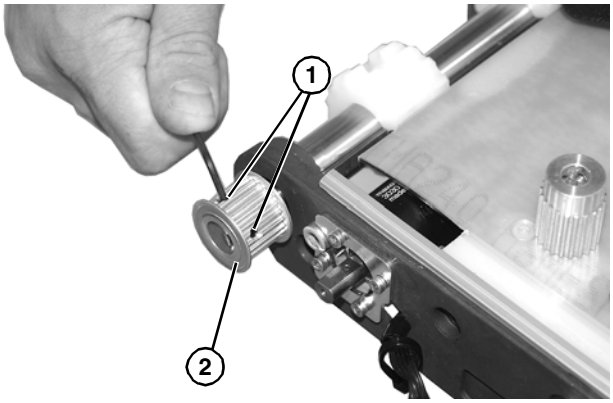


Figure 47

9. Remove driven pulley **(Figure 47, item 2)**.
10. Remove two head plate fastening screws **(Figure 48, item 1)** from opposite side of conveyor.

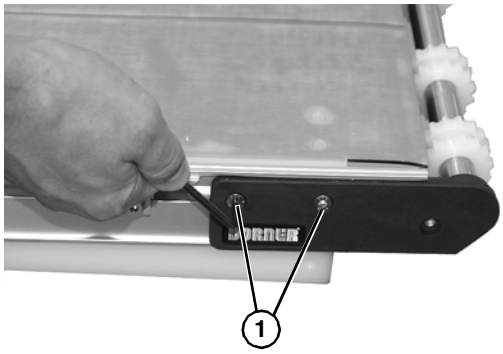


Figure 48

⚠CAUTION

Spindle can slide out.

11. Remove head plate **(Figure 49, item 1)** from frame.

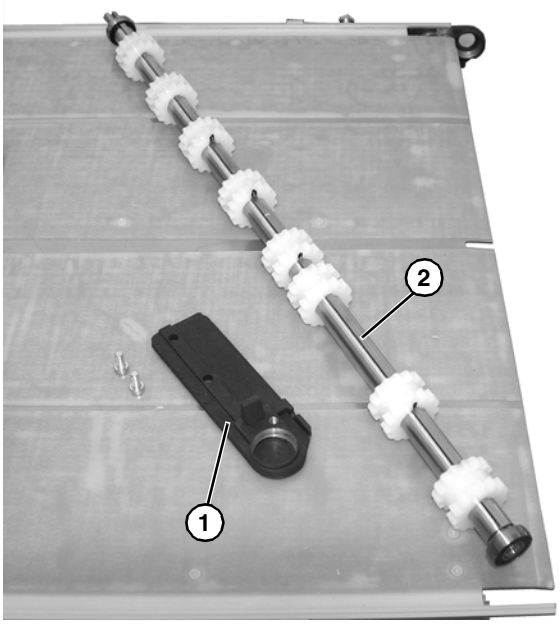


Figure 49

12. Replace spindle **(Figure 49, item 2)**.

Bearing Removal & Replacement

Removal

1. Use bearing removal tool (807-1078) **(Figure 50, item 1)** to remove bearings from drive pulley.

IMPORTANT

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

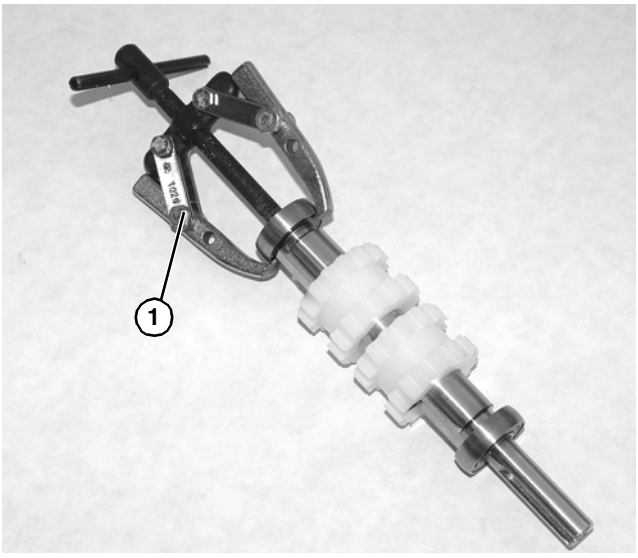


Figure 50

2. Slide free moving sprocket(s) **(Figure 51, item 1)** off the end of pulley **(Figure 51, item 2)**.

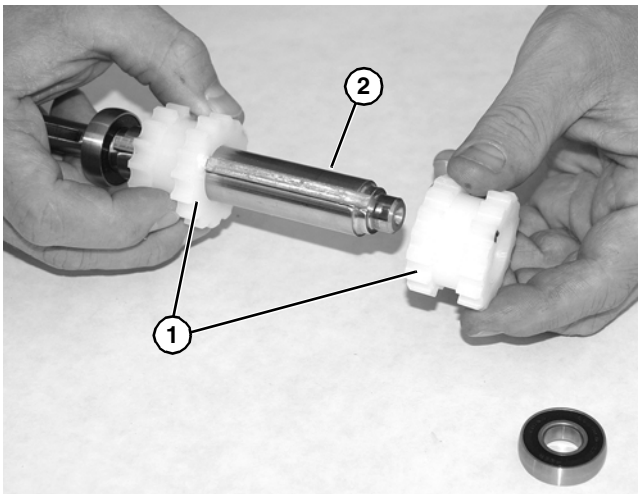


Figure 51

Replacement

1. Install required quantity of sprockets **(Figure 52, item 1)** onto drive pulley **(Figure 52, item 2)**.

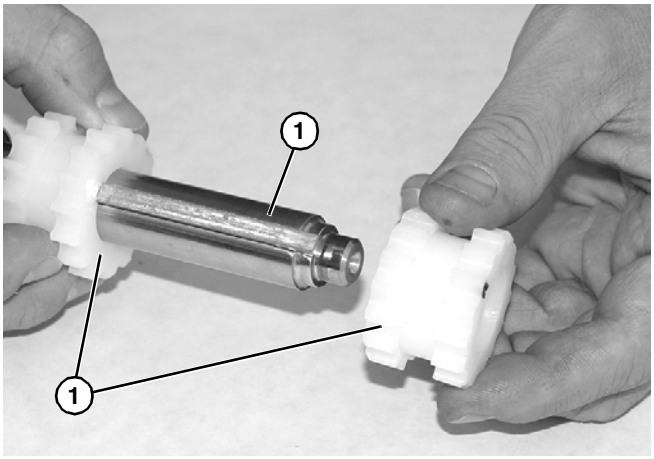


Figure 52

2. Press new bearing onto drive pulley using installation tool 450293 **(Figure 53, item 1)**.

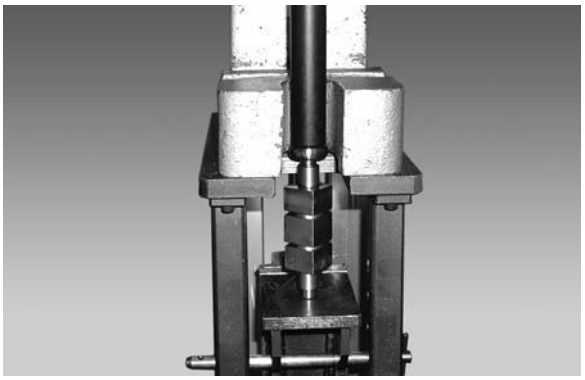


Figure 53

3. Install pulley assembly **(Figure 54, item 1)** on conveyor head plate **(Figure 54, item 2)** and install opposite end head plate **(Figure 54, item 3)**.

Figure 54

4. Install and tighten fastening screws **(Figure 55, item 1)** to 60 in-lb (7 N-m).

Figure 55

Drive Spindle Installation

1. Install drive spindle **(Figure 56, item 1)** into head plate **(Figure 56, item 2)**. Install head plate **(Figure 56, item 3)** and install screws **(Figure 56, item 4)**.

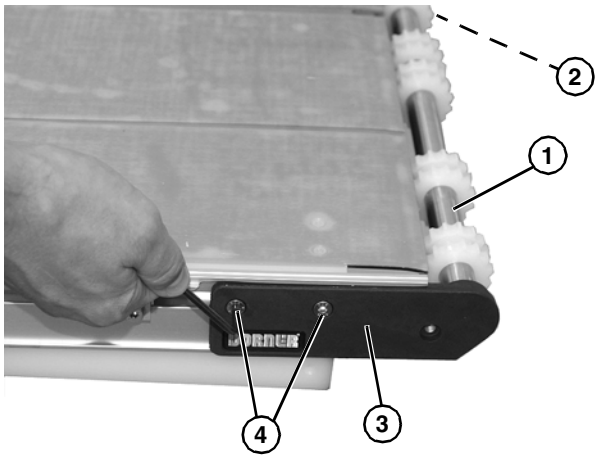


Figure 56

⚠ WARNING

Drive shaft keyway may be sharp. HANDLE WITH CARE.

2. Install driven pulley **(Figure 57, item 1)** onto conveyor shaft until flush with spindle end. Line up longer set screw **(Figure 57, item 2)** on pulley over keyway **(Figure 57, item 3)** of shaft. Tighten set screw **(Figure 57, item 2)** and set screw **(Figure 57, item 4)** to 18 in-lb (7 Nm).

⚠ CAUTION

Failure to install the longer set screw into the keyway will cause the setscrew to protrude into the timing belt, which will cause the conveyor to run erratically and may cause damage to the timing belt and the gearmotor shaft.

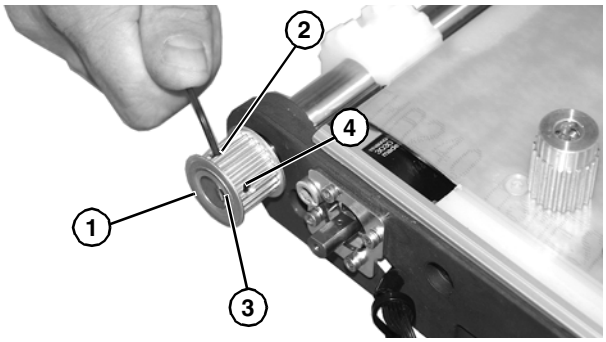


Figure 57

3. Slip timing belt **(Figure 58, item 1)** over driven pulley **(Figure 58, item 2)** and slide drive pulley **(Figure 58, item 3)** through timing belt onto gearmotor shaft.

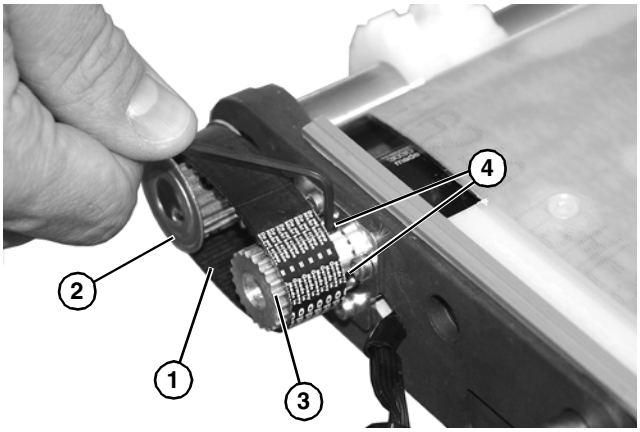


Figure 58

4. Tighten drive pulley set screws **(Figure 58, 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 59, item 1)**, making certain that pointer **(Figure 59, item 2)** on cam is pointing towards the motor drive spindle **(Figure 59, item 2)**.

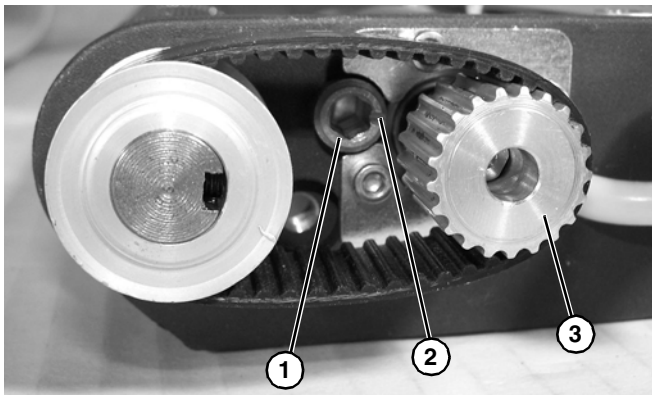


Figure 59

6. Rotate tension cam **(Figure 59, item 1)** to obtain 1/8 - 1/4" belt deflection at center of belt **(Figure 60, item 1)** with approximately 3-5 in-lb of pressure. Tighten four clamp plate screws **(Figure 60, 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.

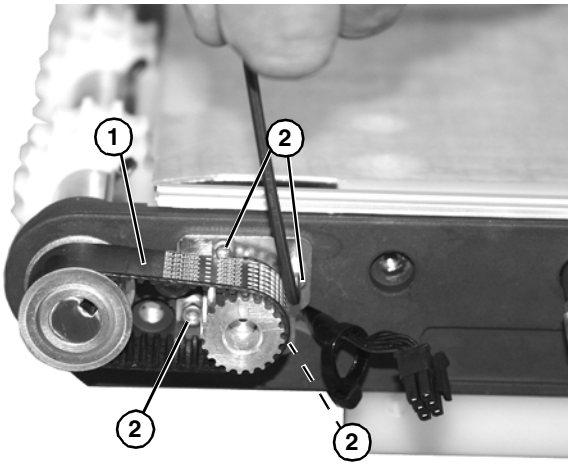


Figure 60

7. Install inframe drive side cover **(Figure 61, item 1)** with two head plate fastening screws **(Figure 61, item 2)**.

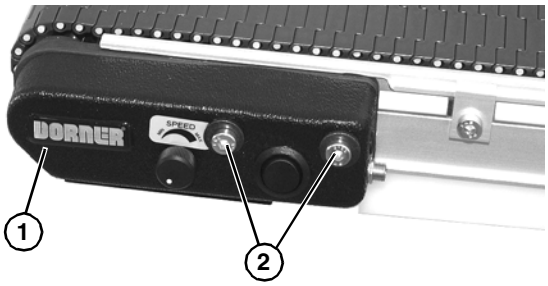


Figure 61

Idler End Wear Items

⚠ WARNING

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

Remove conveyor belt to access pulley(s). See "Conveyor Belt Replacement" on page 16. Remove the desired pulley following the corresponding instructions below:

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

A - Standard Idler Tail

1. On one side of conveyor, remove one (1) fastening screw **(Figure 62, item 1)**.

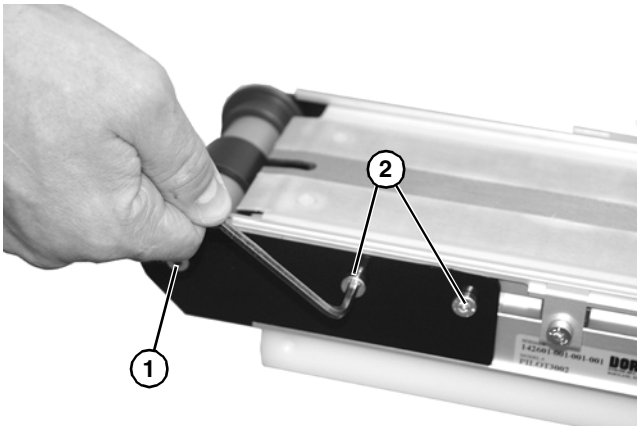


Figure 62

2. On the same side of conveyor, remove two (2) fastening screws **(Figure 62, item 2)**.

3. Remove head plate **(Figure 63, item 1)**.

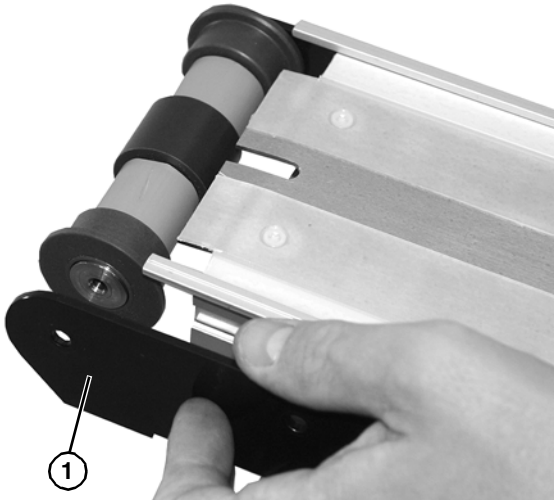


Figure 63

4. Slide tracking sleeves **(Figure 64, item 1)**, spacers **(Figure 64, item 2)**, and idler sleeves **(Figure 64, item 3)** off the end of pulley **(Figure 64, item 4)**.

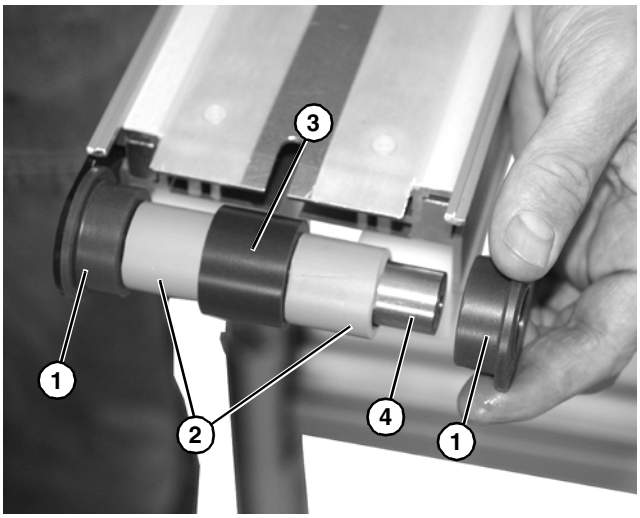


Figure 64

B - Nose Bar Idler Tail

1. On one side of conveyor, remove two (2) fastening screws **(Figure 65, item 1)**.

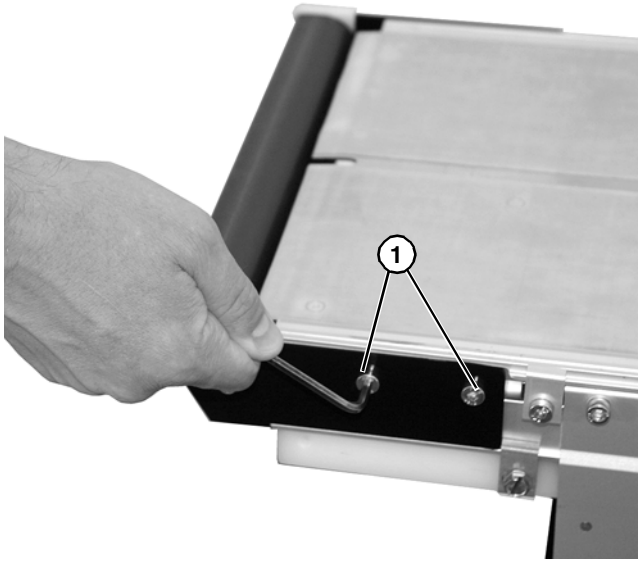


Figure 65

2. On the same side of conveyor, remove two (2) fastening screws **(Figure 66, item 1)**.

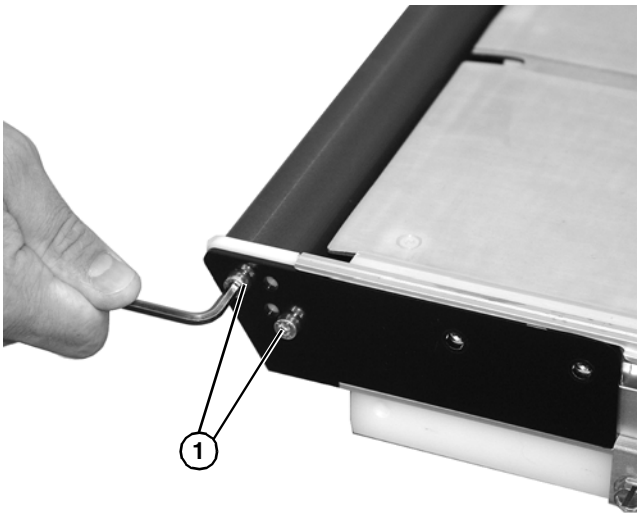


Figure 66

3. Remove head plate **(Figure 67, item 1)**.

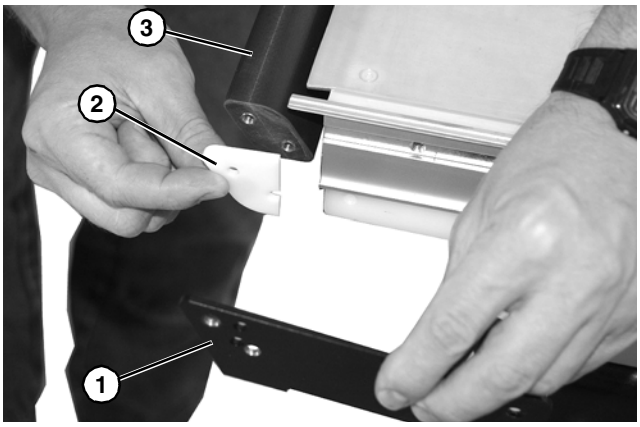
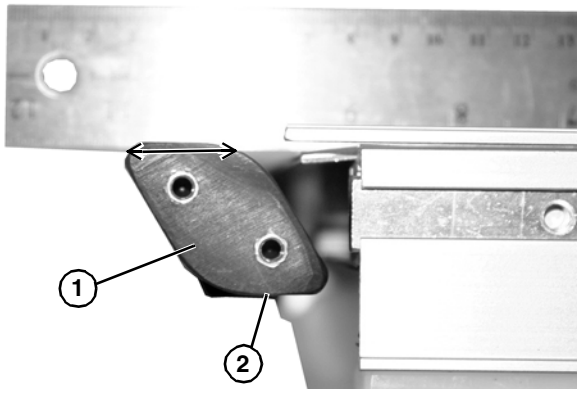


Figure 67

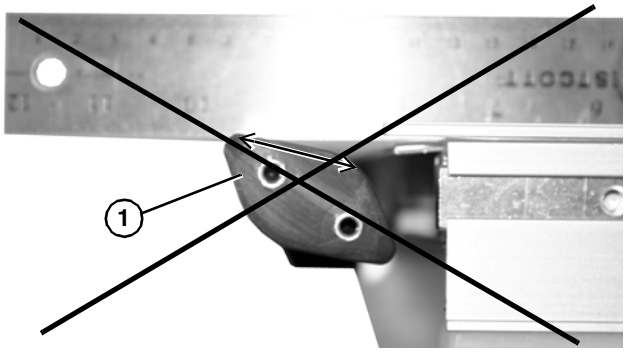
4. Remove tracking plate **(Figure 67, item 2)**, off the end of the bar and remove bar **(Figure 67, item 3)**.
5. Re-install bar **(Figure 68, item 1)**, making certain to only flip bar as shown below, and do not rotate. Bar should be level with conveyor as shown below.

NOTE
*Bar may be flipped 180° to use second wear surface **(Figure 68, item 2)**.*



Correct orientation

Figure 68



Incorrect orientation

Figure 69

Upper Wear Strip Replacement

⚠ WARNING

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

1. Remove conveyor belt. See “Belt Removal” section on page 16.
2. With a putty knife **(Figure 70, item 1)**, start by raising edge of wear strip **(Figure 70, item 2)**.

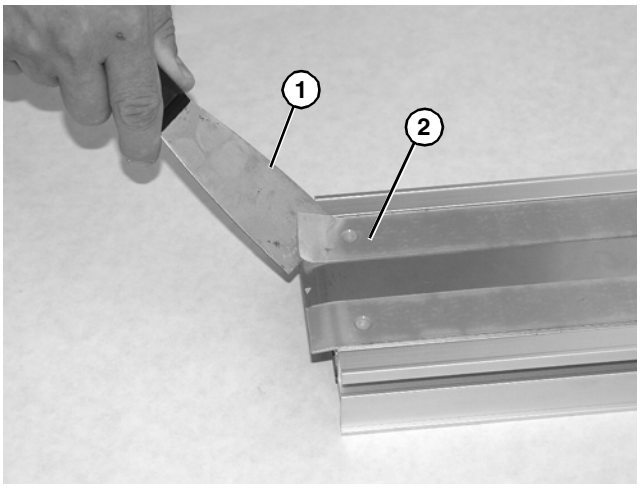


Figure 70

3. Remove old wear strip with a pliers **(Figure 71, item 1)**.

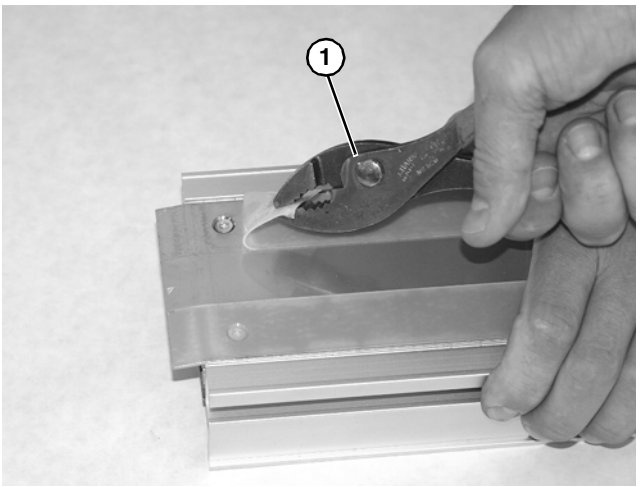


Figure 71

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

5. Install new wear strip **(Figure 72, item 1)**.

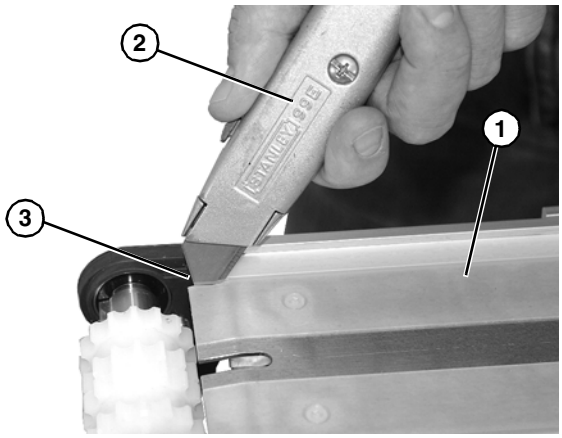


Figure 72

6. Using a utility knife **(Figure 72, item 2)**, cut out notch in each corner **(Figure 72, item 3)**.

Lower Wear Strip Replacement

⚠ WARNING

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

1. Remove conveyor belt. See "Belt Removal" section on page 16.
2. Remove screw **(Figure 73, item 1)** and sag guard plate **(Figure 73, item 2)**.

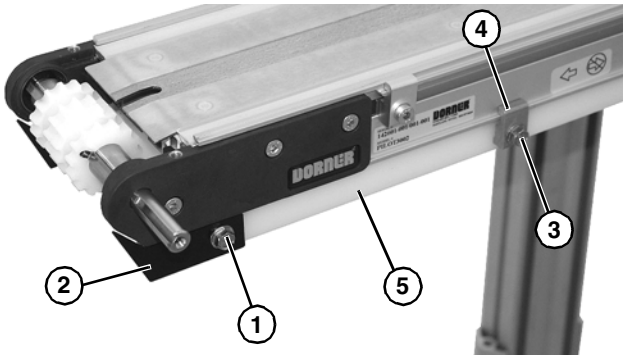


Figure 73

3. Remove screw(s) **(Figure 73, item 3)** from each retaining clip **(Figure 73, item 4)**, and remove lower wear strip **(Figure 73, item 5)**.
4. Clean conveyor surface with isopropyl alcohol and allow to fully dry.
5. Install new wear strip and secure with retaining clips.
6. Install sag guard plate with screw.

Motor Removal and Replacement

1. Remove belt. (See "Belt Installation" on page 17.)
2. Remove inframe drive side cover **(Figure 74, item 1)** by removing two head plate fastening screws **(Figure 74, item 2)**.

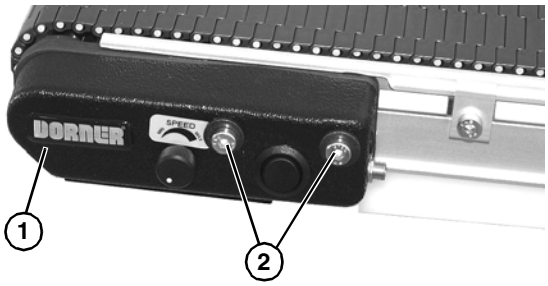


Figure 74

3. Unplug motor connector **(Figure 75, item 1)** from cover wiring connector **(Figure 75, item 2)**.

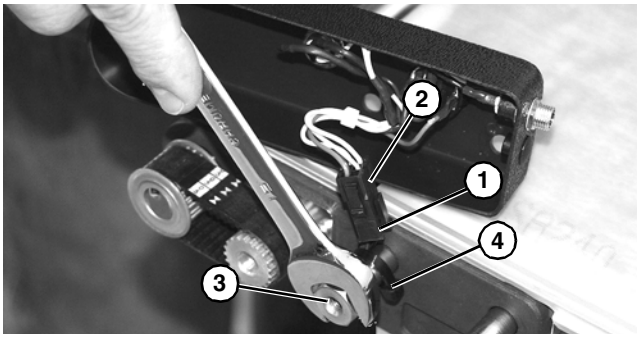


Figure 75

4. Remove hex standoff **(Figure 75, item 3)** and remove tie strap **(Figure 75, item 4)** and wiring harness from hex standoff.
5. Loosen four clamp plate screws **(Figure 76, item 1)**.

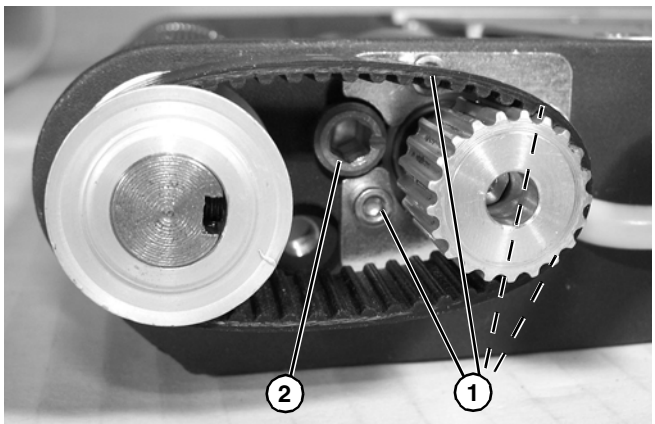


Figure 76

6. Loosen timing belt tension cam **(Figure 76, item 2)**.

7. Loosen two set screws **(Figure 77, item 1)** on drive pulley **(Figure 77, item 2)**. Slide drive pulley outward off of gearmotor shaft and remove timing belt **(Figure 77, item 3)**.

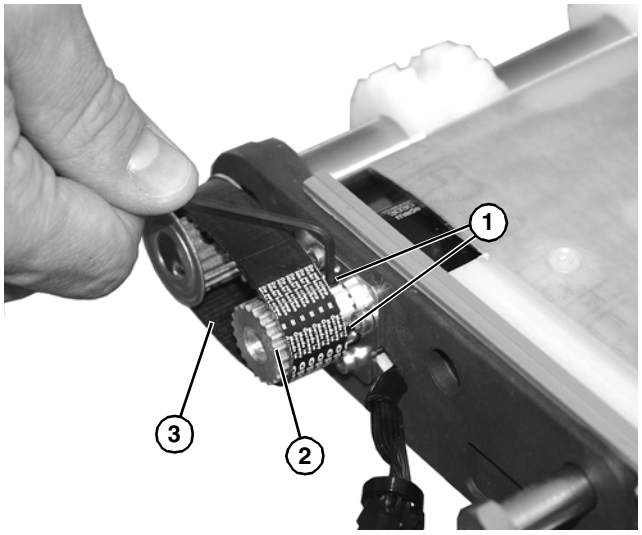


Figure 77

8. Remove four clamp plate screws **(Figure 78, item 1)** and clamp plate **(Figure 78, item 2)**.

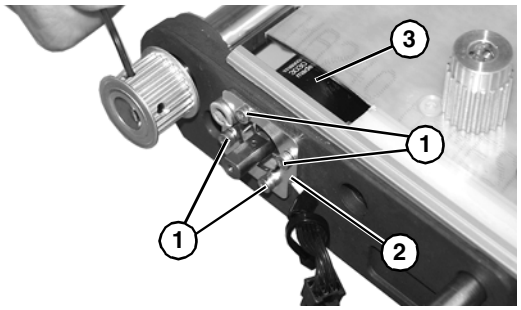


Figure 78

9. Remove motor **(Figure 78, item 3)**.

10. Snap off heat sinks **(Figure 79, item 1)**.

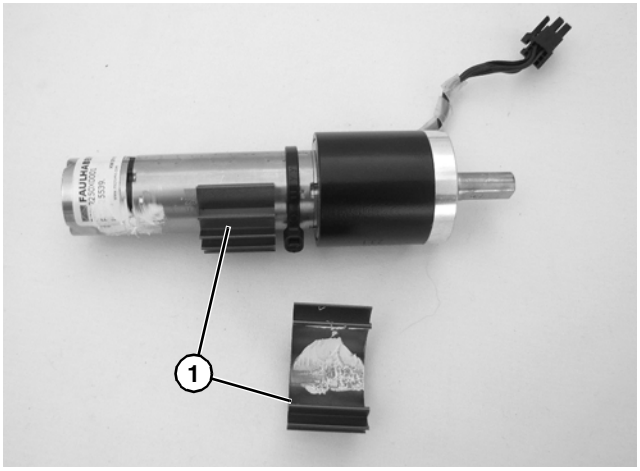


Figure 79

NOTE

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

11. Replace motor.
12. Add heat sink compound to heat sinks **(Figure 80, item 1)** before reinstalling to motor.

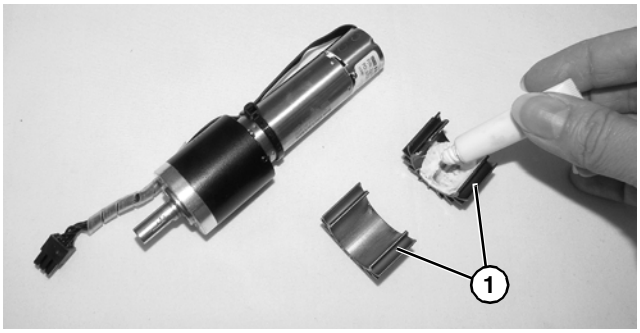


Figure 80

13. Reinstall in reverse order of removal. (Refer to "Drive Spindle Installation" on page 23 for timing belt tensioning.)

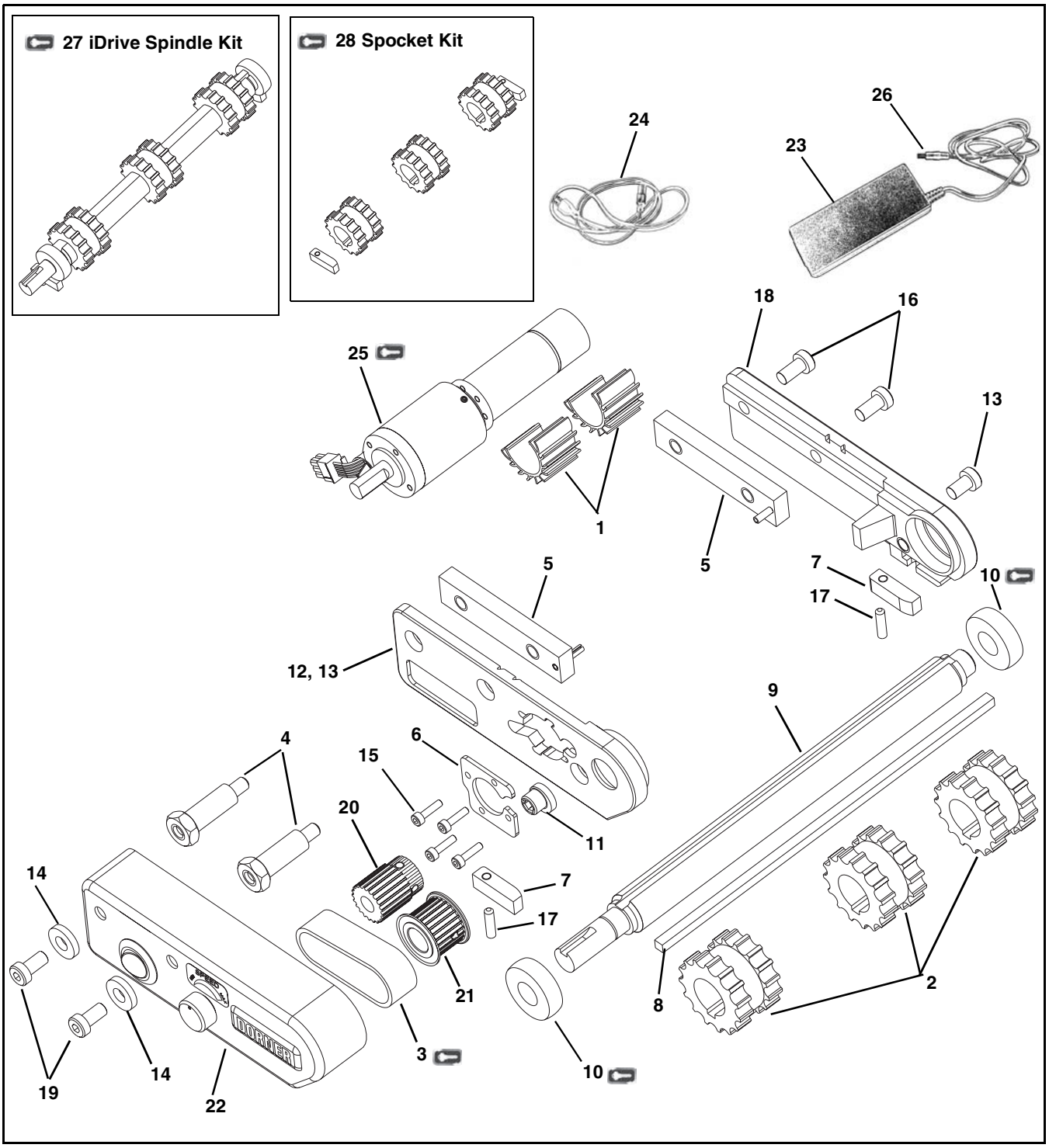
Notes

Service Parts

NOTE

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

Drive End

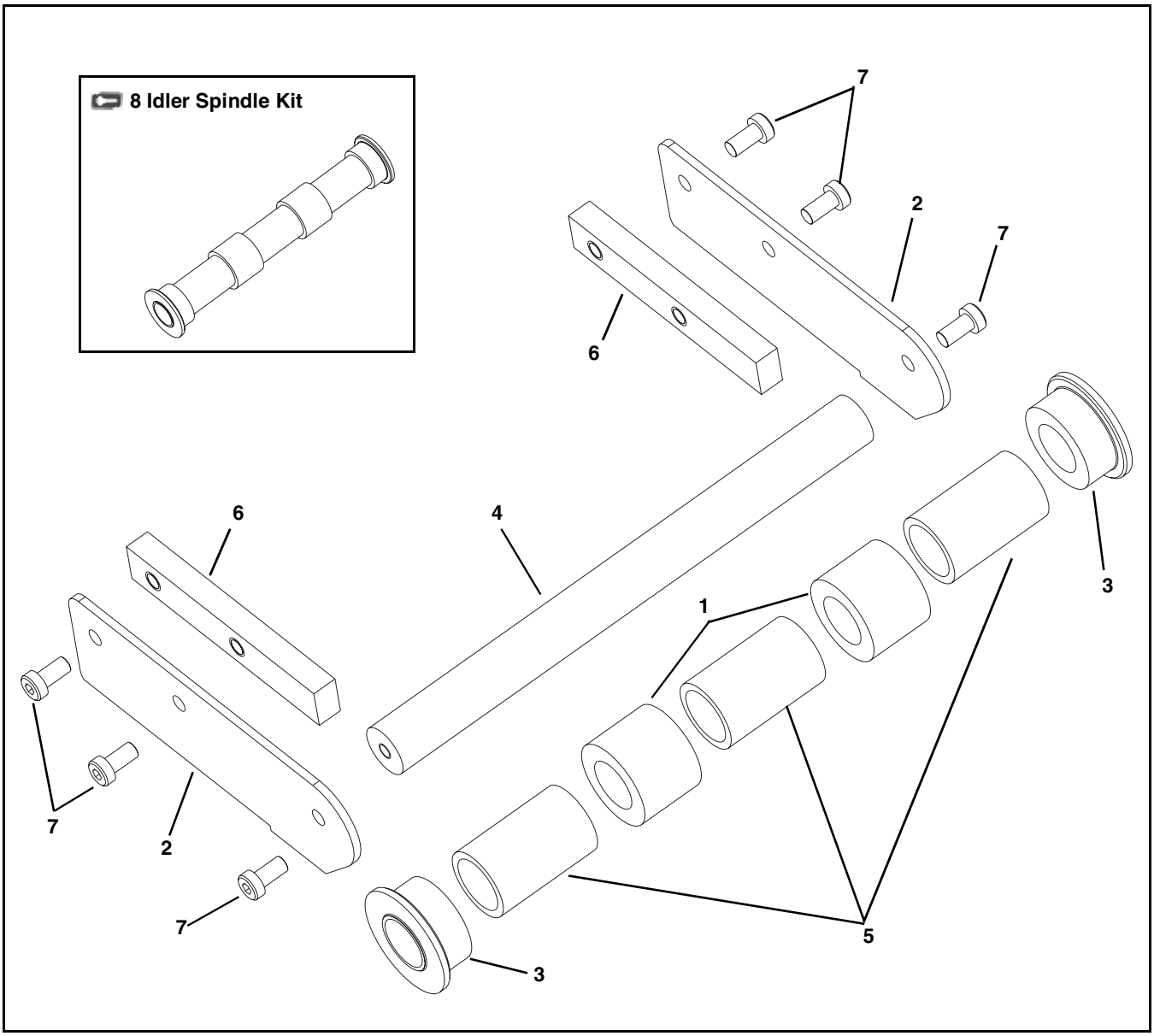


Item	Part Number	Description
1	807-1982	Heat Sink
2	807-2009	Sprocket
3	814-145	Timing Belt, 3 mm x 48 Teeth
4	201020	Hex Standoff
5	201180	Tension Slide Bar (2200 Series Only)
	205806-LH	Tension Slide Bar Left Hand (2300 Series Only)
	205806-RH	Tension Slide Bar Right Hand (2300 Series Only)
6	201181	Clamp Plate
7	201418	Tracking Block
8	201433-WW	Square Key, 3/16”
9	201917-WW	iDrive Spindle
10	22BK2	Bearing Kit (2 pack)
	22BK4	Bearing Kit (4 pack)
11	200039P	Tracking Cam
12	201918F	iDrive Head Plate for A Position
13	201919F	iDrive Head Plate for D Position
14	605279P	Washer
15	920312M	Socket Head Screw, M3 - 0.50 x 12 mm
16	920691M	Low Head Cap Screw, M6 - 1.00 x 10 mm
17	970416M	Cup Set Screw, M4 - 0.70 x 12 mm
18	201920F	Non-Drive Head Plate, for 4" Wide for A Drive Position
	201921F	Non-Drive Head Plate, for 4" Wide for D Drive Position
	240426F	Non-Drive Head Plate, for 8", 12" & 24" Wide for A Drive Position
	240425F	Non-Drive Head Plate, for 8", 12" & 24" Wide for D Drive Position
19	920692M	Low Head Cap Screw, M6 - 1.00 x 12 mm
20	201330	Drive Pulley, 17 Tooth
	201331	Drive Pulley, 21 Tooth
21	203203	Driven Pulley, 24 Tooth
	203204	Driven Pulley, 28 Tooth

Item	Part Number	Description
22	22FDEAA	Electrical Assembly, with speed direction control for A position
	22FDEAD	Electrical Assembly, with speed direction control for D position
	22FDC6A	Electrical Assembly, with customer wired control for A position, 6' cable
	22FDC6D	Electrical Assembly, with customer wired control for D position, 6' cable
	22FDC30A	Electrical Assembly, with customer wired control for A position, 30' cable
	22FDC30D	Electrical Assembly, with customer wired control for D position, 30' cable
	22FDR6A	Electrical Assembly, with speed direction, and 6' remote start/stop cable for A position
	22FDR6D	Electrical Assembly, with speed direction, and 6' remote start/stop cable for D position
	22FDR30A	Electrical Assembly, with speed direction, and 30' remote start/stop cable for A position
	22FDR30D	Electrical Assembly, with speed direction, and 30' remote start/stop cable for D position
23	831-139	Power Supply
24	818-164	Cord, 115V
25	22FDGN23	Gearmotor, 23:1
	22FDGN66	Gearmotor, 66:1
26	805-1316	Plug
27	2XMBLD-WW	iDrive Drive Spindle Kit, (Includes items 2, 7, 8, 9, 10 and 17)
28	2XMBS-WW	Sprocket Kit, (Includes items 2 and 10)
WW = Conveyor width reference: 04, 08, 12 & 24		

Service Parts

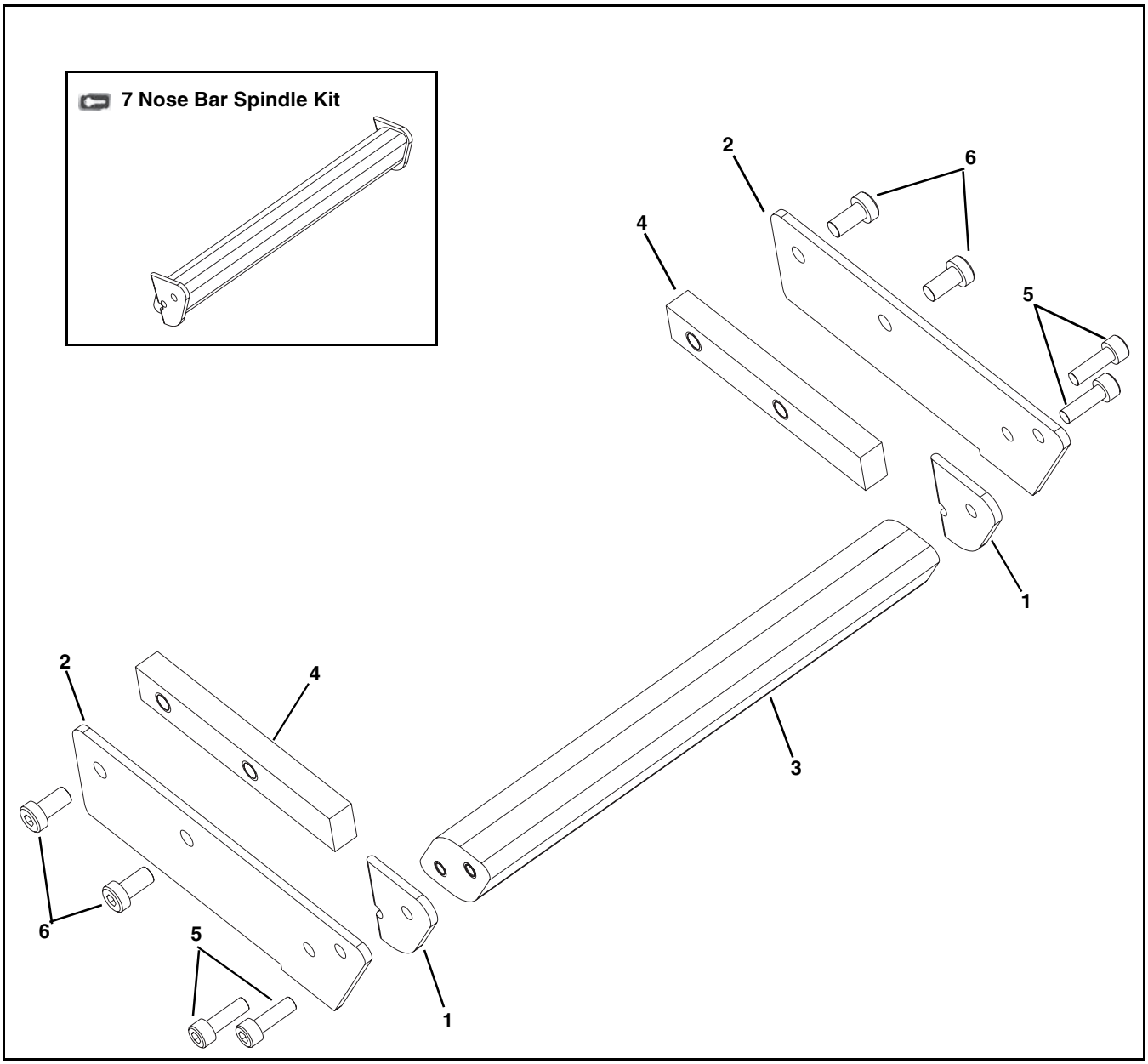
Idler End



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

Item	Part Number	Description
6	240329	Tension Slide Bar (2200 Series Only)
	712016	Tension Slide Bar (2300 Series Only)
7	920692M	Low Head Cap Screw, M6 - 1.00 x 12 mm (2200 Series Only)
	920691M	Low Head Cap Screw, M6 - 1.00 x 10 mm (2300 Series Only)
8	2XMBT-WW	Idler Spindle Kit (Includes items 1, 3 and 5)
WW = Conveyor width reference: 04, 08, 12 & 24		

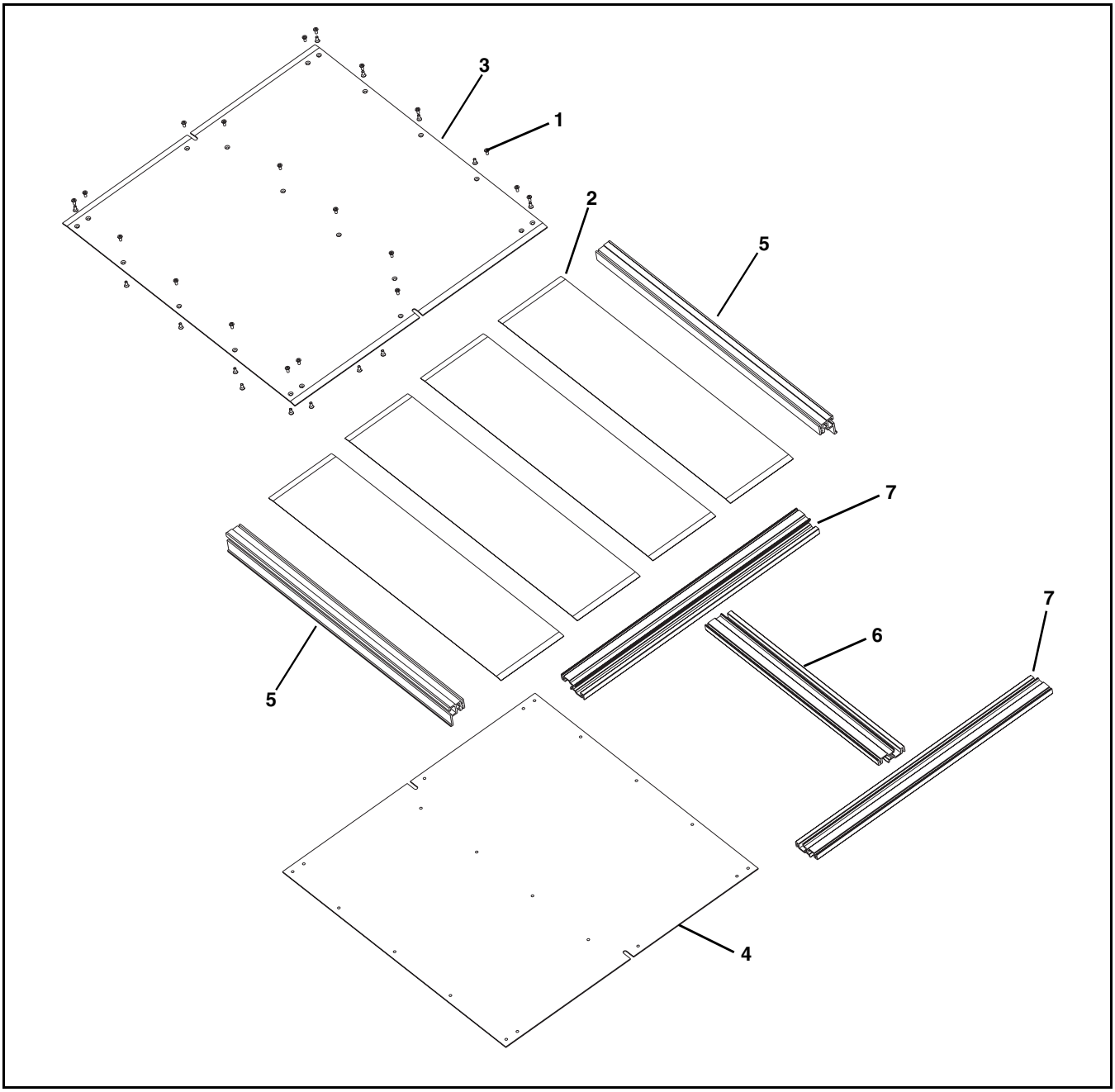
Nose Bar Idler End



Item	Part Number	Description
1	201415	Tracking Plate
2	201416	Idler Side Plate
3	201419-WW	Nosebar Assembly
4	240329	Tension Slide Bar (2200 Series Only)
	712016	Tension Slide Bar (2300 Series Only)
5	920516M	Socket Head Screw, M5-0.80 x 16 mm
6	920692M	Low Head Cap Screw, M6 - 1.00 x 12 mm (2200 Series Only)
	920691M	Low Head Cap Screw, M6 - 1.00 x 10 mm (2300 Series Only)
7	2XMBNB-WW	NoseBar Spindle Kit, (Includes items 1 and 3
WW = Conveyor width reference: 04, 08, 12 & 24		

Service Parts

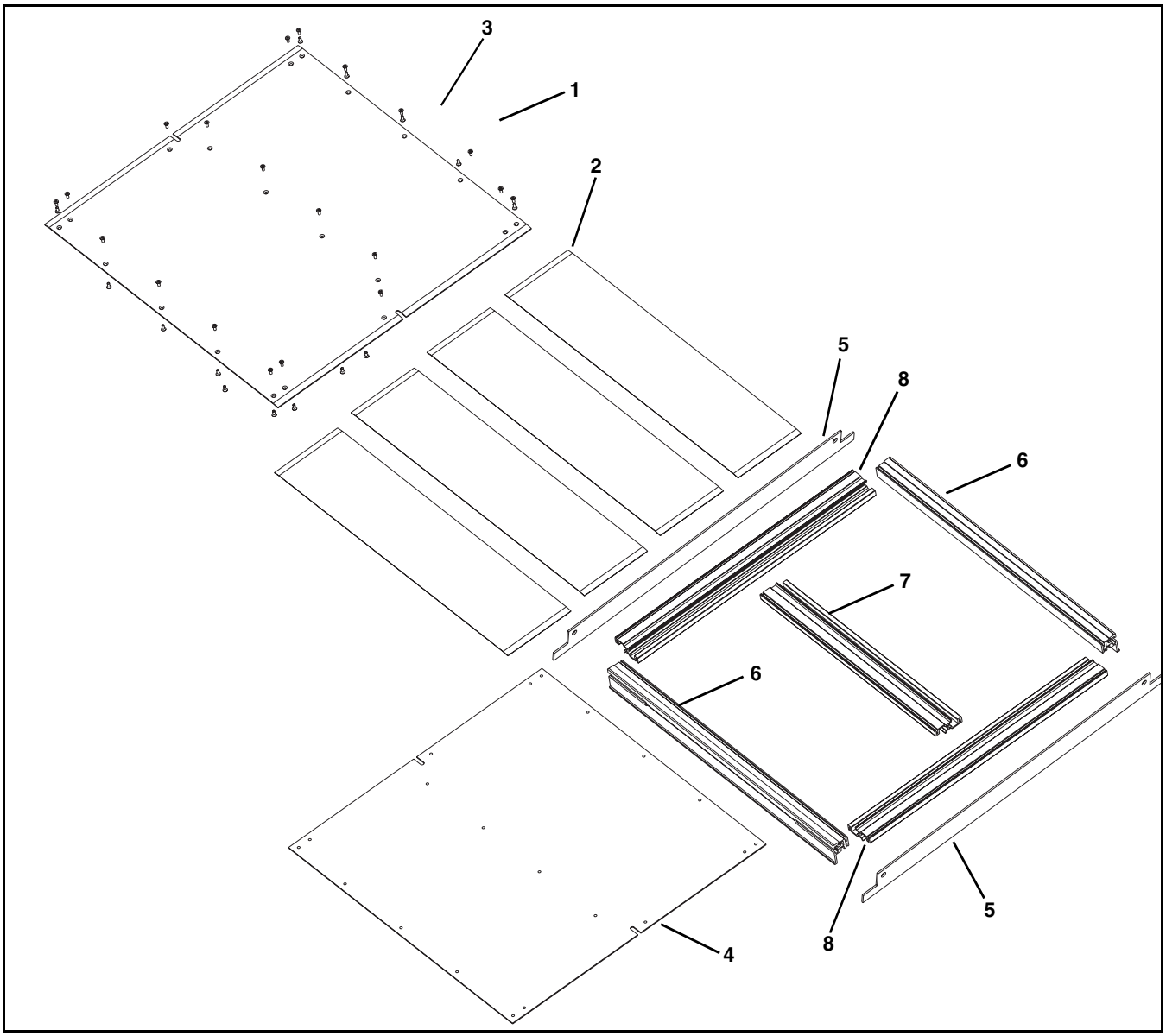
2200 Series Frame Assembly



Item	Part Number	Description
1	807-1105	Flat Head Screw, M4 - 0.70 x 10 mm
2	807-2052	UHMW Tape 1.625" for 4" Wide Conveyors
	807-2053	UHMW Tape 2.50" for 8" Wide Conveyors
	807-2054	UHMW Tape 5.75" for 12" & 24" Wide Conveyors
3	201932-WW-LLLLL	Bed Plate for Single Piece Frames
	201933-WW-LLLLL	End Bed Plate for Multi Piece Frames

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

2300 Series Frame Assembly

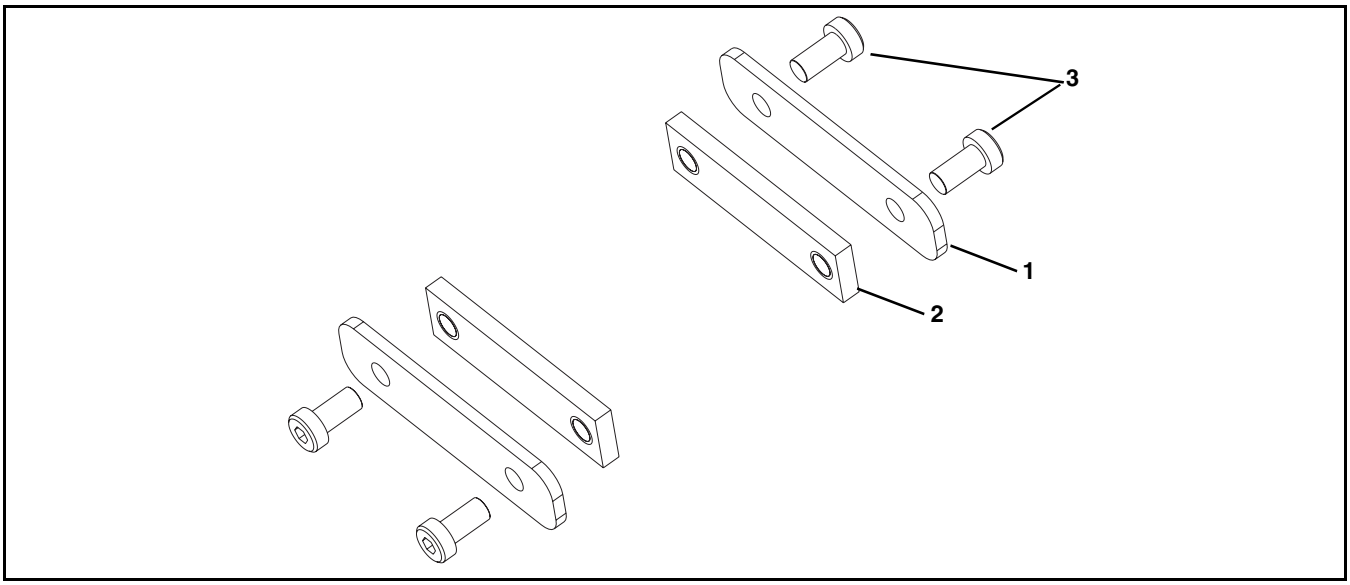


Item	Part Number	Description
1	807-1105	Flat Head Screw, M4 - 0.70 x 10 mm
2	807-2052	UHMW Tape 1.625" for 4" Wide Conveyors
	807-2053	UHMW Tape 2.50" for 8" Wide Conveyors
	807-2054	UHMW Tape 5.75" for 12" & 24" Wide Conveyors
3	201932-WW-LLLLL	Bed Plate for Single Piece Frames
	201913-WW-LLLLL	End Bed Plate for Multi Piece Frames
	201914-WW-LLLLL	Mid Bed Plate for Multi Piece Frames
4	201914-WW-LLLLL	Bottom Bed Plate
5	202248-WW	Frame Cap Plate for 4", 8", & 12" Wide Conveyors

Item	Part Number	Description
6	712071-LLLLL	Frame Rail for Single Piece Frames
	712072L-LLLLL	Left Hand End Frame Rail for Multi Piece Frames
	712072R-LLLLL	Right Hand End Frame Rail for Multi Piece Frames
	712036-LLLLL	Mid Frame Rail for Multi Piece Frames
7	240415-LLLLL	Center Rail for 8", 12" & 24" Wide Conveyors
8	240415-02162	Center Cross Rail for 24" Wide Conveyors
WW = Conveyor width reference: 04, 08, 12 & 24		
LLLLL = Part length in inches with 2 decimal places.		
Example: Part Length = 95.25" LLLLL = 09525		

Service Parts

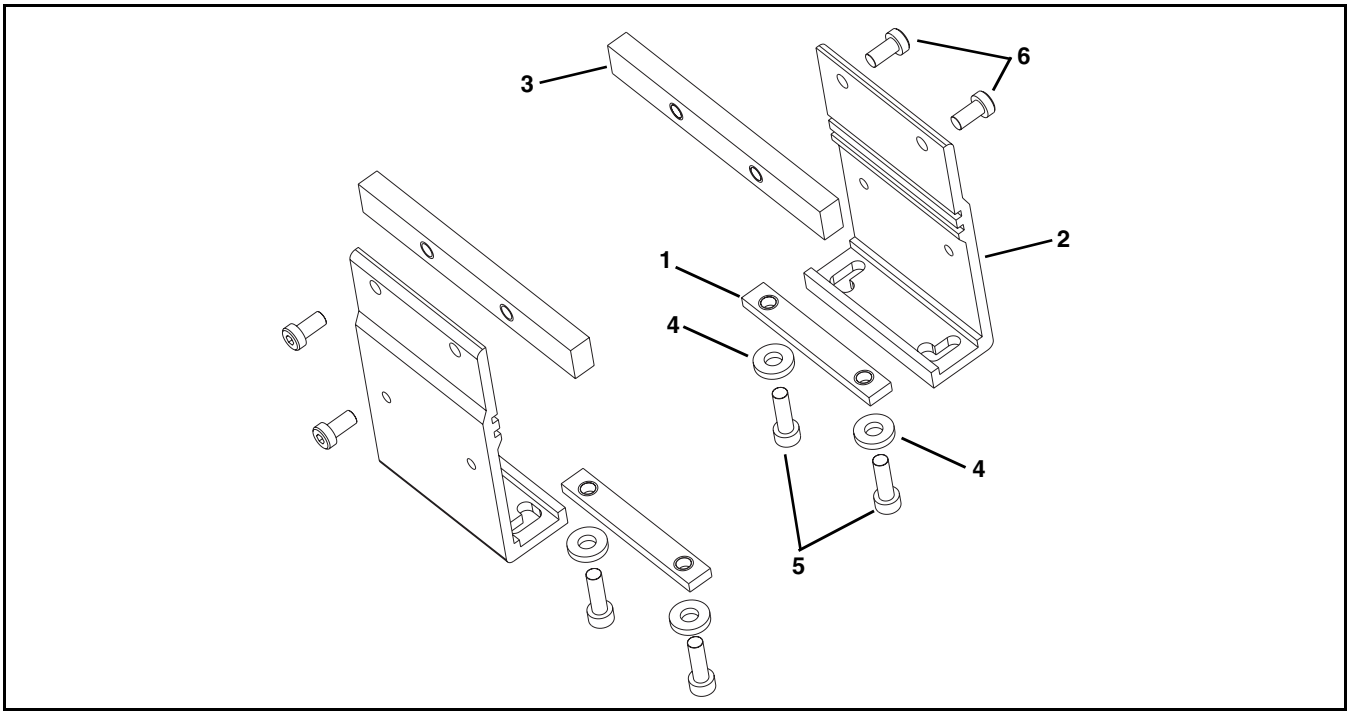
Connecting Assembly without Stand Mounts



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

Item	Part Number	Description
3	920692M	Low Head Cap Screw, M6 - 1.00 x 12 mm

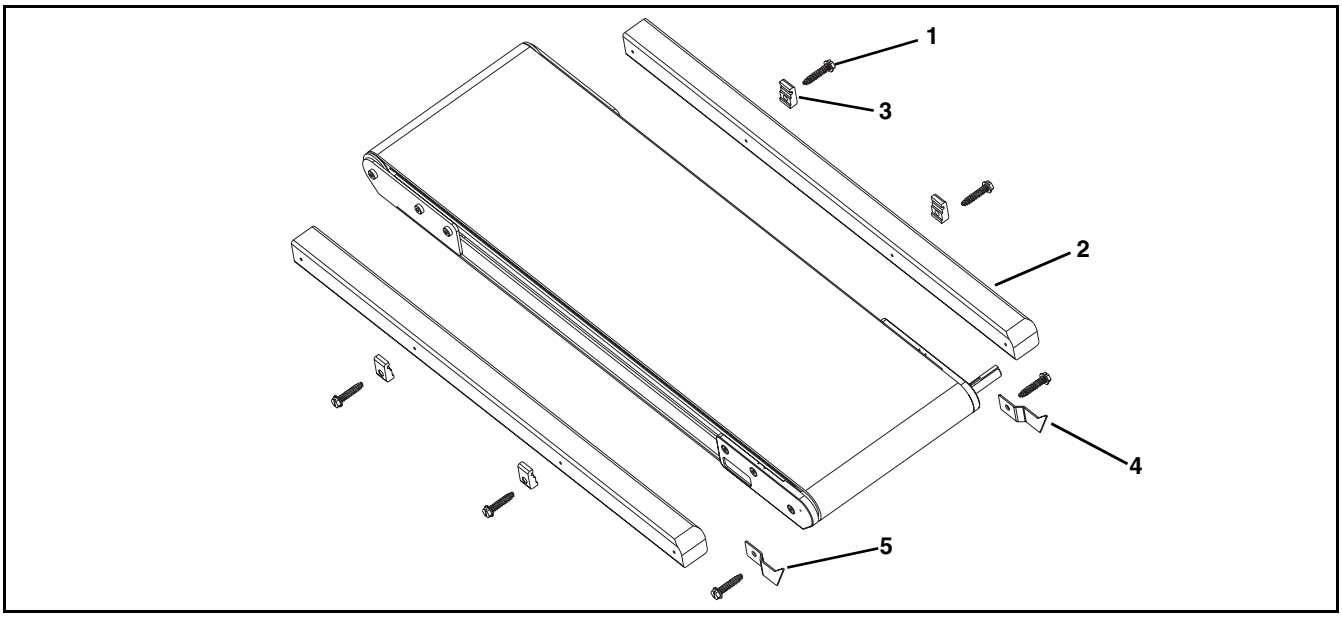
Connecting Assembly with Mounting Brackets



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

Item	Part Number	Description
4	605279P	Washer
5	920620M	Socket Head Screw, M6 - 1.00 x 20 mm
6	920692M	Low Head Cap Screw, M6 - 1.00 x 12 mm

Return Wear Strip

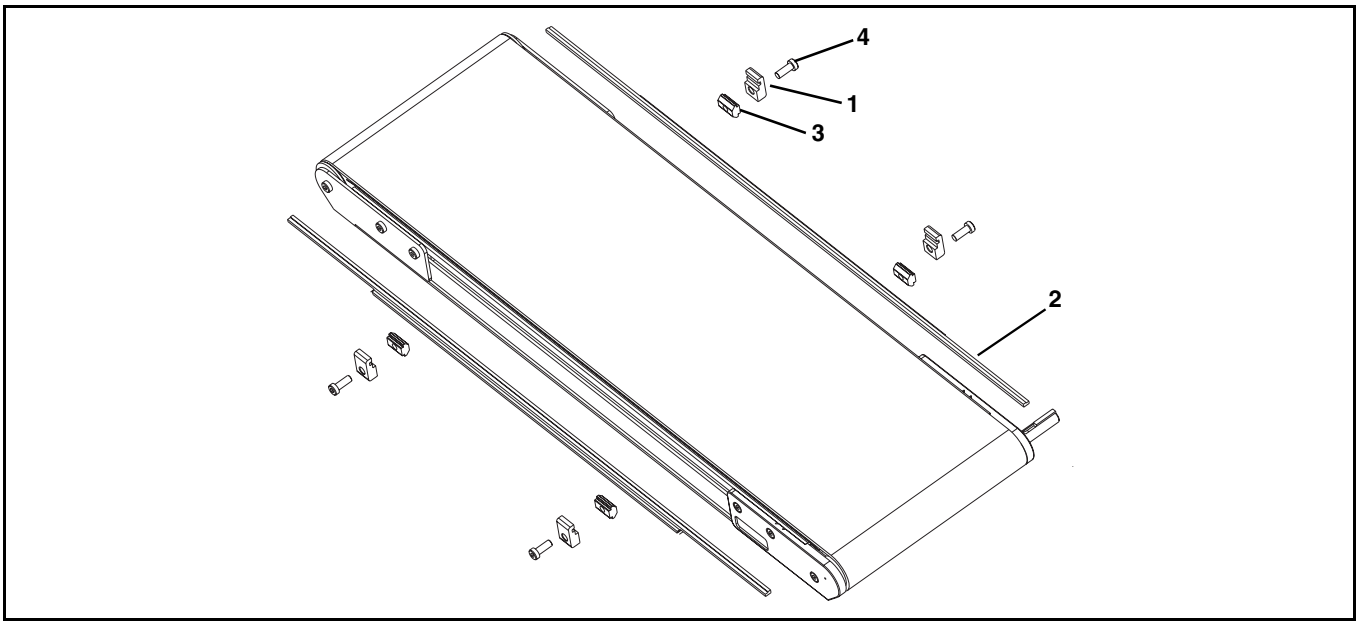


Item	Part Number	Description
1	807-2041	Sheet Metal Screw, #14 x 1.25”
2	201915-LLLLL	Return Wear Strip
3	201941	Retaining Clip
4	202412	Sag Guard Plate Left Hand

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

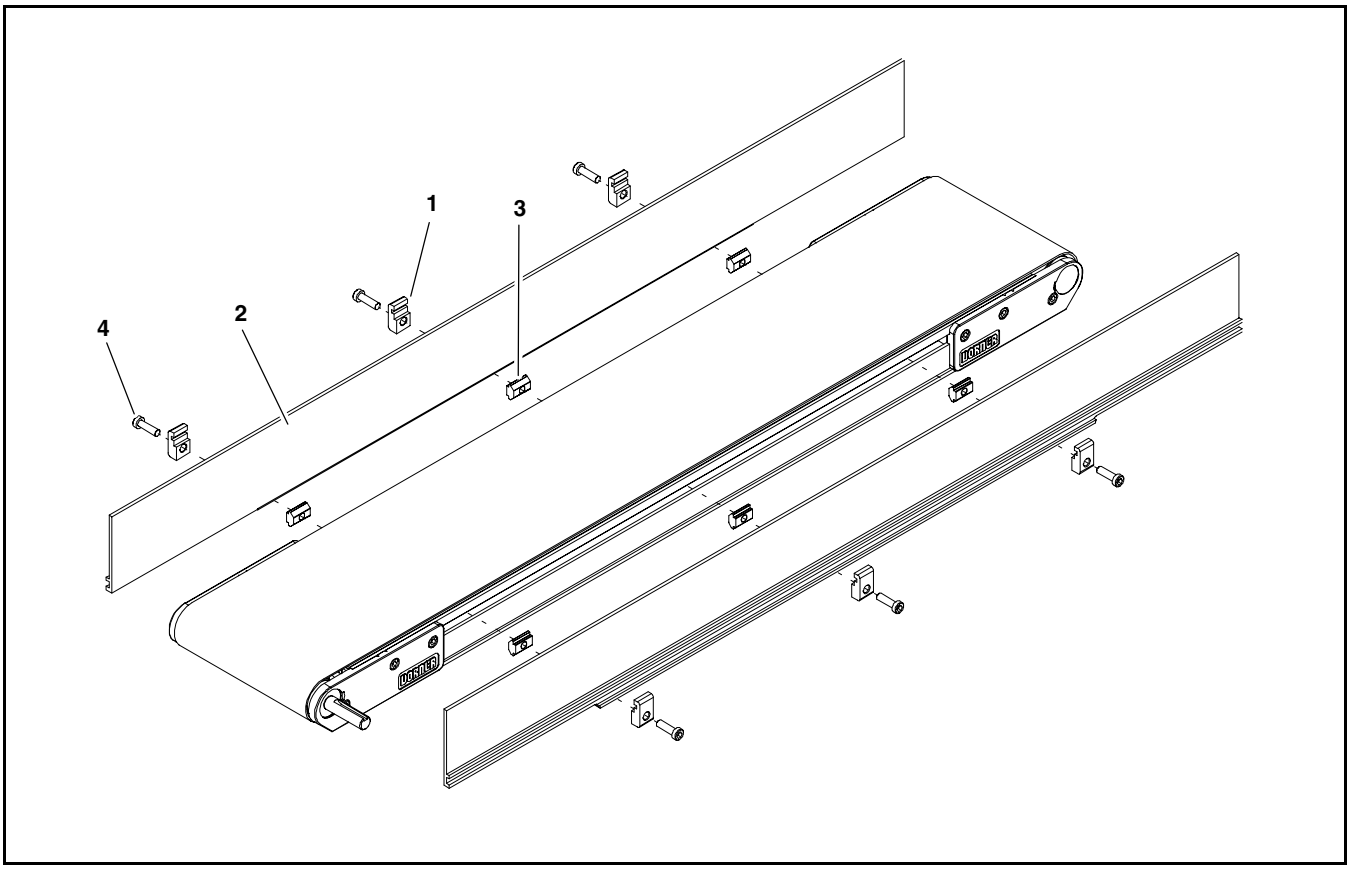
Service Parts

-01 Low Side



Item	Part Number	Description
1	200121	Guide Retaining Clip
2	201552-LLLLL	Low Side Guides
3	639971MK10	Single Drop-in Tee Bar (2200 Series Only) (x10)
4	920694M	Low Head Cap Screw, M6 - 1.00 x 20 mm (2200 Series Only)
	807-1937	Self-Drilling Hex Head Screw, 1/4 - 20 x 1" (2300 Series Only)
LLLLL = Part length in inches with 2 decimal places.		
Example: Part Length = 95.25" LLLLL = 09525		

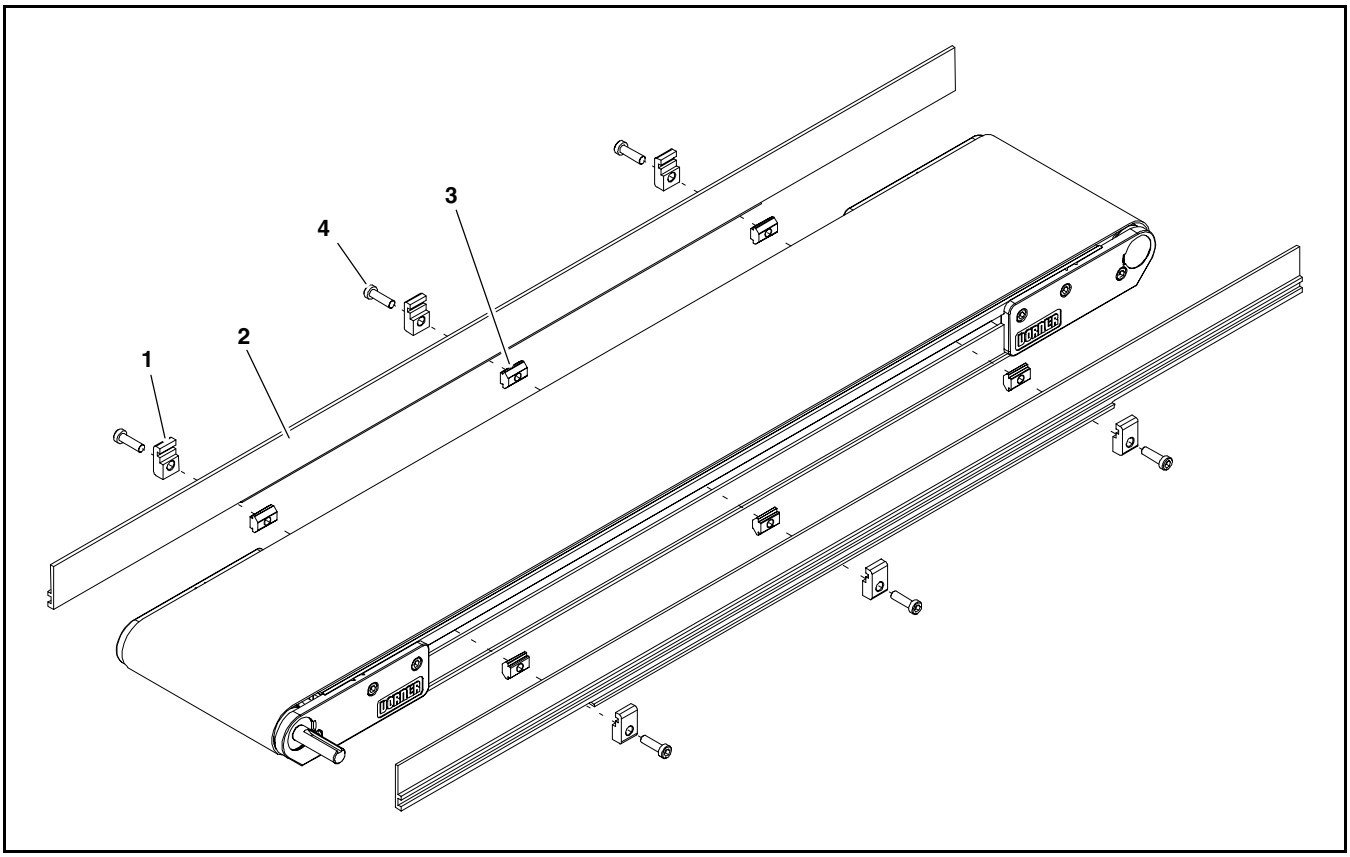
-04 3” (76 mm) Aluminum Side



Item	Part Number	Description
1	200121	Guide Retaining Clip
2	280403-LLLLL	3” (76 mm) High Side Guides
3	639971MK10	Single Drop-in Tee Bar (2200 Series Only) (x10)
4	920694M	Socket Head Screw, M6 x 20 mm (2200 Series)
	807-1937	Self-Drilling Hex Head Screw, 1/4-20x1” (2300 Series)
LLLLL = Part length in inches with 2 decimal places.		
Example: Part Length = 35.25" LLLLL = 03525		

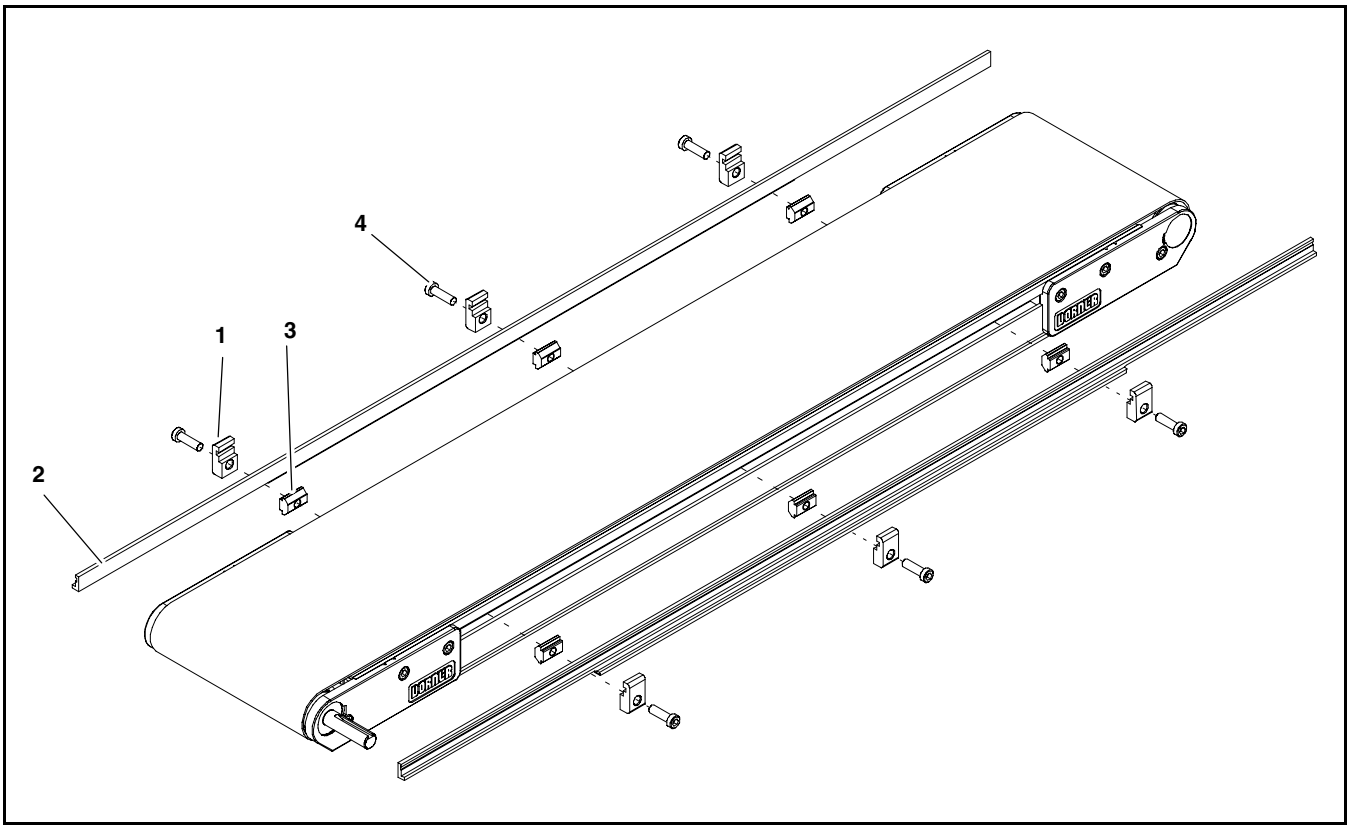
Service Parts

-05 1.5” (38 mm) Aluminum Side



Item	Part Number	Description
1	200121	Guide Retaining Clip
2	280503-LLLLL	1.5” (38 mm) High Side Guides
3	639971MK10	Single Drop-in Tee Bar (2200 Series Only) (x10)
4	920694M	Socket Head Screw, M6 x 20 mm (2200 Series)
	807-1937	Self-Drilling Hex Head Screw, 1/4-20x1” (2300 Series)
LLLLL = Part length in inches with 2 decimal places.		
Example: Part Length = 35.25" LLLLL = 03525		

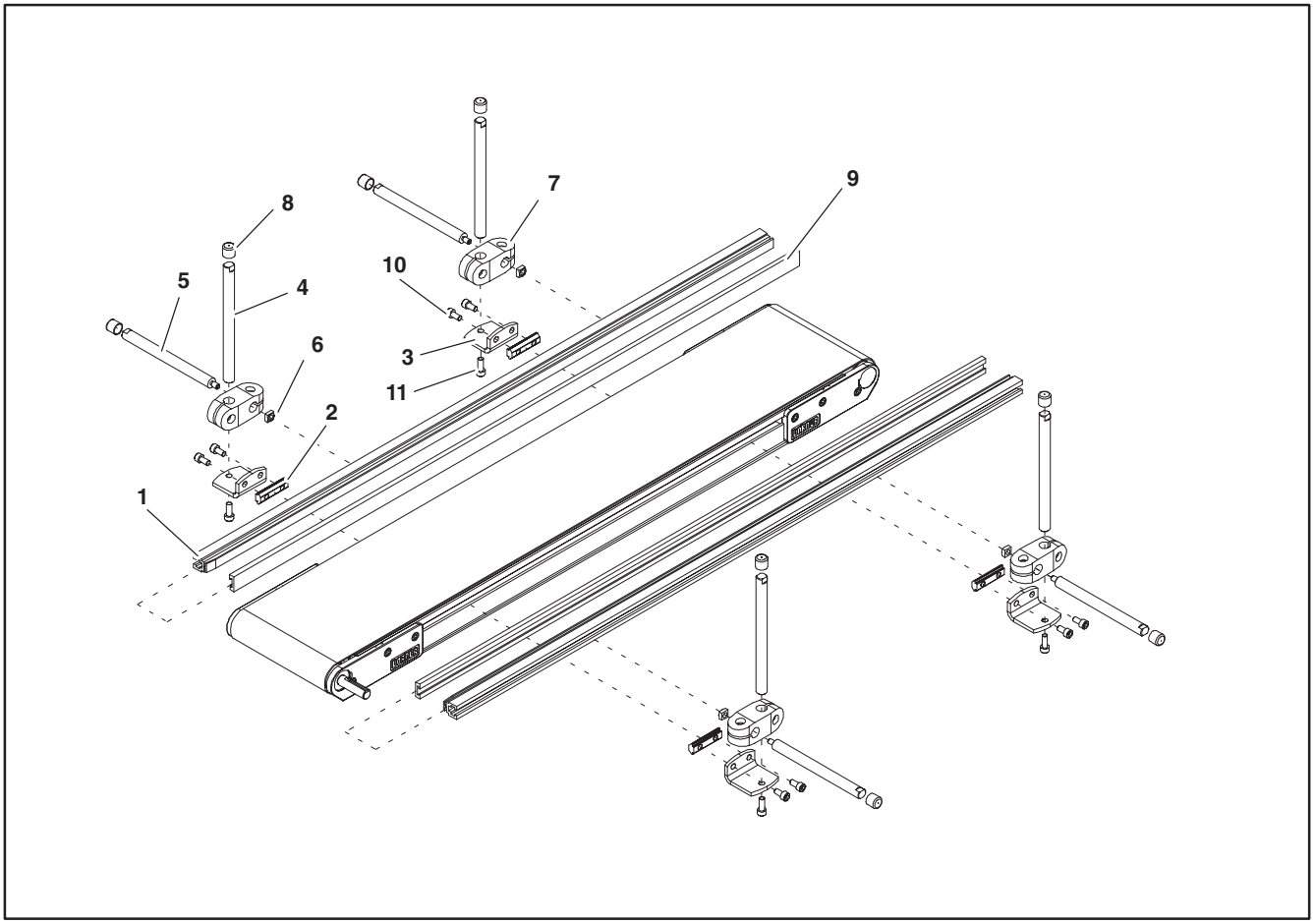
-09 Low to High Side



Item	Part Number	Description
1	200121	Guide Retaining Clip
2	280903-LLLLL	0.5” (13 mm) High Side Guides
3	639971MK10	Single Drop-in Tee Bar (2200 Series Only) (x10)
4	920694M	Socket Head Screw, M6 x 20 mm (2200 Series)
	807-1937	Self-Drilling Hex Head Screw, 1/4-20x1” (2300 Series)
LLLLL = Part length in inches with 2 decimal places.		
Example: Part Length = 35.25" LLLLL = 03525		

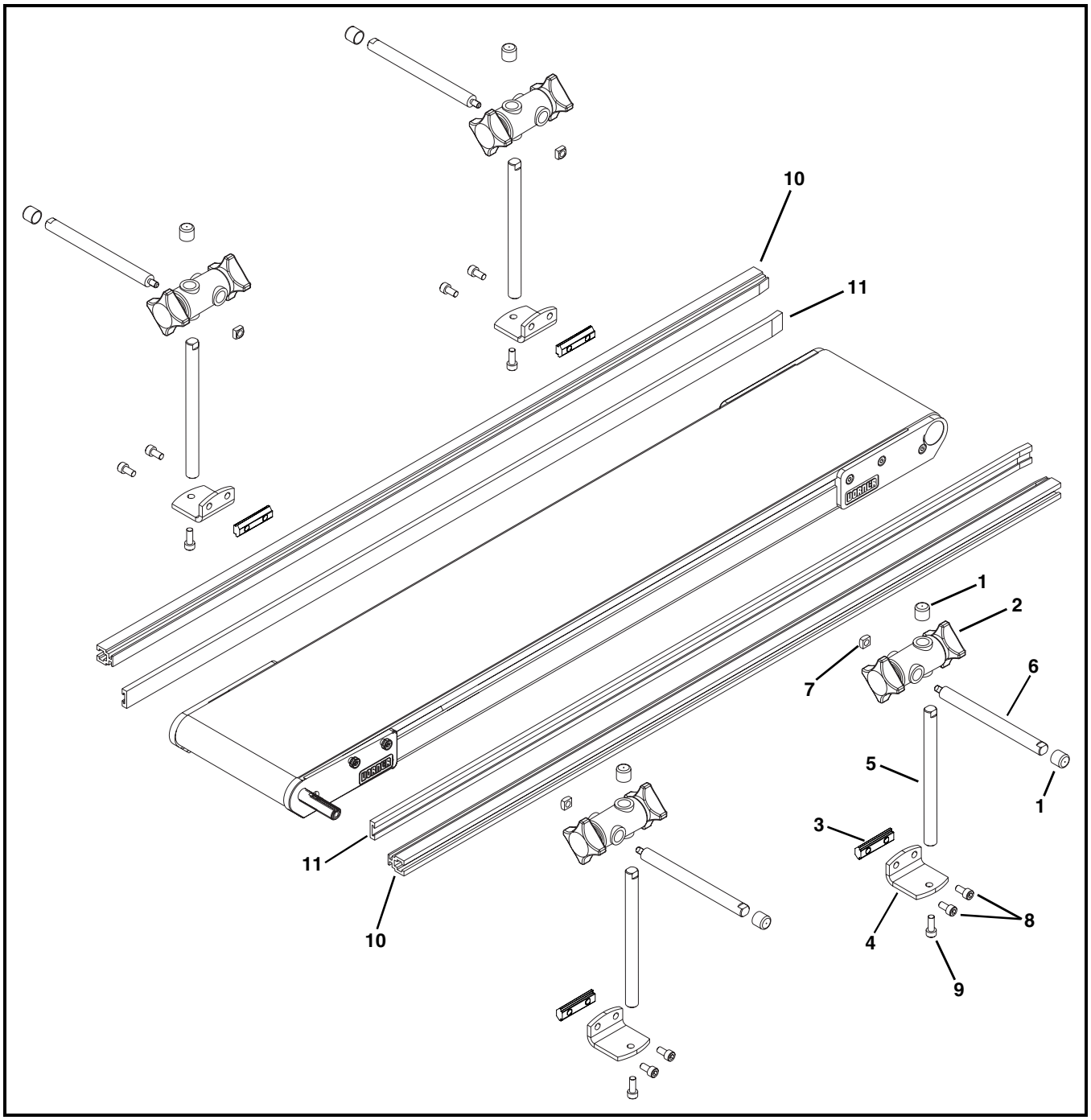
Service Parts

-13 Adjustable Guiding



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

-14 Tool-Less Adjustable Guiding

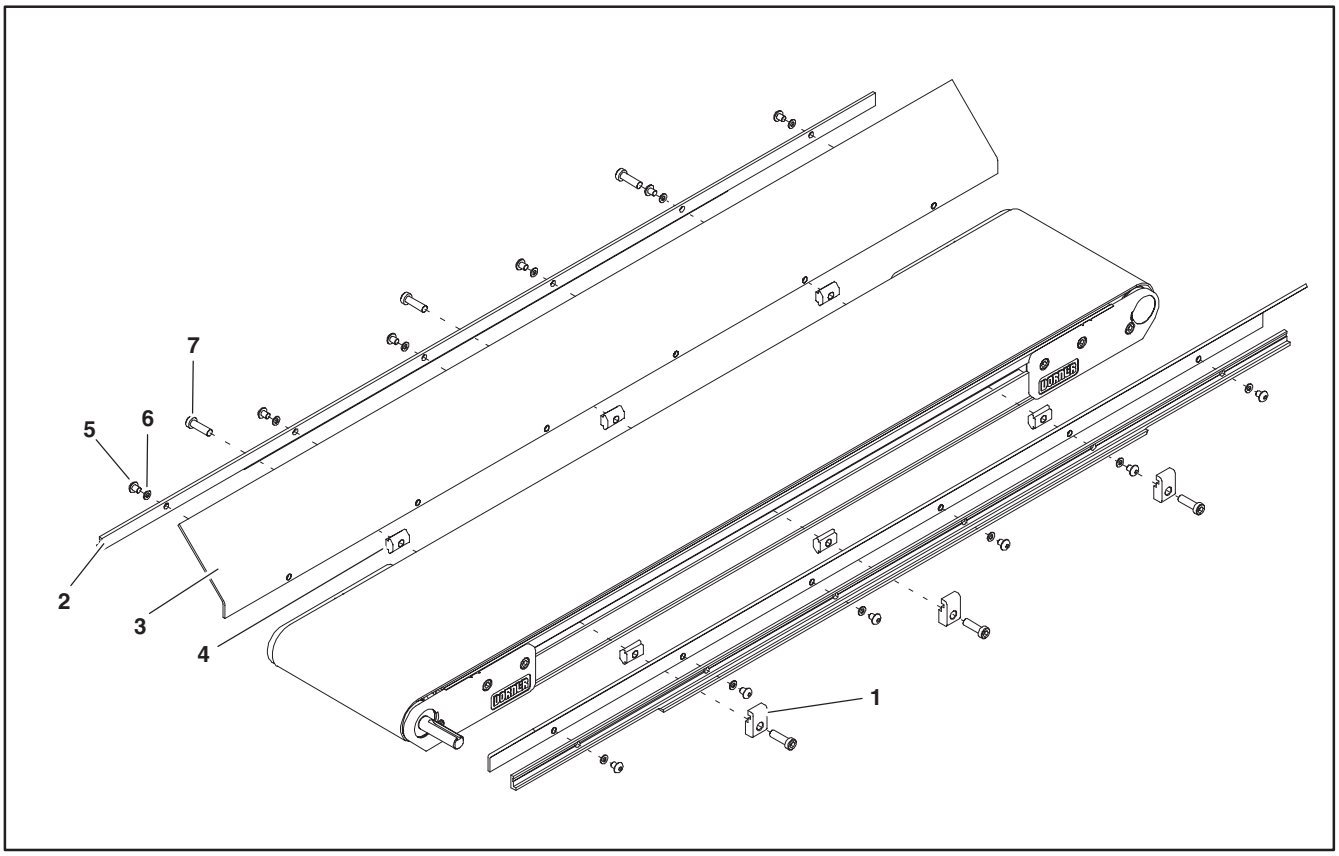


Item	Part Number	Description
1	807-948	Shaft Cap
2	807-1470	Cross Block
3	200830M	Drop-In Tee Bar (2200 Series Only)
4	202004M	Mounting Bracket
5	202027M	Vertical Mounting Guide Shaft
6	202028M	Horizontal Mounting Guide Shaft

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

Service Parts

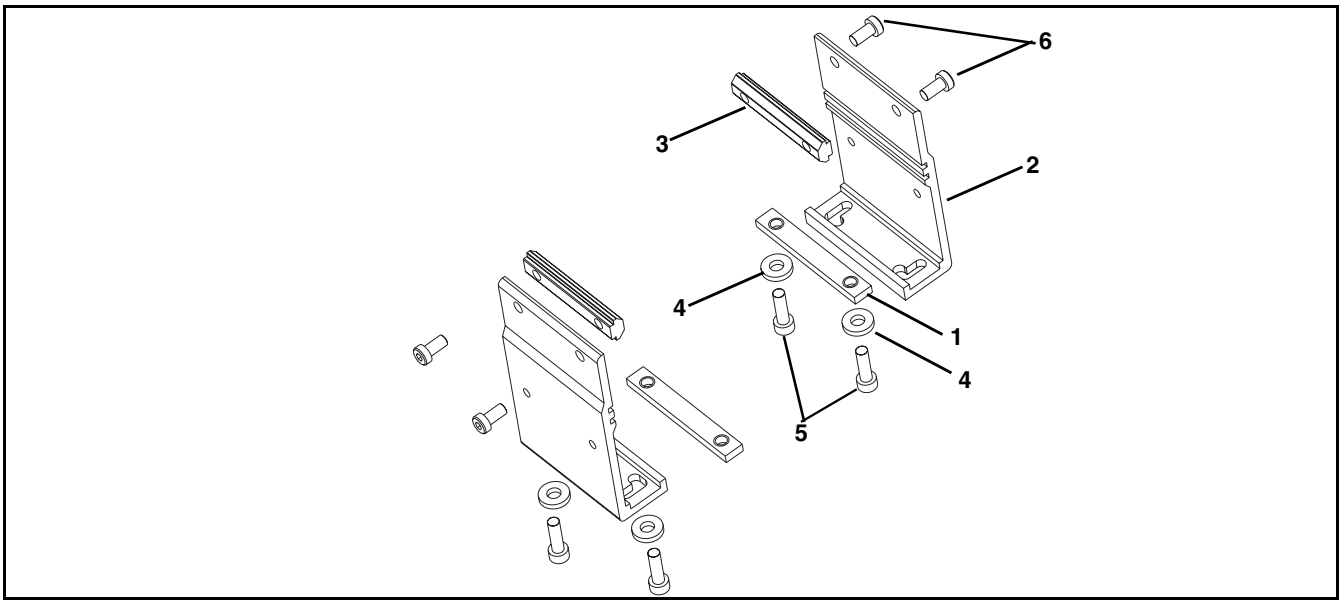
Flared Side Guiding



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	639971MK10	Drop-In Tee Bar (2200 Series Only) (x10)
5	910506M	Button Head Screw, M5 x 6 mm
6	911-512	Washer
7	920694M	Cap Low-Head Screw, M6 x 20 mm (2200 Series)
	807-1937	Self-Drilling Hex Head Screw, 1/4-20x1" (2300 Series)

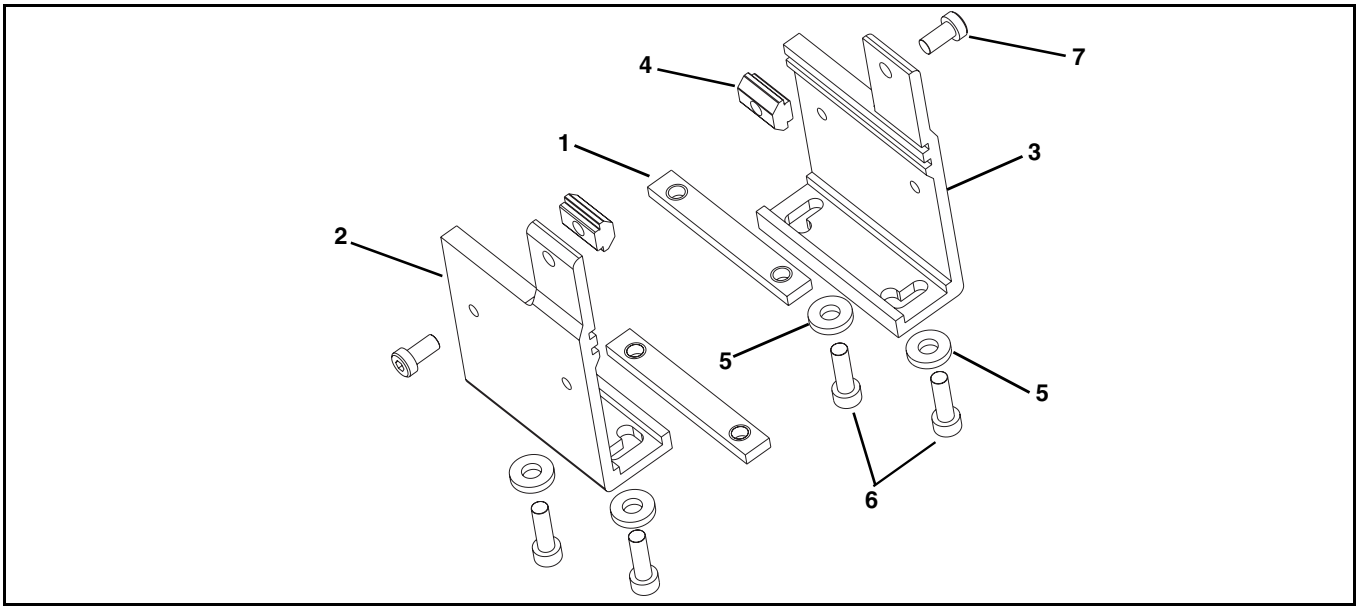
Mounting Brackets



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

Item	Part Number	Description
5	920620M	Socket Head Screw, M6 - 1.00 x 20 mm
6	960692M	Low Head Cap Screw, M6 - 1.00 x 12 mm (2200 Series Only)
	807-1937	Self-Drilling Hex Head Screw, 1/4 - 20 x 1" (2300 Series Only)

Mounting Brackets for 2’ (610 mm) Conveyors

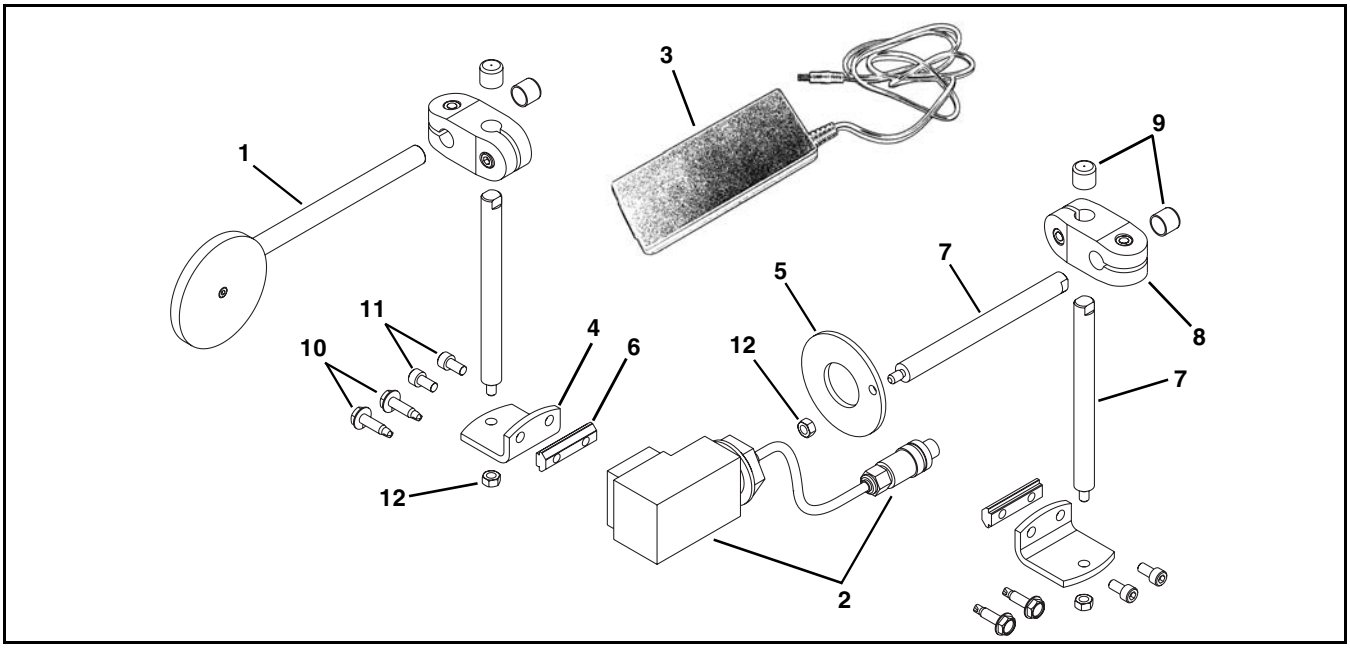


Item	Part Number	Description
1	202303	Connector Bar
2	202304	2' Stand Mount Left Hand
3	202305	2' Stand Mount Right Hand
4	639971M	Drop-in Tee Bar (2200 Series Only)

Item	Part Number	Description
5	605279P	Washer
6	920620M	Socket Head Screw, M6 - 1.00 x 20 mm
7	960692M	Low Head Cap Screw, M6 - 1.00 x 12 mm (2200 Series Only)
	807-1937	Self-Drilling Hex Head Screw, 1/4 - 20 x 1" (2300 Series Only)

Service Parts

Photo Eye



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

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

Conveyor Belting

Belting Per Foot (305 mm)

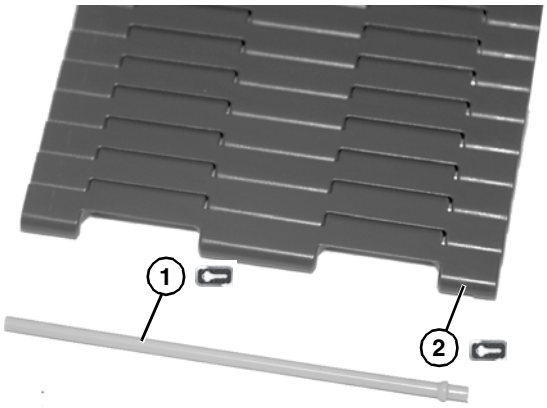


Figure 81

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

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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