



3200 Series Modular Belt Straight Conveyors

Installation, Maintenance and Parts Manual



Flat Modular Belt Conveyor



Modular Belt Z-Frame Conveyor

Available with: ***SmartSlot™***

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Table of Contents

Introduction	2	Removal of Tenting Wear Strips	17
Warnings – General Safety	3	Wear Strip Installation	18
Product Description	4	Tail Component Removal	18
Specifications	4	A - Drive Tail Component Removal	18
3200 Series Flat Modular Belt Straight Conveyors	4	B - Nose Bar Drive Tail Component Removal	21
3200 Series Cleated Modular Belt Straight Conveyors	4	C - Idler Tail Component Removal	24
3200 Series Modular Belt Z-Frame Conveyors	4	D - Nose Bar Idler Tail Component Removal	26
Conveyor Supports	5	Maintenance of Knuckles	28
Specifications	5	Guides	28
Installation	6	Lower Knuckle	28
Required Tools	6	Upper Knuckle	29
Recommended Installation Sequence	6	Weighted Take-Up	32
Conveyor Sections Longer than 12 ft (3658 mm)	6	Service Parts	34
Connecting Components	6	Drive End Tail Assembly	34
Z-Frame Conveyors	7	Nose Bar Drive End Tail Assembly	36
Upper Knuckle	7	Idler Tail Assembly	38
Lower knuckle	7	Nose Bar Idler Tail Assembly	40
All Conveyors	8	Weighted Take-Up Assembly	42
Mounting Brackets for T-Slot Conveyors	8	Upper Knuckle	44
Brackets for SmartSlot Conveyors	9	Lower Knuckle	46
Belt Installation	10	Frame Assembly	47
Proper Methods of Attaching Guiding to Side Rails		Connecting Assembly	48
(SmartSlot Frames Only)	11	1.5" (38 mm) High Sides	49
Self-Drilling Screws	11	3" (76 mm) High Sides	50
Pre-Drill for Standard Screws	12	Fully Adjustable Guiding	51
Guiding (SmartSlot Frames Only)	13	Tool-Less Fully Adjustable Guiding	52
Guiding (T-Slot Frames Only)	13	Adjustable Outboard Guiding	53
Fully Adjustable Guiding	14	4.00" (102 mm) High Side Profiles	54
Drive Package Installation	14	6.00" (152 mm) High Side Profiles	55
Preventive Maintenance and Adjustment	15	1.00" (25 mm) Cleated High Side Profiles	56
Required Tools	15	3.00" (76 mm) Cleated High Side Profiles	57
Checklist	15	4.00" (102 mm) Cleated High Side Profiles	58
Lubrication	15	6.00" (152 mm) Cleated High Side Profiles	59
Maintaining the Conveyor Belt	15	Flat Belt Returns	60
Troubleshooting	15	Flat Belt Mounting Brackets for T-Slot Conveyors	61
Conveyor Belt Replacement	15	Flat Belt Mounting Brackets for SmartSlot Conveyors	61
Replacing a Section of Belt	15	Cleated Belt Mounting Brackets for T-Slot Conveyors	62
Replacing the Entire Belt	16	Cleated Belt Mounting Brackets	
Conveyor Belt Tensioning	16	for SmartSlot Conveyors	62
Wear Strips	16	Ordering a Replacement Chain	63
Removal of Top Mid Clip-On Wear Strips	16	Flat Belt Chain Repair Kit	63
Removal of Outer Top Wear Strips	17	Cleated Belt Chain Repair Kit	63
Removal of J-Leg Wear Strips	17	Return Policy	64

Introduction



CAUTION

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.

The Dorner Limited Warranty applies.

Dorner 3200 Series conveyors have patents pending.

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

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

Warnings – General Safety

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 conveyor components.

Typical Components	
1	Conveyor
2	Gearmotor
3	Belt (Flat Belt Shown)
4	Support Stands
5	Drive End
6	Idler End

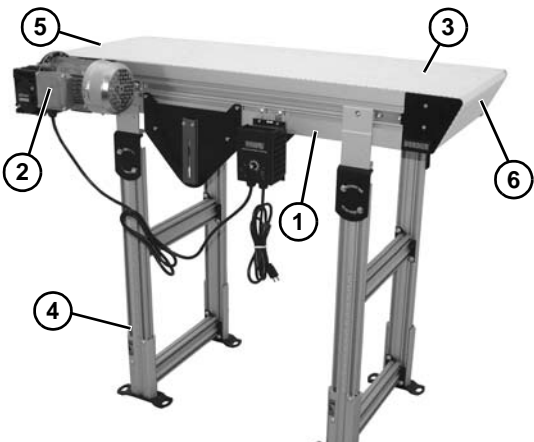
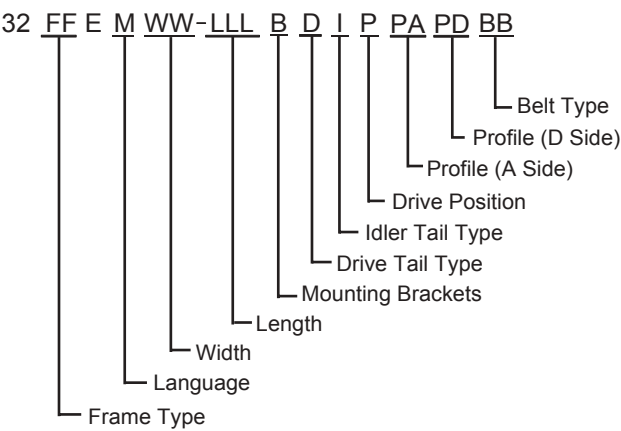


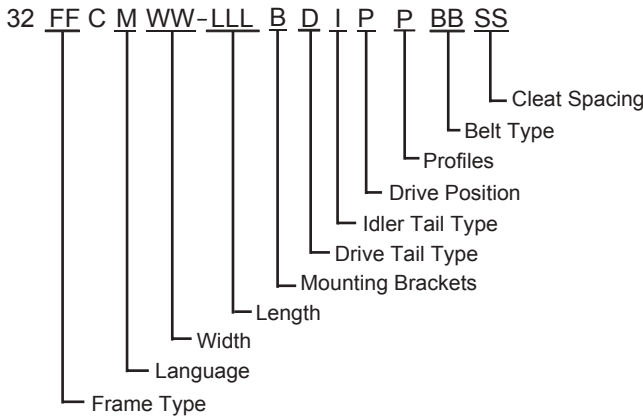
Figure 1

Specifications

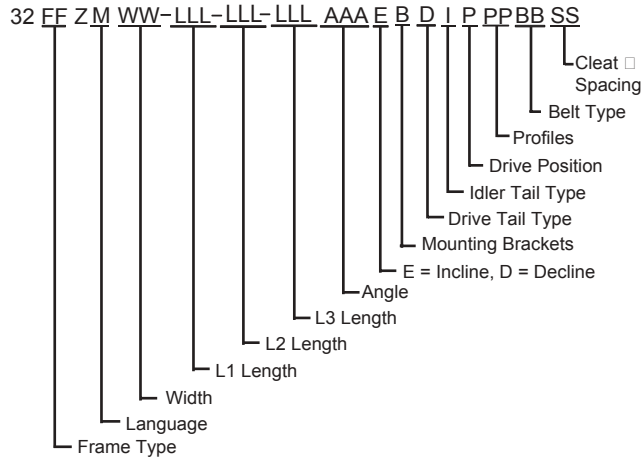
3200 Series Flat Modular Belt Straight Conveyors



3200 Series Cleated Modular Belt Straight Conveyors



3200 Series Modular Belt Z-Frame Conveyors



Conveyor Supports

Maximum Distances:

- 1 = Support Stand on Idler End = 3 ft (914 mm)
- 2 = Between Support Stands = 12 ft (3658 mm)**
- 3 = Support Stand on Drive End = 3 ft (914 mm)
- ** For conveyors longer than 12 ft (3658 mm),
install stand mount kit at frame joint.
- * LPZ stand positions may vary, please consult
factory.

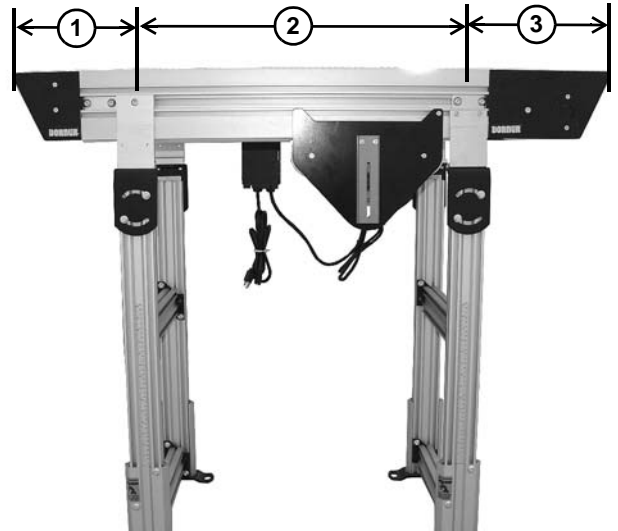


Figure 2

Specifications

Flat Belt Conveyor Width Reference (<u>WW</u>)	06 - 48 in 02 increments
Flat Belt Conveyor Belt Width	6" (152 mm) - 48" (1219 mm) in 2" (51 mm) increments
Cleated Belt Conveyor Width Reference (<u>WW</u>)	08 - 24 in 02 increments
Cleated Belt Conveyor Belt Width	8" (203 mm) - 24" (610 mm) in 2" (51 mm) increments
LPZ Conveyor Width Reference (<u>WW</u>)	06 - 24 in 02 increments
LPZ Conveyor Belt Width	6" (152 mm) - 24" (610 mm) in 2" (51 mm) increments
Maximum Conveyor Load	20 lbs. / ft ² (97 kg/ m ²) with a maximum of 1000 lbs. (454 kg)
Belt Travel	12" (305 mm) per revolution of pulley
Maximum Belt Speed	250 ft/minute (76 m/minute)

Conveyor Length Reference (<u>LLL</u>)	036 - 999 in 001 increments
Conveyor Length	36" (914 mm) - 999" (25.4 m) in 1" (25 mm) increments
LPZ Section Length (<u>LLL</u>)	024 - 288 in 001 increments
LPZ Section Length	24" (610 mm) - 288" (7315 mm) in 1" (25 mm) increments

IMPORTANT

Maximum conveyor loads are based on:

- Non-accumulating product
- Product moving toward gearmotor
- Conveyor being mounted horizontally
- Conveyor being located in a dry environment
- Conveyor equipped with standard belt only

Installation

⚠ CAUTION

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

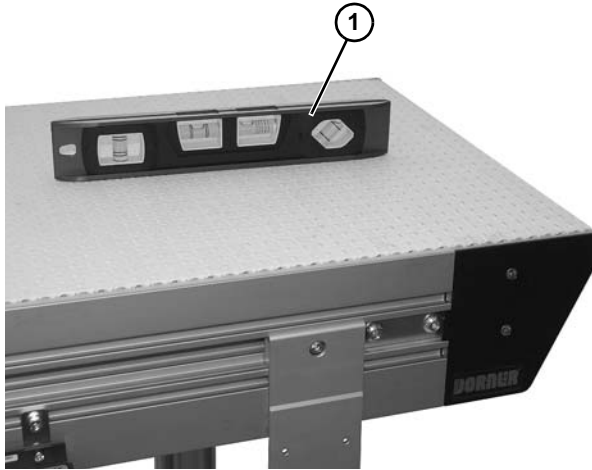


Figure 3

Required Tools

- Level
- Torque wrench
- 4 mm hex wrench
- 5 mm hex wrench

Recommended Installation Sequence

1. Assemble the conveyor (if required). Refer to “Conveyor Sections Longer than 12 ft (3658 mm)” on page 6 and “All Conveyors” on page 8.
2. Attach the stands. Refer to “All Conveyors” on page 8.
3. Install the belt. Refer to “Brackets for SmartSlot Conveyors” on page 9.
4. Install the guiding. Refer to “Guiding (SmartSlot Frames Only)” on page 13 or Refer to “Guiding (T-Slot Frames Only)” on page 13.
5. Install the gearmotor. Refer to “Drive Package Installation” on page 14.

Conveyor Sections Longer than 12 ft (3658 mm)

Connecting Components

Typical Connecting Components (Figure 4)

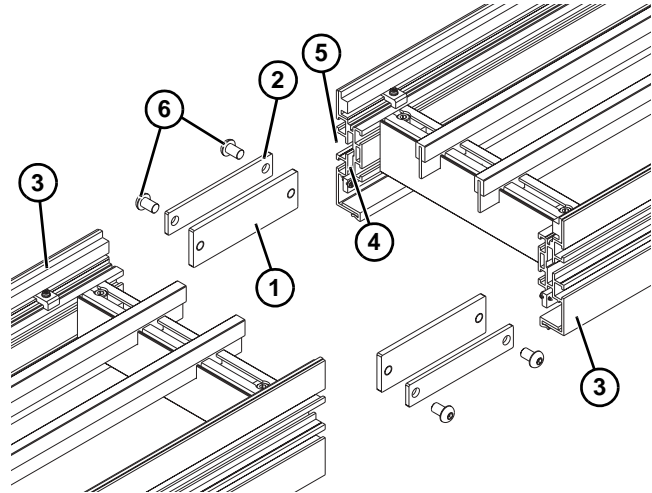


Figure 4

1	Clamp Plate
2	Cover Plate
3	Conveyor frames
4	Inner Channel
5	Outer Channel
6	Button Head Screw, M10-1.50 x 16 mm

1. Locate and arrange conveyor sections by section labels (Figure 5, item 1).

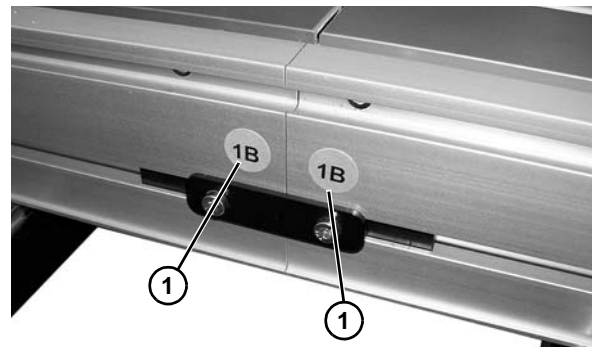


Figure 5

2. Loosely assembly each side clamp plate (Figure 4, item 1) and cover plate (Figure 4, item 2) with two button head screws (Figure 4, item 6).
3. Line up conveyor sections, and install clamp plates (Figure 4, item 1) into inner channel (Figure 4, item 4) of conveyor section and cover plate (Figure 4, item 2) into outer channel (Figure 4, item 4). Secure with two button head screws (Figure 4, item 3) on each side. Tighten screws to 84 in-lb (9 Nm).

Z-Frame Conveyors

NOTE

Be sure all frame sections are properly supported during Z-Frame assembly.

Upper Knuckle

1. Attach upper frame (**Figure 6, item 1**) to upper knuckle (**Figure 6, item 2**), taking care to install both lower wearstrips (**Figure 6, item 3**) onto frame channels (**Figure 6, item 4**).

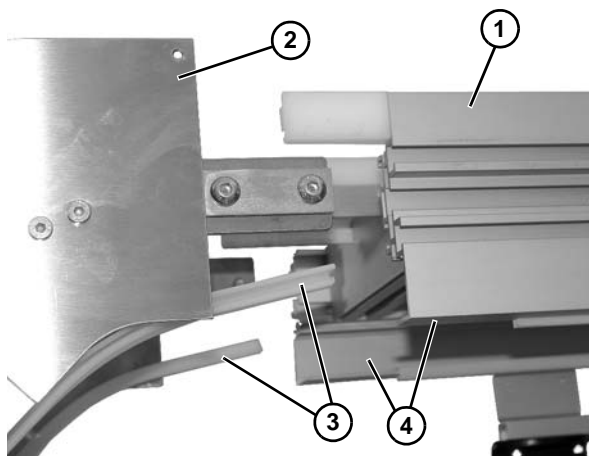


Figure 6

2. Tighten two socket head screws (**Figure 7, item 1**). Repeat on other side.

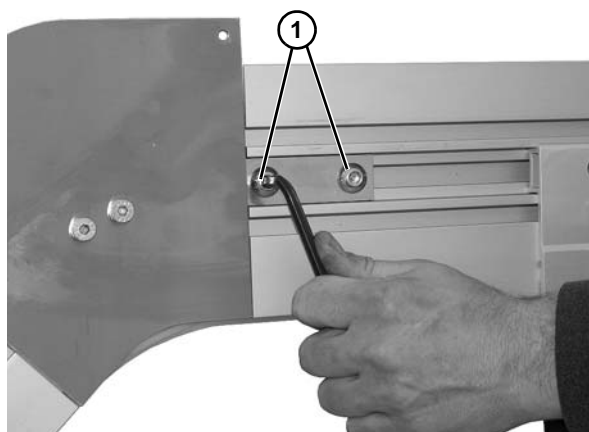


Figure 7

3. Tighten all screws to 60 in-lb (7 Nm).

Lower knuckle

1. Attach lower frame (**Figure 8, item 1**) to lower knuckle (**Figure 8, item 2**) taking care to install both lower wearstrips (**Figure 8, item 3**) onto frame channels (**Figure 8, item 4**).

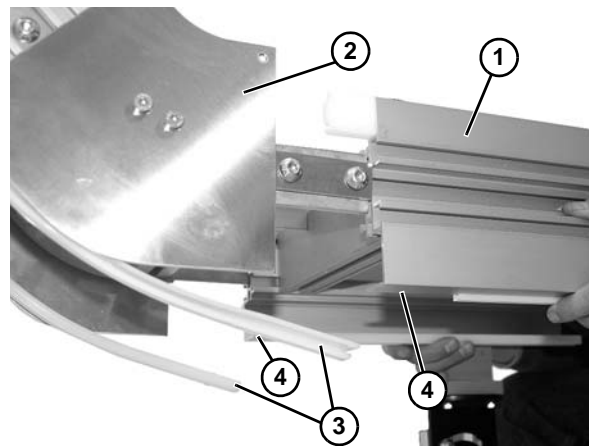


Figure 8

2. Tighten two socket head screws (**Figure 9, item 1**). Repeat on other side.

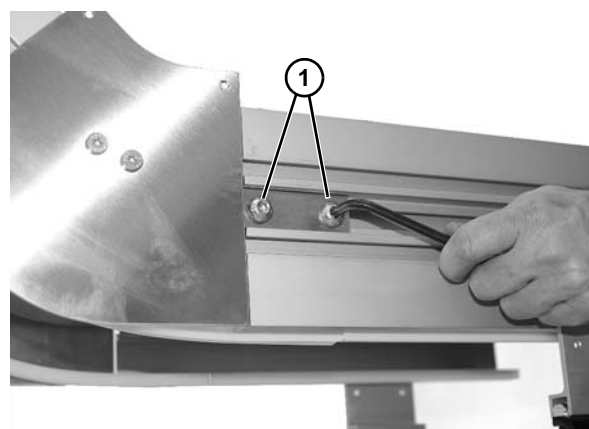


Figure 9

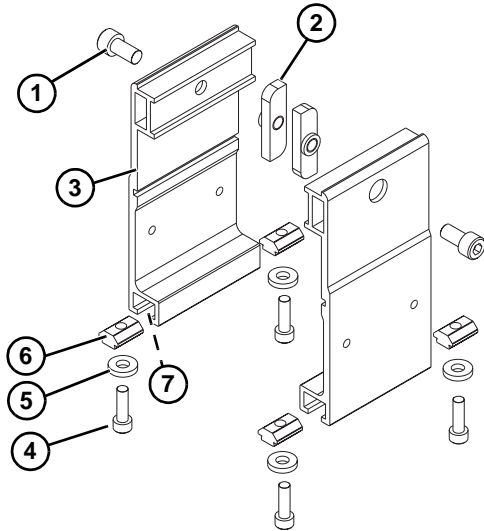
3. Tighten all screws to 60 in-lb (7 Nm).

Installation

All Conveyors

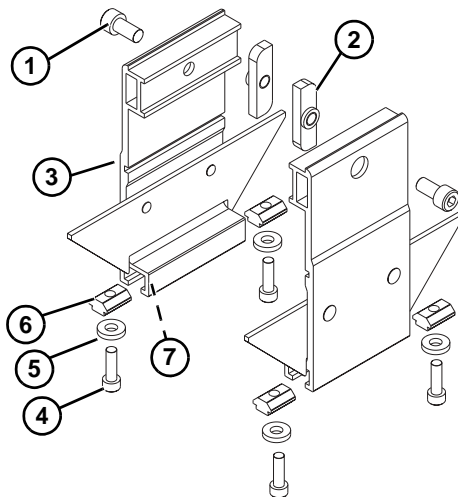
Mounting Brackets for T-Slot Conveyors

Locate brackets. Exploded views shown in (Figure 10) and (Figure 11).



**T-Slot Mounting Brackets
for Flat Belt Conveyors**

Figure 10



**T-Slot Mounting Brackets
for Cleated Belt Conveyors**

Figure 11

1. Loosen screws (Figure 10, item 1) or (Figure 11, item 1) from nuts (Item 2), and leave on brackets (Item 3).
2. Remove screws (Figure 10, item 4) or (Figure 11, item 4) and washers (Item 5) from T-bars (Item 6). Leave T-bars (Item 6) in bracket slots (Item 7).

NOTE

Mounting brackets for flat belt conveyors shown below.

3. Insert nut (Figure 12, item 1) into conveyor side slots (Figure 12, item 2). Fasten brackets (Figure 12, item 3) to conveyor with mounting screws (Figure 12, item 4).

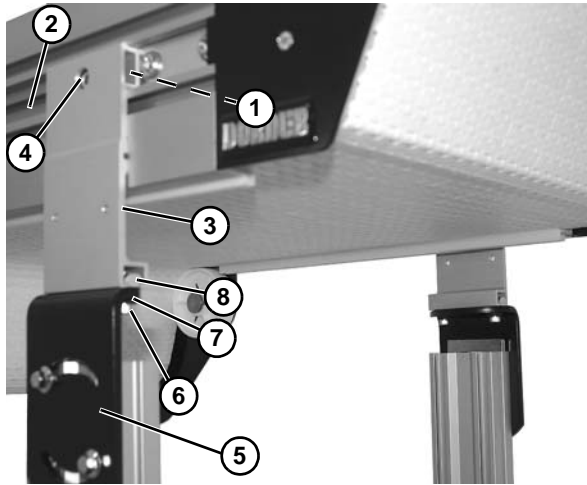
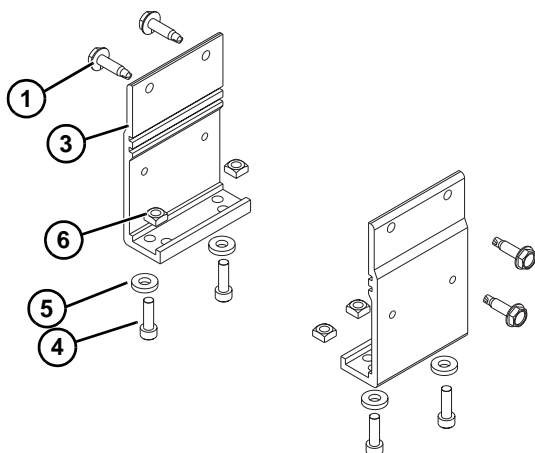


Figure 12

4. Fasten brackets to support stand bracket (Figure 12, item 5) with mounting screws (Figure 12, item 6), washers (Figure 12, item 7) onto T-bar (Figure 12, item 8).
5. Tighten screws (Figure 12, item 4 & 6) to 60 in-lb (7 Nm).

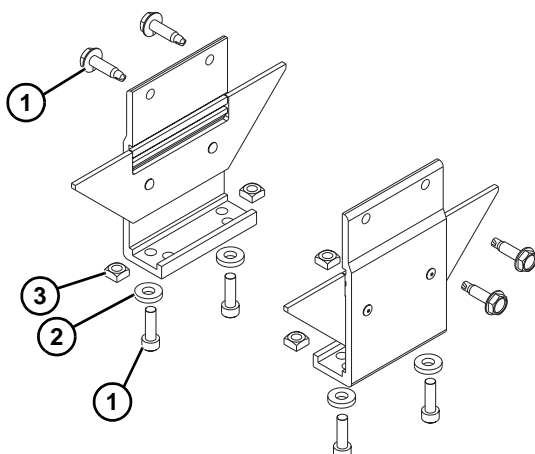
Brackets for SmartSlot Conveyors

Locate brackets. Exploded views shown in (Figure 13) and (Figure 14).



**SmartSlot Mounting Brackets
for Flat Belt Conveyors**

Figure 13



**SmartSlot Mounting Brackets
for Cleated Belt Conveyors**

Figure 14

1. Remove screws (Figure 13, item 1) or (Figure 14, item 1), washers (Item 2), nuts (Item 3) a from brackets.

IMPORTANT

For proper methods of attachment to conveyor side rail see page 11.

2. Locate and retain self-drilling screws (Figure 13, item 4) or (Figure 14, item 4).

NOTE

For maximum support distance see page 5.

3. Measure an equal distance from end of head plate (on both sides of conveyor) and mark placement of mounting brackets (Figure 15, item 1). Fasten mounting brackets to conveyor with mounting screws (Figure 15, item 2) following proper methods of attachment instructions on page 11.

NOTE

Mounting brackets for flat belt conveyors shown.

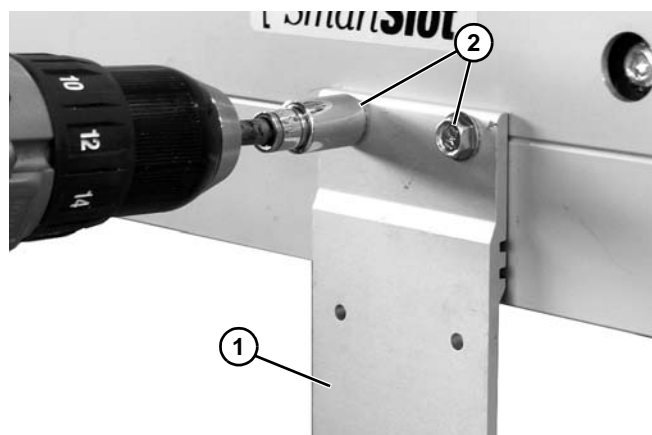


Figure 15

4. Fasten brackets (Figure 16, item 1) to support stand (Figure 16, item 2) with mounting screws (Figure 16, item 3), washers (Figure 16, item 4) and nuts (Figure 16, item 5).

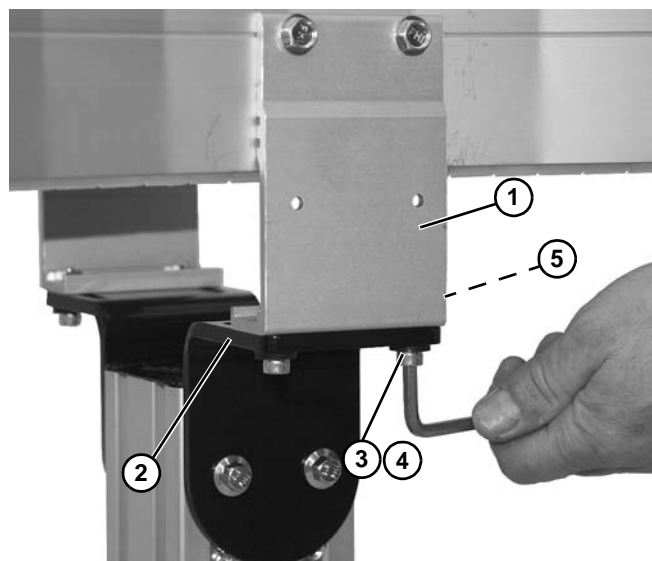


Figure 16

5. Tighten screws (Figure 16, item 3) to 60 in-lb (7 Nm).

Installation

Belt Installation

Typical Belt Components (Figure 17).

1	Chain Belt
2	Belt Rod

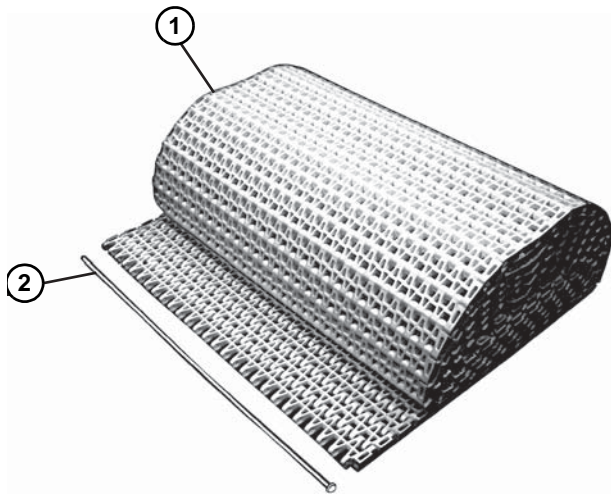
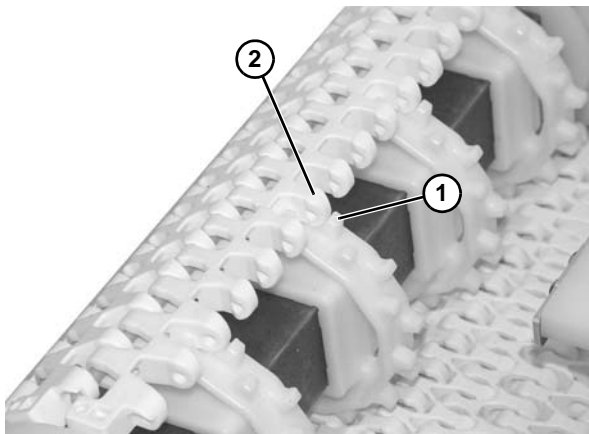


Figure 17

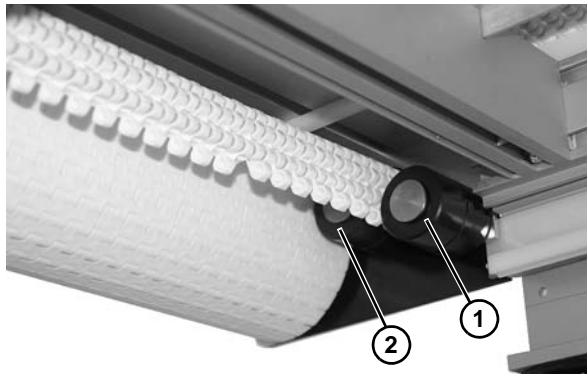
1. Position the belt on the conveyor frame.
2. Standard Drive Tail: Wrap the belt around the drive end of the conveyor, making sure the sprocket teeth have engaged the belt, with concave teeth (Figure 18, item 1) mating with rounded section (Figure 18, item 2) of belt.



Standard Drive Tail

Figure 18

3. Nose Bar Drive Tail: Wrap belt around bottom of drive tail around both return rollers (Figure 19, item 1) and (Figure 19, item 2) as shown.



Nose Bar Drive Tail

Figure 19

4. Nose Bar Idler Tail: Wrap belt around idler tail (Figure 20).



Figure 20

5. Weighted Take-Up: Wrap belt (Figure 21, item 1) over pucks (Figure 21, item 2) and around bottom of weighted shaft (Figure 21, item 3).

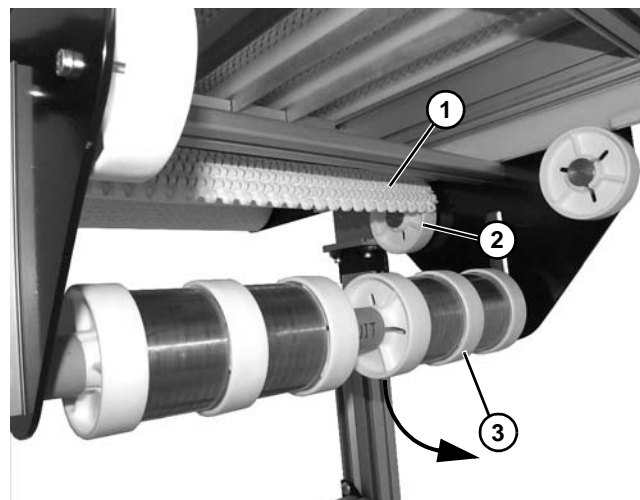


Figure 21

- Weighted Take-Up: Continue wrapping belt (Figure 22, item 1) over top of pucks (Figure 22, item 2) and on top of J-Leg wear strips (Figure 22, item 3).

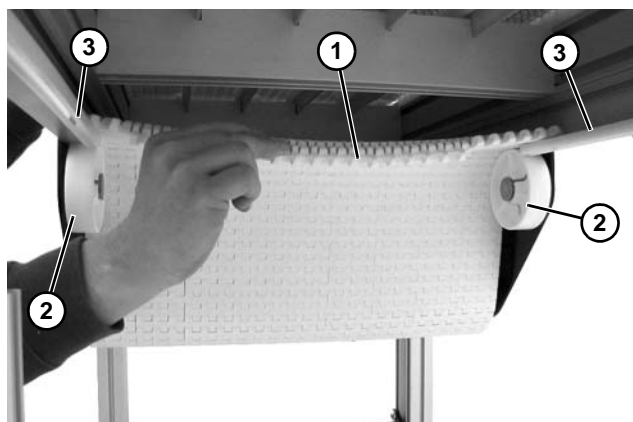


Figure 22

NOTE

For conveyors with weighted take-up units, push up on the weighted shaft to remove belt tension.

- Bring the ends of the belt together (Figure 23).

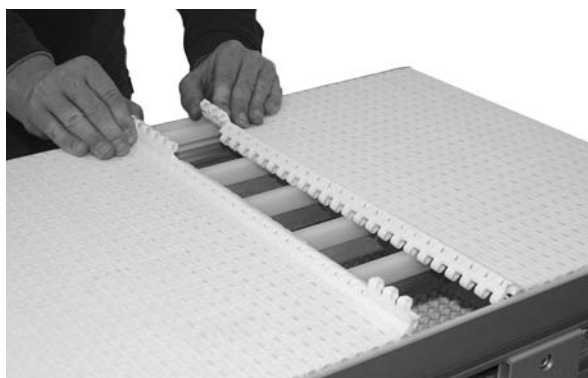


Figure 23

- Insert the belt rod (Figure 24, item 1).

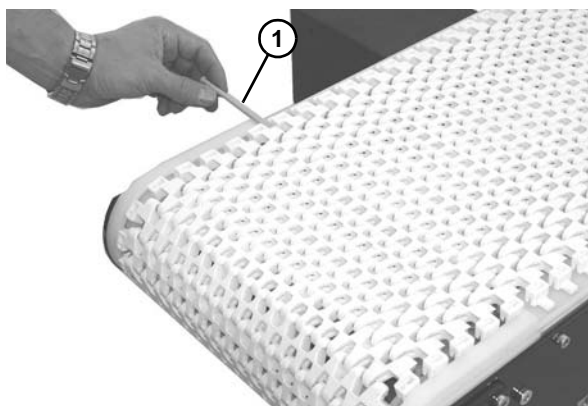


Figure 24

- Push the belt rod in as far as possible.
- Lightly tap the head of the rod with a hammer until it snaps into position.

Proper Methods of Attaching Guiding to Side Rails (SmartSlot Frames Only)

⚠ WARNING

Installing self-drilling screws into the SmartSlot 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 3200 SmartSlot 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.

- Locate guide (Figure 25, item 1) and retaining clip (Figure 25, item 2) and hold to side rail. Hole should line up with notch (Figure 25, item 3) in side rail.

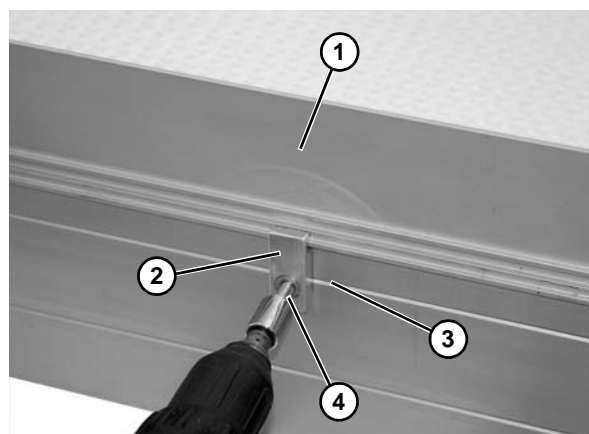


Figure 25

- With a cordless drill or equivalent install self-drilling screw (Figure 25, item 4). 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.

Installation

3. Hand tighten the screws to secure (**Figure 26**). Recommended torque is 150 in-lb (17 Nm).



Figure 26

Pre-Drill for Standard Screws

The 3200 SmartSlot side rail will also accept standard screws. M6-1.0 and 1/4-20 are acceptable. Strength grade 8 is recommended.

1. Locate guide (**Figure 27, item 1**) and retaining clip (**Figure 27, item 2**) and hold to side rail. Hole should line up with notch (**Figure 27, item 3**) in side rail. Mark the hole locations with a center punch (**Figure 27, item 4**) and remove the bracket.

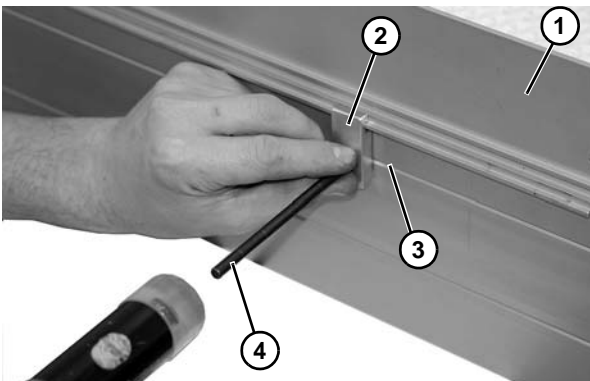


Figure 27

2. Drill the hole locations (**Figure 28, item 1**) with a 3/16" drill bit (**Figure 28, item 2**).

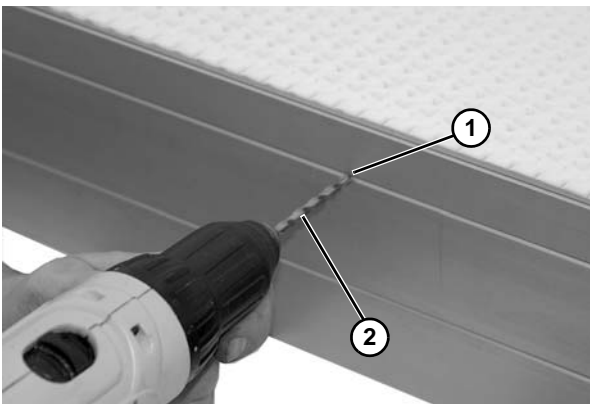


Figure 28

3. Position and hold bracket (**Figure 29, item 1**) to side rail. With a standard M6-1.0 or 1/4-20 screw, install screws (**Figure 29, item 2**) with cordless drill or equivalent. Do not fully tighten with drill.

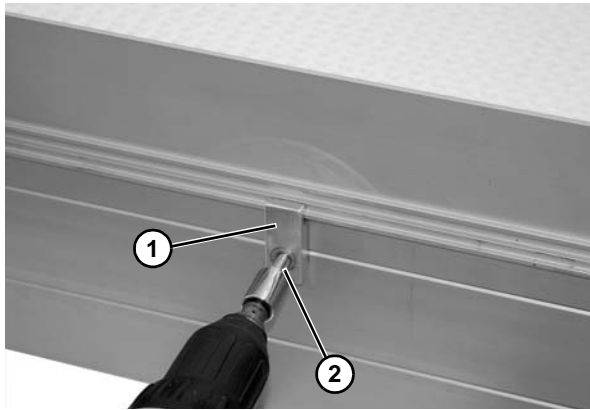


Figure 29

4. Hand tighten the screws to secure (**Figure 30**). Recommended torque is 150 in-lb (17 Nm).



Figure 30

Guiding (SmartSlot Frames Only)



WARNING

Installing self-drilling screws into the SmartSlot 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 SmartSlot 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 31, item 1**) locations. The end clips should be no greater than 12" from end of the conveyor. Hole should line up with notch (**Figure 31, item 2**) in side rail.

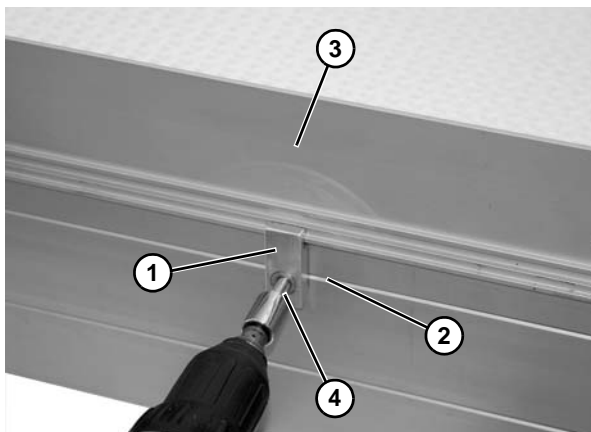


Figure 31

2. Hold guide (**Figure 31, item 3**) and retaining clip (**Figure 31, item 1**) to conveyor side rail. Install self-drilling screws (**Figure 31, item 4**) following the "Proper Methods of Attaching Guiding to Side Rails (SmartSlot Frames Only)" on page 11 procedure.

Guiding (T-Slot Frames Only)

1. Install guide block (**Figure 32, item 1**) with drop-in tee bar (**Figure 32, item 2**) in conveyor slot

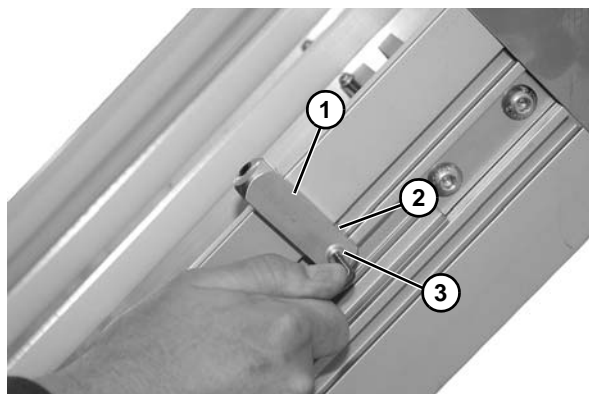


Figure 32

2. Tighten socket head screw (**Figure 32, item 3**) to secure position.
3. Install guide (**Figure 33, item 1**) onto top slot in guide block (**Figure 33, item 2**) and secure with set screw (**Figure 33, item 3**).

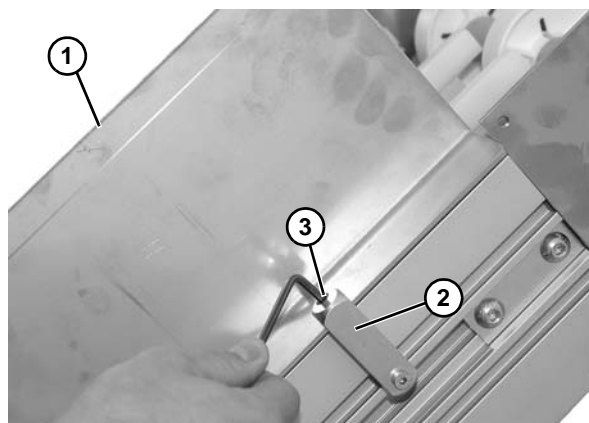


Figure 33

Installation

Fully Adjustable Guiding

Fully adjustable guiding may be shipped from the factory in various stages of assembly. If necessary, assemble the components in the manner shown in (Figure 34).

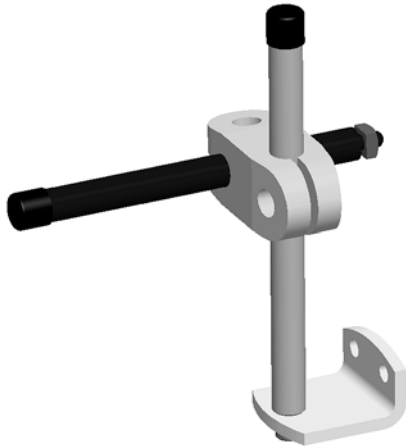


Figure 34

1. Insert drop-in tee bars (Figure 35, item 1) into the conveyors t-slot (Figure 35, item 2), if applicable, and attach fully adjustable brackets (Figure 35, item 3). Evenly space along length of conveyor.

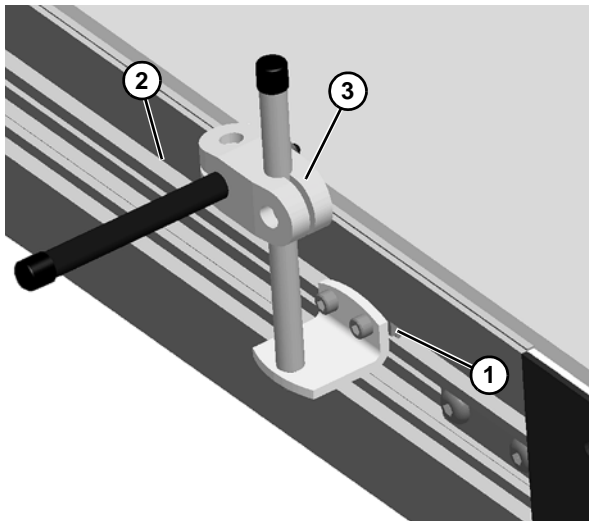


Figure 35

NOTE

For SmartSlot conveyors attach with self-drilling screws as shown in Proper Methods for Attaching Guiding to Side Rails (SmartSlot Frames Only) section on page 11.

2. Install extruded guide (Figure 36, item 1) onto end of mounting guide shaft (Figure 36, item 2).

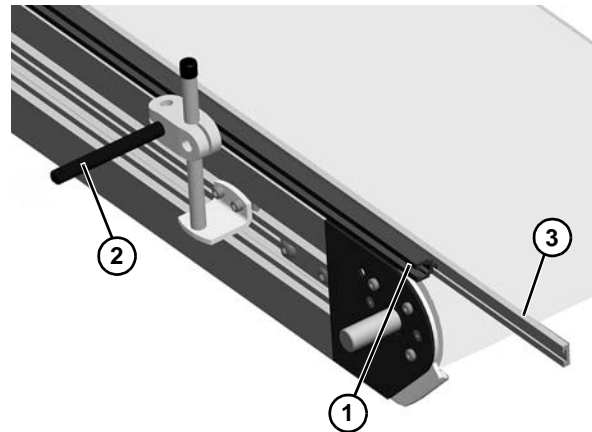


Figure 36

3. Install guiding (Figure 36, item 3) onto extruded guide (Figure 36, item 1).

Drive Package Installation

NOTE

For detailed assembly instructions, refer to the appropriate Drive Packages Installation, Maintenance and Parts Manual.

1. Attach the motor (Figure 37, item 1) to the gear reducer (Figure 37, item 2). (End Drive shown below.)

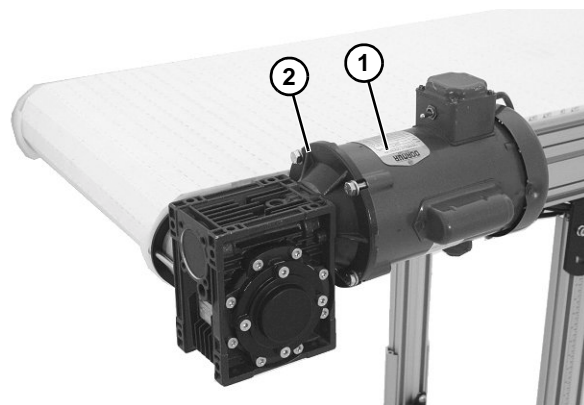


Figure 37

Preventive Maintenance and Adjustment

Required Tools

- 3 mm hex wrench
- 4 mm hex wrench
- 5 mm hex wrench
- 6 mm hex wrench
- 8 mm hex wrench
- 19 mm combination wrench
- Adjustable wrench
- T20 Torx
- Punch and hammer (to remove belt rod)

Checklist

- Keep service parts on hand. Refer to the "Service Parts" section starting on page 34 for recommendations.
- Replace any worn or damaged parts.

Lubrication

No lubrication is required. Replace bearings if worn.

Maintaining the Conveyor Belt

Troubleshooting

Inspect conveyor belt for:

- Surface cuts or wear
- Skipping

Damage to belt links or rods, surface cuts and / or wear indicate:

- Sharp or heavy parts impacting belt
- Jammed parts
- Accumulated dirt
- Foreign material inside the conveyor
- Improperly positioned accessories

Skipping indicates:

- Excessive load on belt
- Worn spindle or impacted dirt on drive spindle

Conveyor Belt Replacement

⚠ WARNING

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

Replacing a Section of Belt

1. Use a punch and hammer to push the belt rod (Figure 38, item 1) out by striking the rod end opposite the retaining head (Figure 38, item 2).

⚠ WARNING

SEVERE HAZARD! If conveyor belt is damaged or worn, replace belt section.

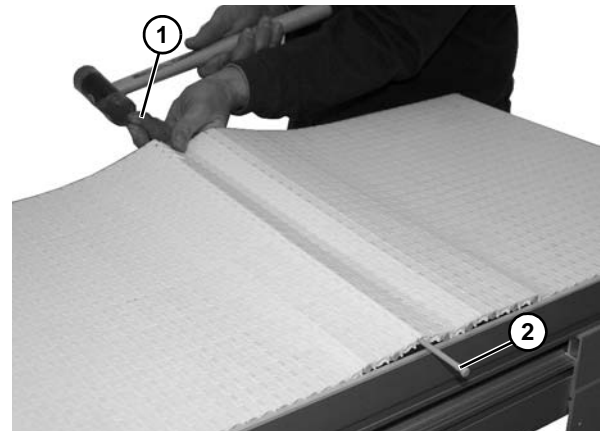


Figure 38

2. Remove the belt rods on both sides of the section of belt being replaced.
3. Replace old section of belt.

⚠ CAUTION
Do NOT reuse belt rods that are damaged or show signs of wear.

Preventive Maintenance and Adjustment

Replacing the Entire Belt

1. Use a punch and hammer to push the belt rod (**Figure 39, item 1**) out by striking the rod end opposite the retaining head (**Figure 39, item 2**).

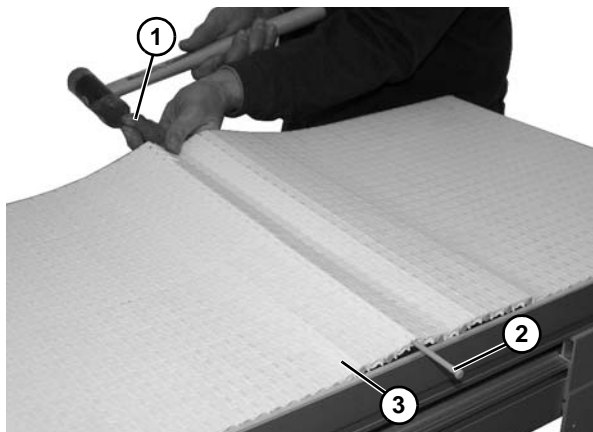


Figure 39

2. Slide the old belt (**Figure 39, item 3**) off the conveyor frame.
3. Replace the old belt with a new one. Refer to “Brackets for SmartSlot Conveyors” on page 9.

CAUTION

Do NOT reuse belt rods that are damaged or show signs of wear.

Conveyor Belt Tensioning

WARNING



SEVERE HAZARD!

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

NOTE

Belt should not be stretched during installation. A proper length of belt can be installed by interlocking the ends by hand without excess links.

1. If applicable, check weighted take-up unit to see if belt is at bottom of travel.
2. Remove one or more belt links to take up tension. Refer to “Replacing a Section of Belt” on page 15.

Wear Strips

Replace the wear strips if they become worn.

Typical Standard Wear Strips (**Figure 40**)

- | | |
|---|------------------------------|
| 1 | Wear Strips, Top Mid Clip-On |
| 2 | Wear Strips, Outer Top |
| 3 | Wear Strips, J-Leg |
| 4 | Wear Strips, Tenting |

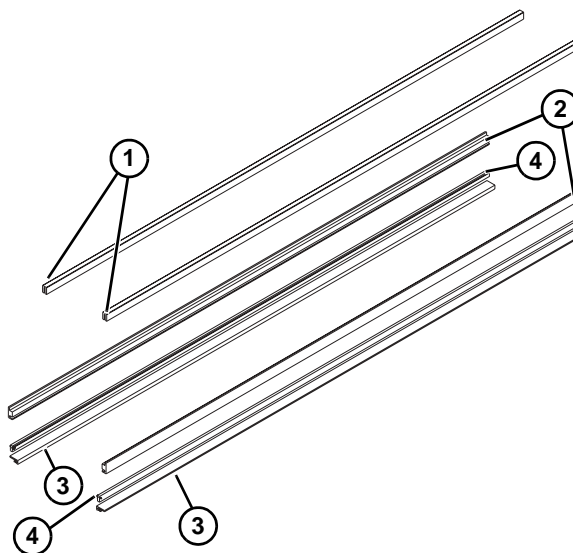


Figure 40

Removal of Top Mid Clip-On Wear Strips

1. Remove belt. See “Conveyor Belt Replacement” on page 15.

NOTE

*The top clip-on wearstrips (**Figure 41, item 1**) have a screw (**Figure 41, item 2**) on end of wearstrip on idler end (**Figure 41, item 3**) of conveyor so wearstrips do not move too far toward drive end.*

2. Remove top clip-on wear strips (**Figure 41, item 1**).

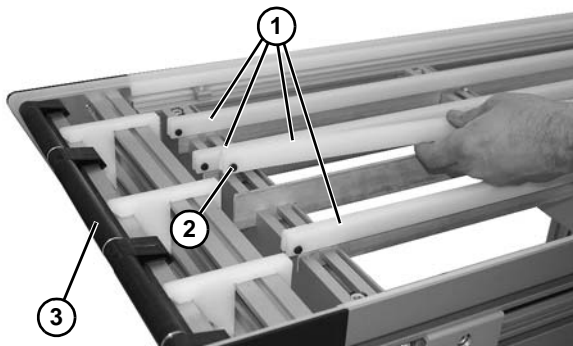


Figure 41

Preventive Maintenance and Adjustment

Removal of Outer Top Wear Strips

1. Using T20 torx tool, remove torx screws (Figure 42, item 1) and clamps (Figure 42, item 2) holding outer top wear strip (Figure 42, item 3) to frame.

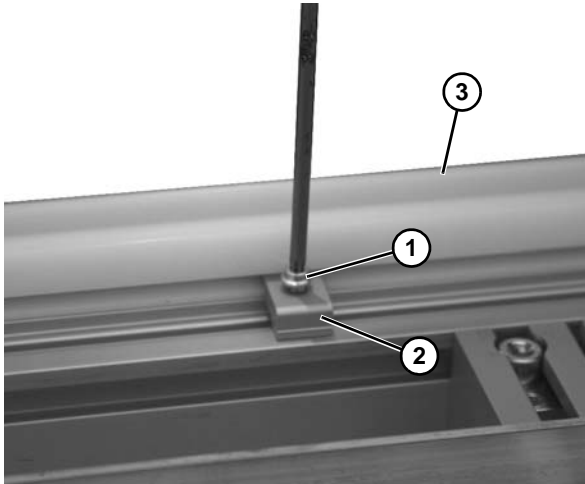


Figure 42

2. Remove outer top wear strip (Figure 43, item 1) from frame assembly.

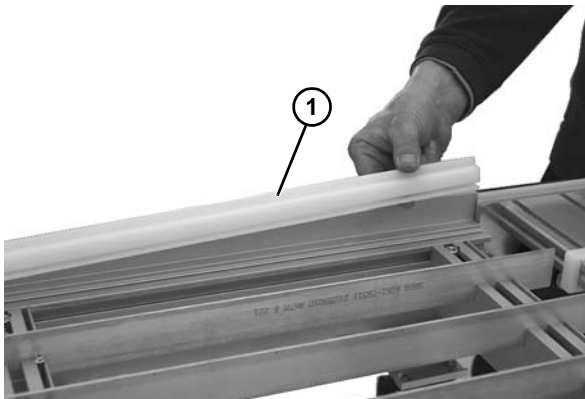


Figure 43

Removal of J-Leg Wear Strips

1. Slide J-leg wear strips (Figure 44, item 1) from lower frame (Figure 44, item 2).

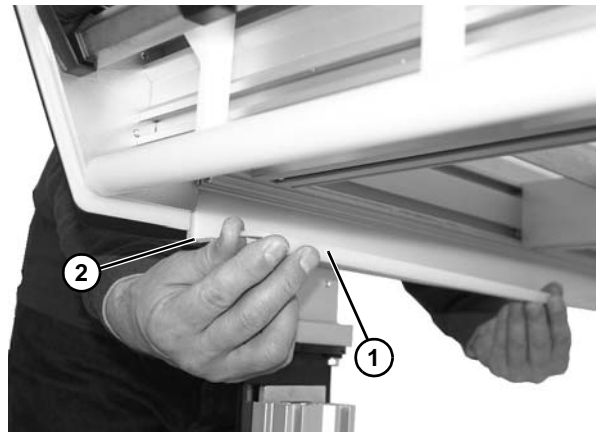


Figure 44

Removal of Tenting Wear Strips

1. Remove drive tail. Refer to “Tail Component Removal” on page 18.
2. Slide tenting wear strips (Figure 45, item 1) from frame assembly (Figure 45, item 2).

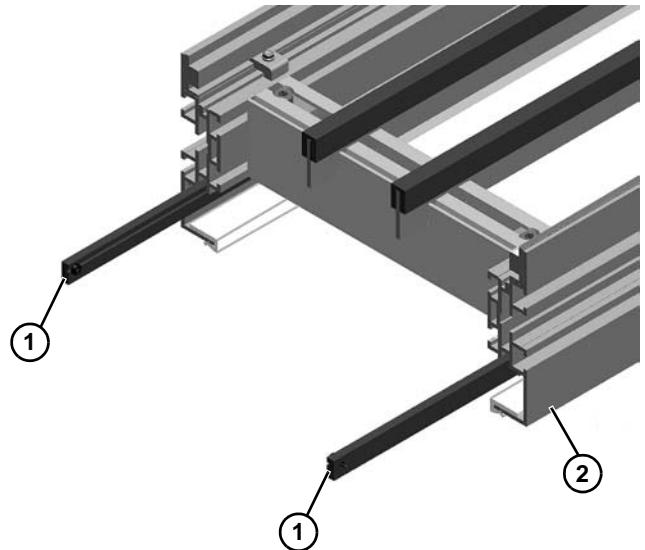


Figure 45

Preventive Maintenance and Adjustment

Wear Strip Installation

NOTE

The top clip-on wearstrips (**Figure 46, item 1**) have a screw (**Figure 46, item 2**) on end of wearstrip on idler end (**Figure 46, item 3**) of conveyor so wearstrips do not move too far toward drive end.

1. Install top clip-on wear strips (**Figure 46, item 1**).

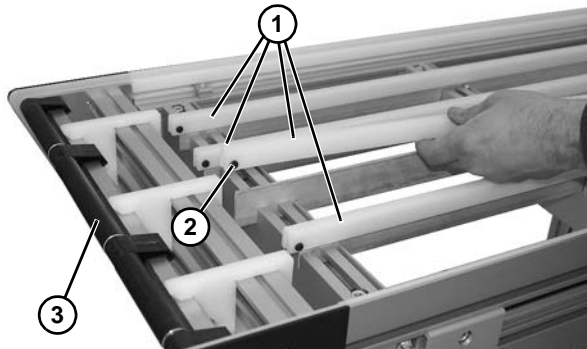


Figure 46

2. Slide tenting wear strips (**Figure 47, item 1**) into frame assembly (**Figure 47, item 2**) on discharge end of conveyor.

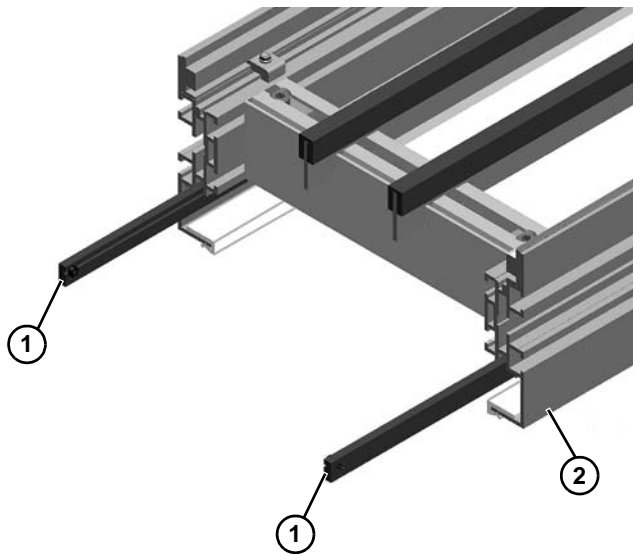


Figure 47

Install remaining components reverse of removal.

Tail Component Removal



WARNING



SEVERE HAZARD!

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

Remove conveyor belt to access spindle(s). See “Replacing the Entire Belt” on page 16. Remove the desired spindle following the corresponding instructions below:

- **A** – Drive Tail Component Removal
- **B** – Nose Bar Drive Tail Component Removal
- **C** – Idler Tail Component Removal
- **D** – Nose Bar Idler Tail Component Removal

A – Drive Tail Component Removal



WARNING



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

1. Remove the gearmotor. For detailed instructions, refer to the appropriate drive package manual.
2. Loosen the two socket head screws (**Figure 48, item 1**). Repeat on opposite side.



Figure 48

Preventive Maintenance and Adjustment

3. Remove the drive tail assembly (Figure 49, item 1) from the frame (Figure 49, item 2).

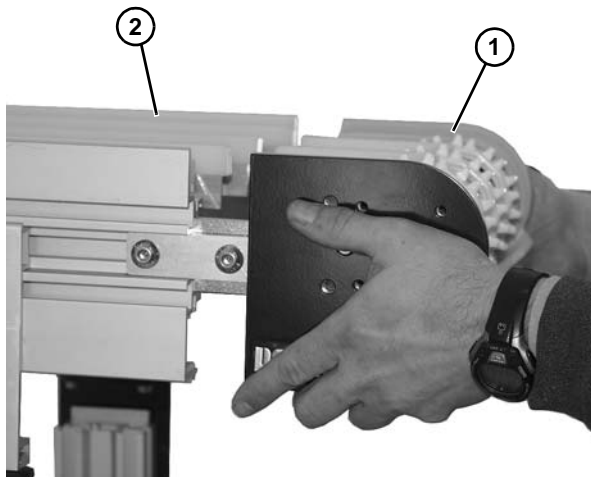


Figure 49

6. Remove two socket head screws (Figure 52, item 1) from bearing housing (Figure 52, item 2).

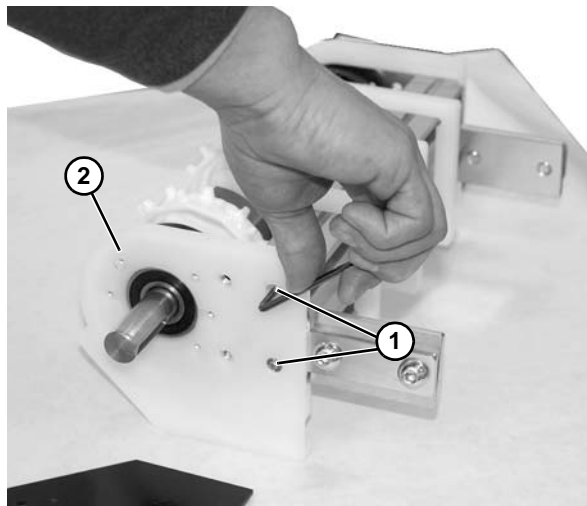


Figure 52

4. Remove the two flat head screws (Figure 50, item 1) and cover (Figure 50, item 2).

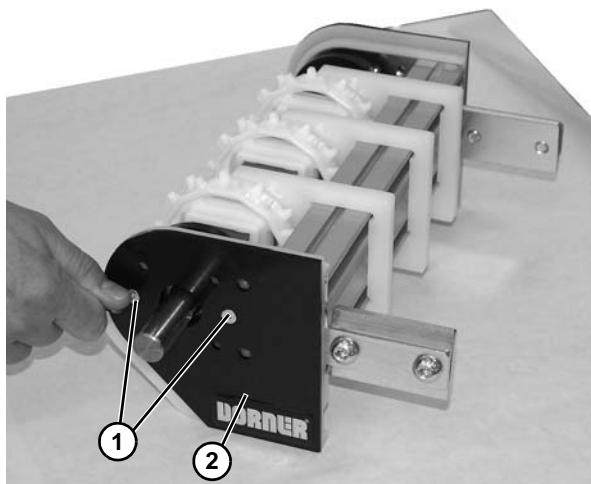


Figure 50

7. Remove bearing housing (Figure 53, item 1) from crossmember (Figure 53, item 2).

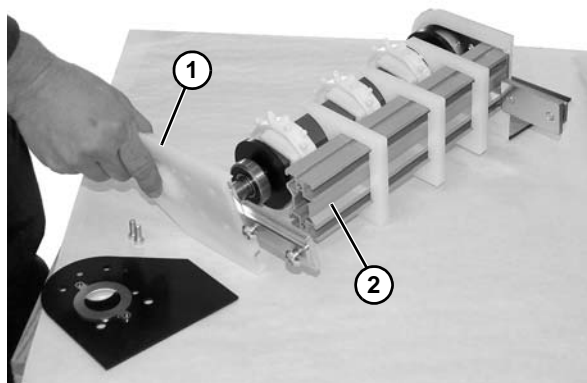


Figure 53

5. Remove bearing stop plate (Figure 51, item 1).

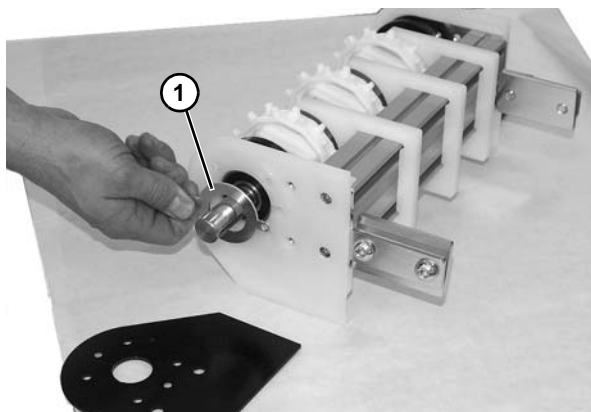


Figure 51

8. Remove from drive backing plate (Figure 54, item 1).

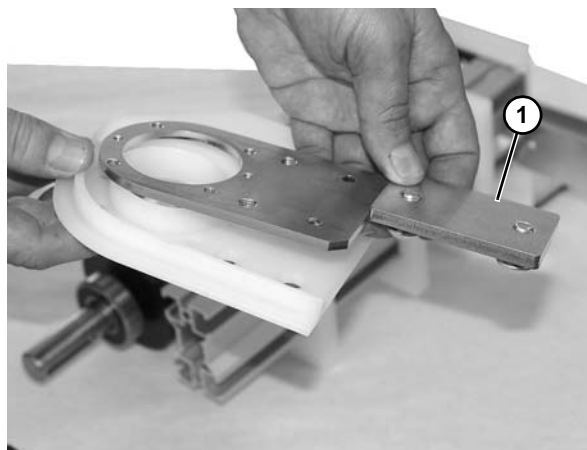


Figure 54

Preventive Maintenance and Adjustment

9. Remove components on opposite side, as shown.

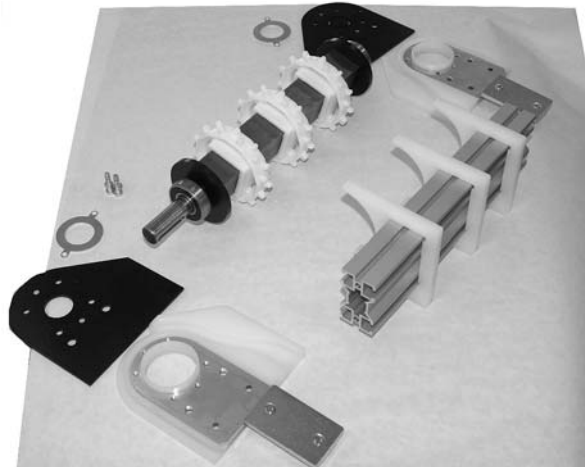


Figure 55

10. Remove gap filler plates (**Figure 56, item 1**) from crossmember (**Figure 56, item 2**).

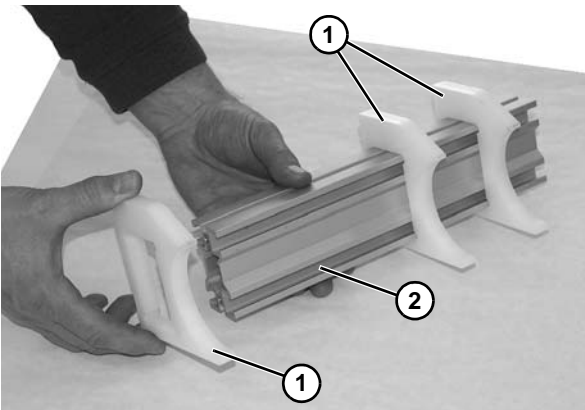


Figure 56

IMPORTANT

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

11. Using puller (**Figure 57, item 1**), as shown, remove bearing (**Figure 57, item 2**) from shaft assembly. Repeat on opposite side, if needed.

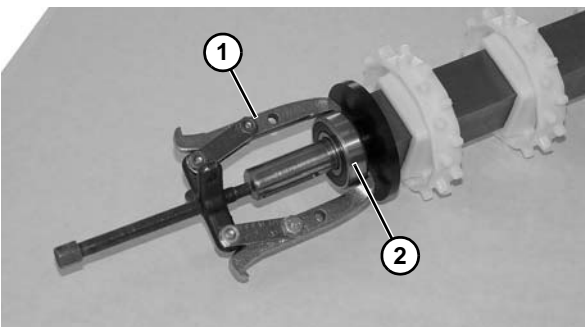


Figure 57

12. Remove washer (**Figure 58, item 1**), as shown, making note of flange area (**Figure 58, item 2**) of washer. Repeat on opposite side, if needed.

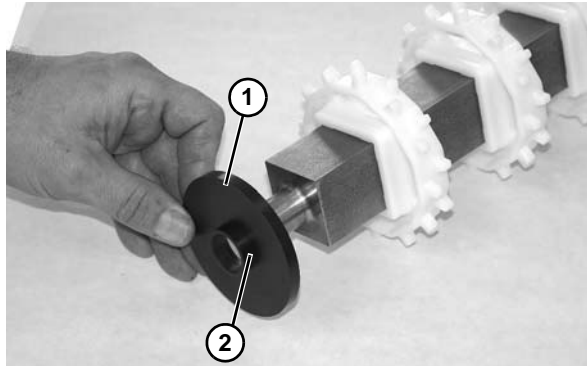


Figure 58

13. Remove sprockets (**Figure 59, item 1**) off the drive spindle (**Figure 59, item 2**). Inspect and replace if worn.

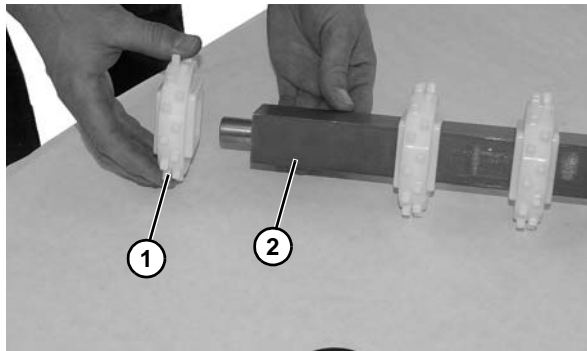


Figure 59

14. Press new bearing onto drive pulley.
15. To assemble sprockets onto drive spindle, slide all sprockets spaced evenly onto drive spindle and alignment key.
16. Assemble components reverse of removal.

NOTE

*When reinstalling the drive spindle tail assembly, the drive tail assembly (**Figure 60, item 1**) should mate flush with the conveyor frame (**Figure 60, item 2**).*

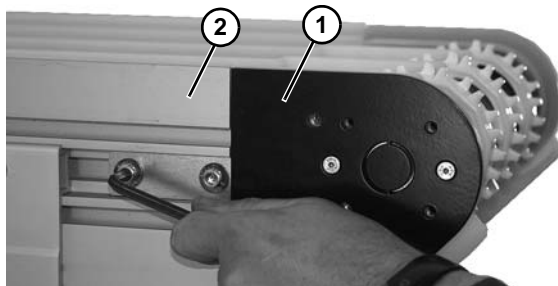


Figure 60

Preventive Maintenance and Adjustment

B – Nose Bar Drive Tail Component Removal

 WARNING

Drive shaft keyway may be sharp. HANDLE WITH CARE.

1. Remove the gearmotor. For detailed instructions, refer to the appropriate drive package manual.
2. Loosen two socket head bolts (Figure 61, item 1) on each side of nose bar drive tail assembly (Figure 61, item 2).

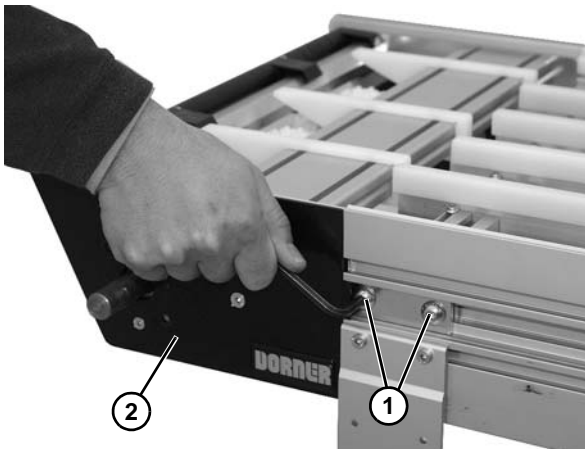


Figure 61

3. Remove the drive tail assembly (Figure 62, item 1) from the frame (Figure 62, item 2).

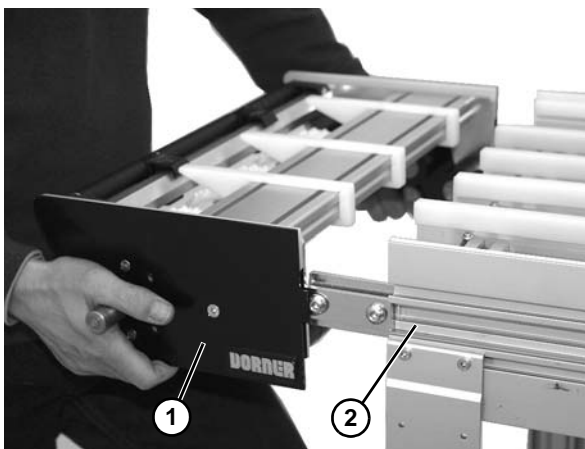


Figure 62

4. Remove the three socket head screws (Figure 63, item 1) from cover plate (Figure 63, item 2).

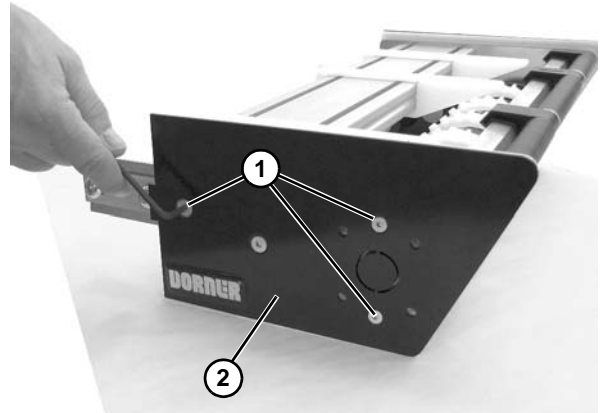


Figure 63

5. Remove cover assembly (Figure 64, item 1).

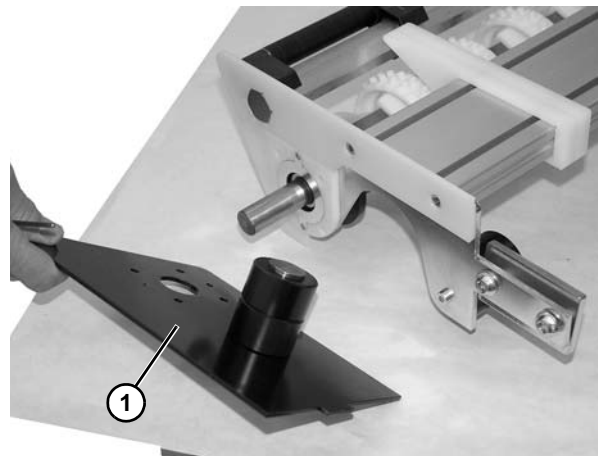


Figure 64

6. Remove bearing stop plate (Figure 65, item 1).

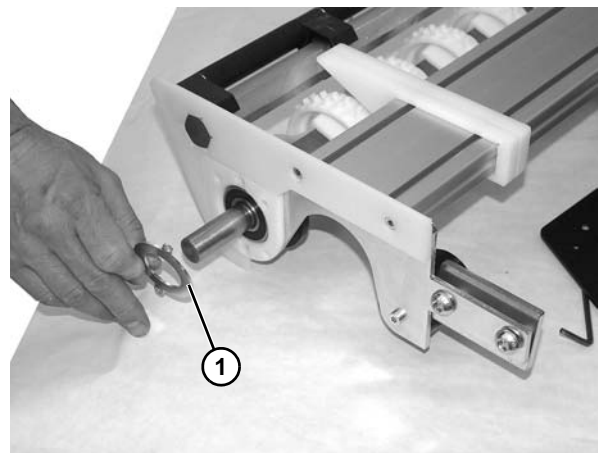


Figure 65

Preventive Maintenance and Adjustment

7. Remove two socket head screws (**Figure 66, item 1**) holding nose bar spacer (**Figure 66, item 3**) and nose bar backing plate (**Figure 66, item 2**) from crossmember.

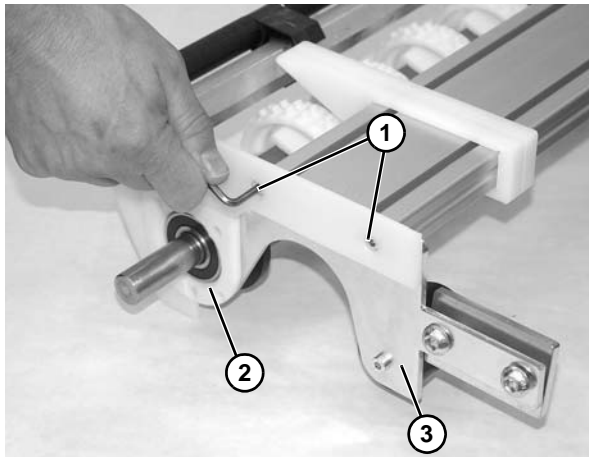


Figure 66

8. Remove bearing housing (**Figure 67, item 1**), nose bar spacer (**Figure 67, item 2**), and nose bar backing plate assembly (**Figure 67, item 3**) from crossmember.

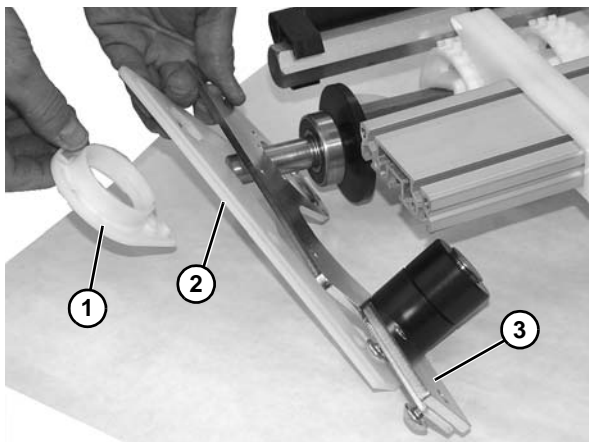


Figure 67

9. Remove center spindle assembly (**Figure 68, item 1**).



Figure 68

10. Remove shaft assembly (**Figure 68, item 2**).

IMPORTANT

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

11. Using puller (**Figure 69, item 1**), as shown, remove bearing (**Figure 69, item 2**) from shaft assembly. Repeat on opposite side, if needed.

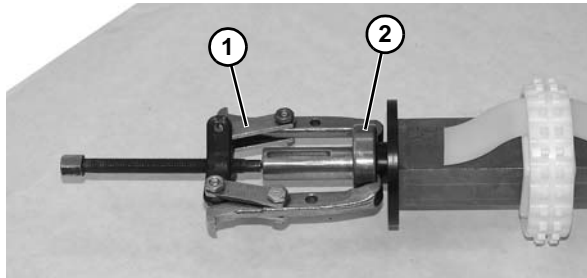


Figure 69

12. Remove washer (**Figure 70, item 1**), as shown, making note of flange area (**Figure 70, item 2**) of washer. Repeat on opposite side, if needed.

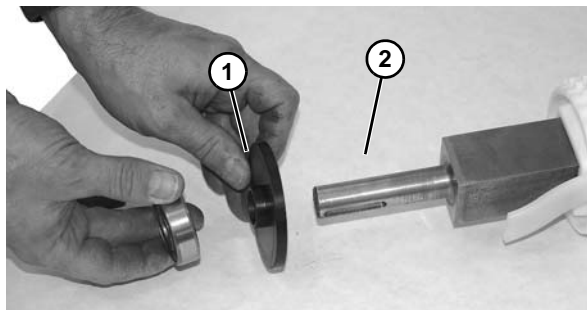


Figure 70

13. Slide entire sprocket assembly slightly outward, and remove the first sprocket (**Figure 71, item 1**) off the drive spindle (**Figure 71, item 2**) and alignment bar (**Figure 71, item 3**). Inspect and replace if worn.

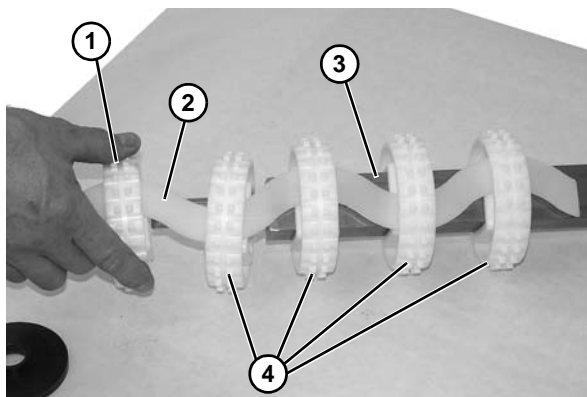


Figure 71

14. Remove remaining sprockets (**Figure 71, item 4**) off the alignment bar as you slide entire assembly off the drive spindle.

Preventive Maintenance and Adjustment

15. To assemble sprockets onto drive spindle, slide one sprocket onto alignment bar and slide assembly onto drive spindle.
16. Install second sprocket and subsequent sprockets (**Figure 71, item 4**) one by one, while sliding entire assembly onto alignment bar (**Figure 71, item 2**) and spindle (**Figure 71, item 3**), making certain each sprocket is locked into retaining tab cut out (**Figure 72, item 1**) on alignment bar (**Figure 72, item 2**).

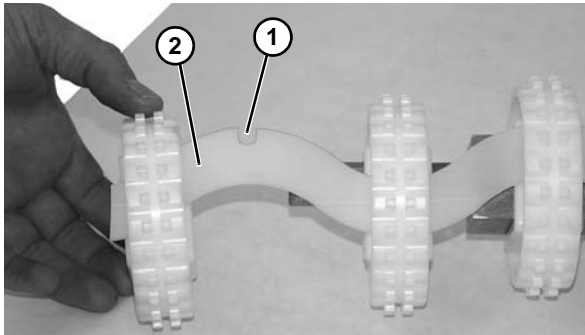


Figure 72

17. Press new bearing onto drive pulley.
18. Remove socket head screw (**Figure 73, item 1**) holding return rollers (**Figure 73, item 2**) onto drive cover plate (**Figure 73, item 3**).

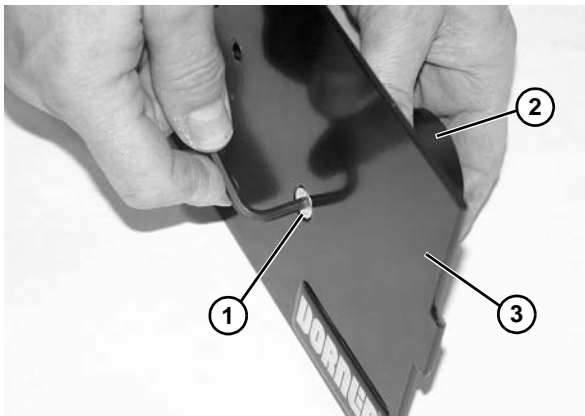


Figure 73

19. Remove two return rollers (**Figure 74, item 1**) and idler stub (**Figure 74, item 2**) from cover plate.

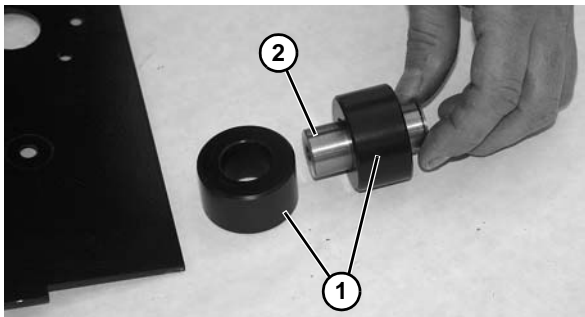


Figure 74

20. Remove nose bar spacer (**Figure 75, item 1**) from nose bar backing plate (**Figure 75, item 2**).

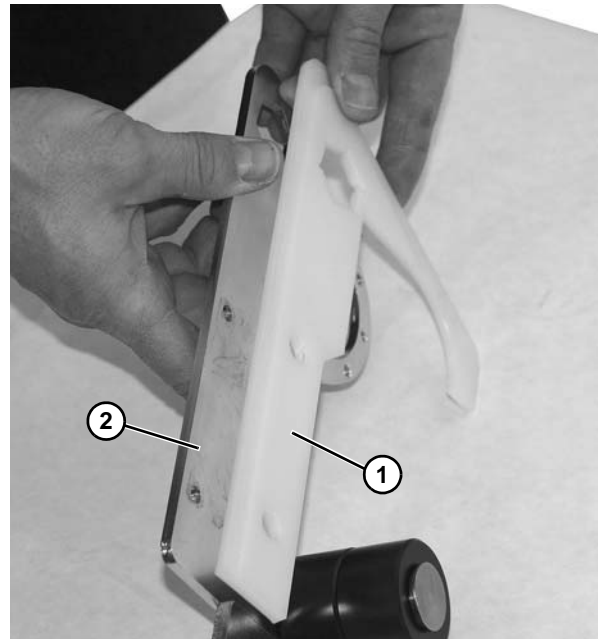


Figure 75

21. Remove socket head screw (**Figure 76, item 1**) holding return rollers (**Figure 76, item 2**) on nose bar backing plate (**Figure 76, item 3**).

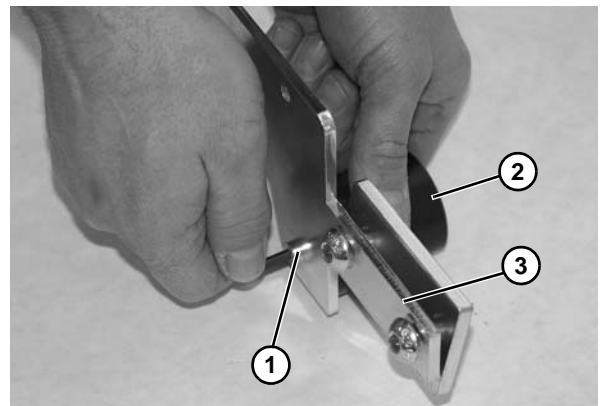


Figure 76

22. Remove two return rollers and idler stub from nose bar backing plate.

Preventive Maintenance and Adjustment

23. Remove spindle retainer (**Figure 77, item 1**), and each spindle assembly (**Figure 77, item 2**) from hex shaft (**Figure 77, item 3**).

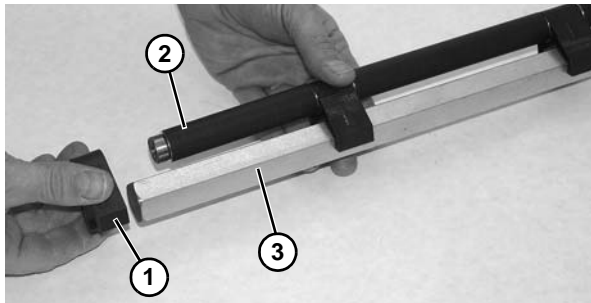


Figure 77

24. Repeat for remaining spindle retainers and each spindle assembly.
25. Remove gap filler plates (**Figure 78, item 1**) from crossmember (**Figure 78, item 2**).

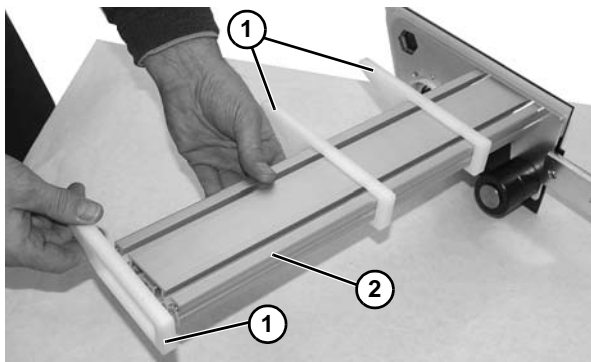


Figure 78

26. Assemble components reverse of removal.

NOTE

*When reinstalling the nose bar drive spindle tail assembly, the drive tail assembly (**Figure 79, item 1**) should mate flush with the conveyor frame (**Figure 79, item 2**).*

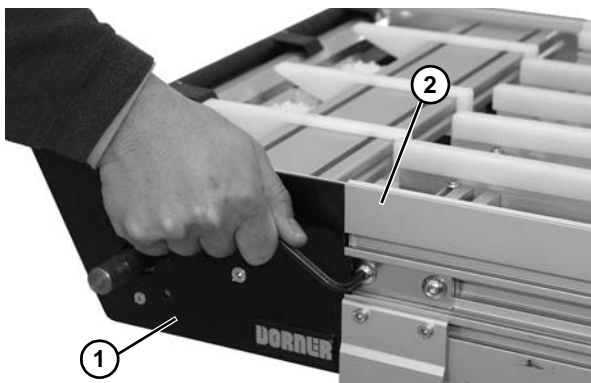


Figure 79

C – Idler Tail Component Removal

1. Be sure the conveyor is supported.
2. Loosen the two socket head screws (**Figure 80, item 1**). Repeat on opposite side.

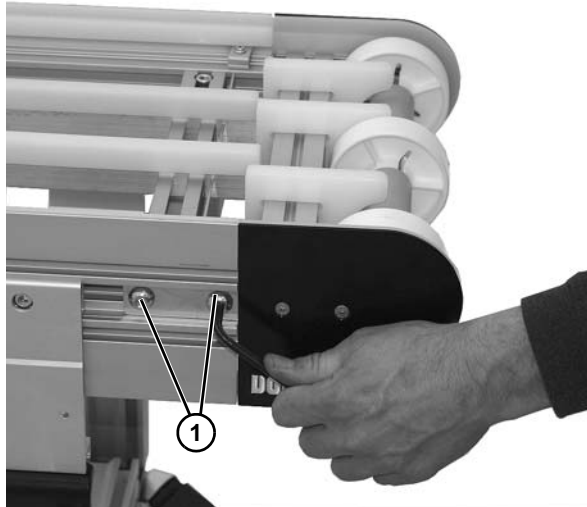


Figure 80

3. Remove the idler tail assembly (**Figure 81, item 1**) from the frame (**Figure 81, item 2**).

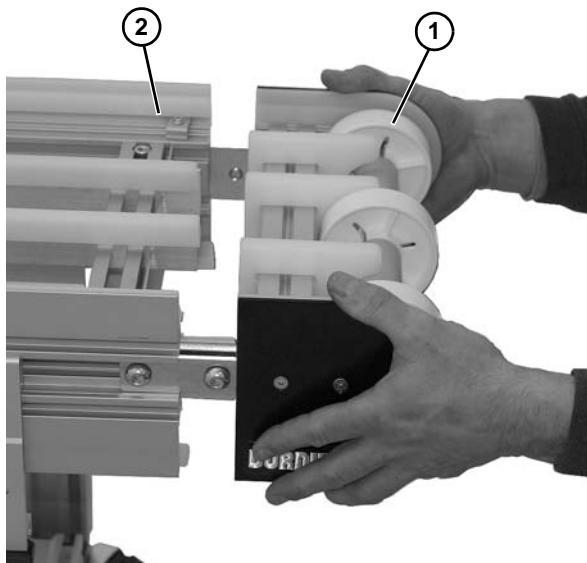


Figure 81

Preventive Maintenance and Adjustment

4. Remove the two flat head screws (**Figure 82, item 1**) and cover (**Figure 82, item 2**).

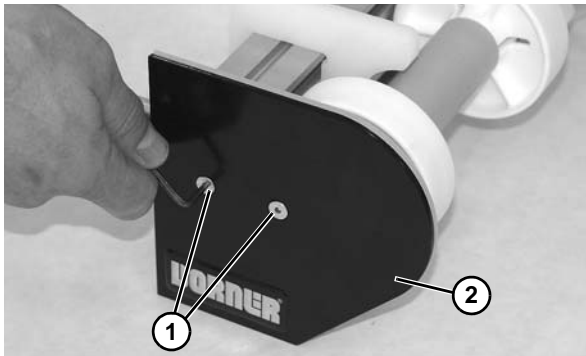


Figure 82

5. Remove two socket head screws (**Figure 83, item 1**) and filler plate (**Figure 83, item 2**).

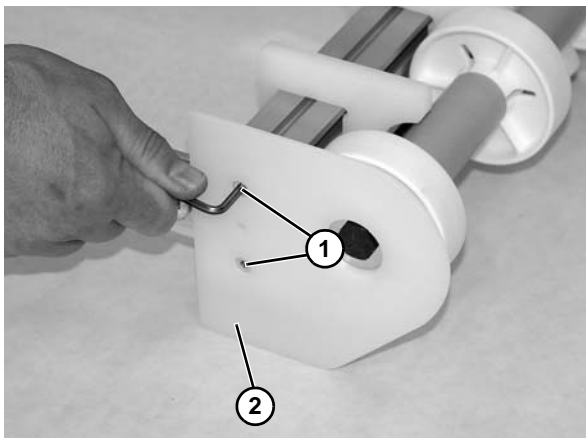


Figure 83

6. Remove filler plate (**Figure 84, item 1**) and idler backing plate (**Figure 84, item 2**) from crossmember (**Figure 84, item 3**) and roller assembly (**Figure 84, item 4**).

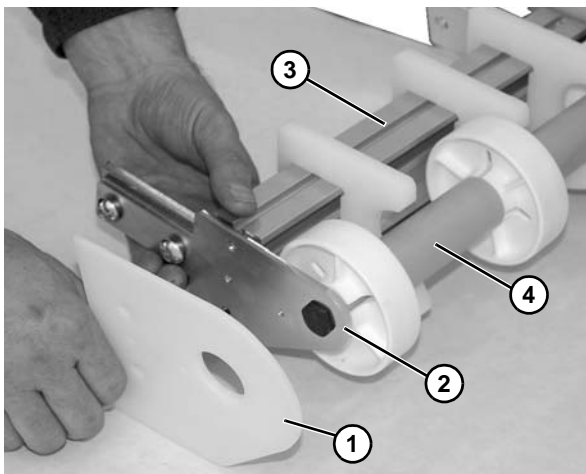


Figure 84

7. Use wrenches to remove both bolts (**Figure 85, item 1**) from each side of roller assembly.

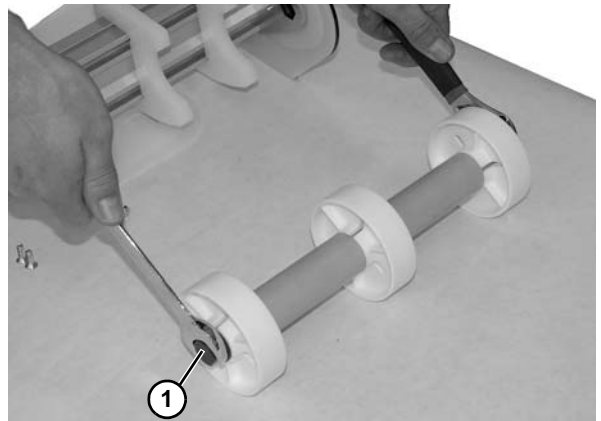


Figure 85

8. Remove idler pucks (**Figure 86, item 1**) and tube spacers (**Figure 86, item 2**), as needed, from each side of assembly.

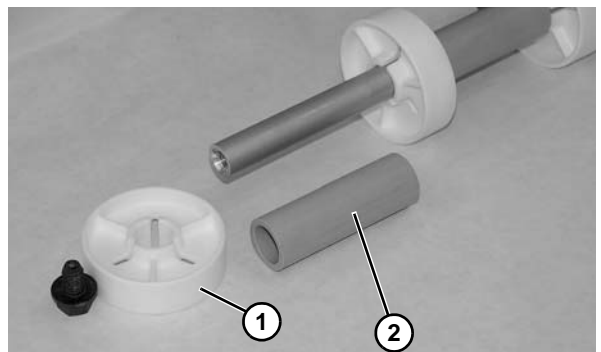


Figure 86

9. Remove gap filler plates (**Figure 87, item 1**) from crossmember (**Figure 87, item 2**).

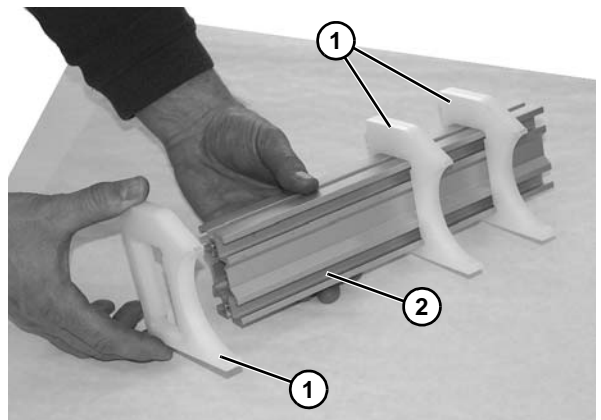


Figure 87

Preventive Maintenance and Adjustment

10. Install components reverse of removal, making sure idler pucks (Figure 88, item 1) and gap filler plates (Figure 88, item 2) are evenly spaced on assembly.

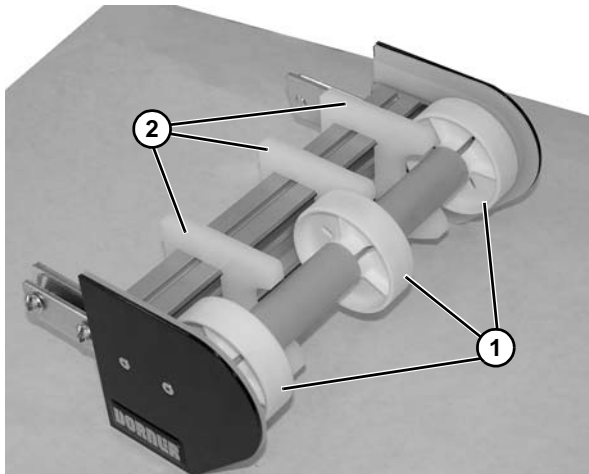


Figure 88

11. Assemble components reverse of removal.

NOTE

When reinstalling the idler spindle assembly, the idler tail assembly (Figure 89, item 1) should mate flush with the conveyor frame (Figure 89, item 2).

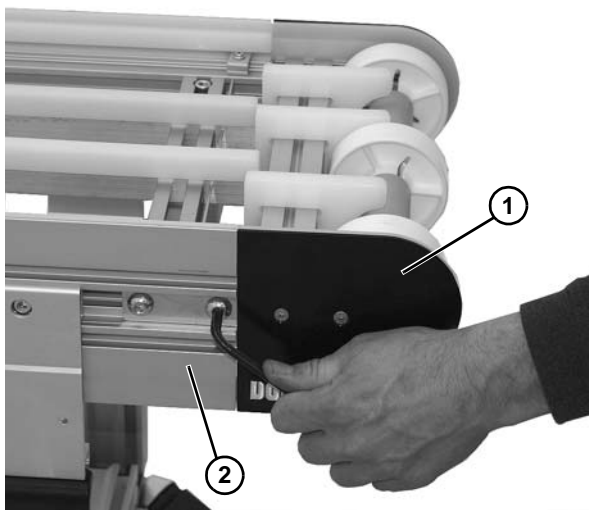


Figure 89

D – Nose Bar Idler Tail Component Removal

1. Be sure the conveyor is supported.
2. Loosen the two socket head screws (Figure 90, item 1). Repeat on opposite side.

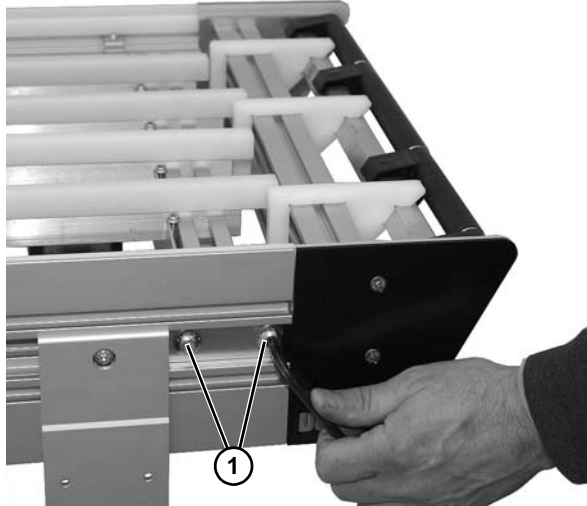


Figure 90

3. Remove idler tail assembly (Figure 91, item 1).

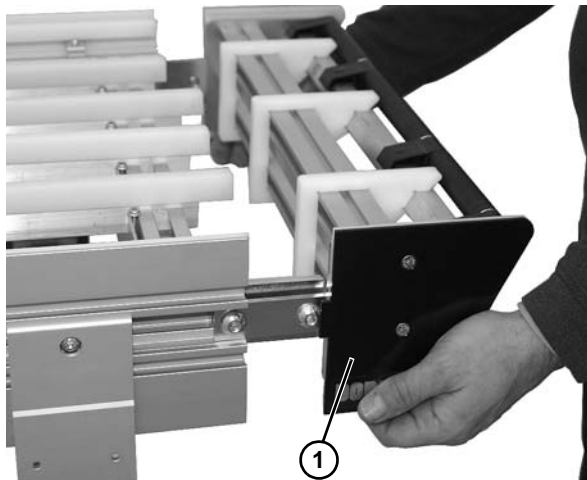


Figure 91

Preventive Maintenance and Adjustment

4. Remove two flat head screws (**Figure 92, item 1**) and cover plate (**Figure 92, item 2**). Repeat procedure on opposite side.

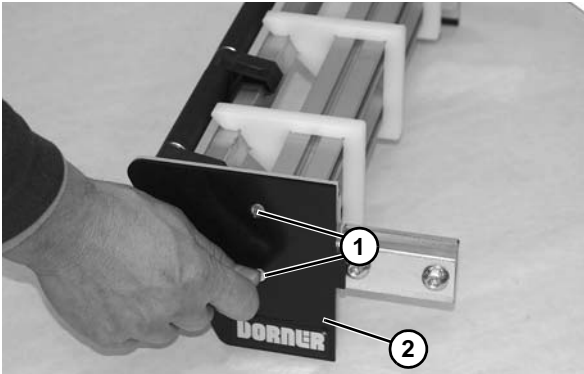


Figure 92

5. Remove two low head cap screws (**Figure 93, item 1**) and nose bar spacer (**Figure 93, item 2**). Repeat procedure on opposite side. Check nose bar spacer on each side for wear. If worn, replace.

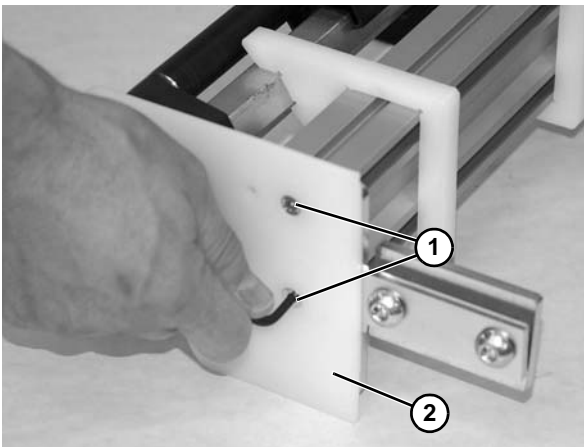


Figure 93

6. Remove backing plate assembly (**Figure 94, item 1**) from center spindle assembly (**Figure 94, item 2**) and half round assembly (**Figure 94, item 3**).

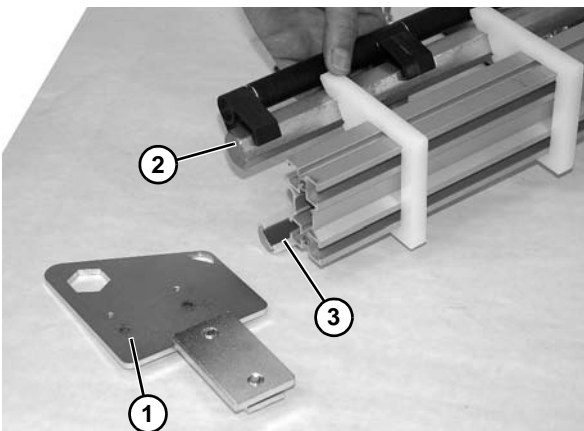


Figure 94

7. Remove spindle assembly (**Figure 95, item 1**) from opposite side backing plate assembly (**Figure 95, item 2**).

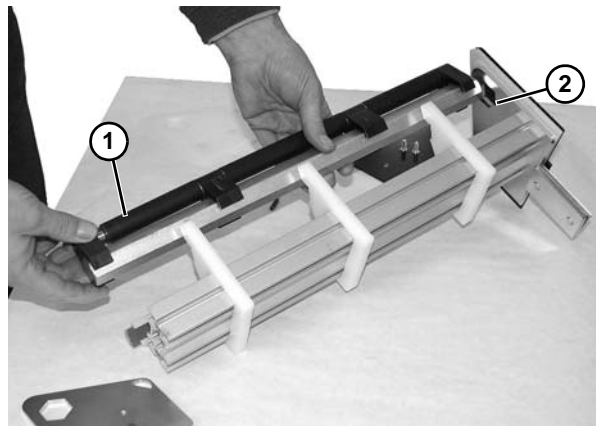


Figure 95

8. Remove spindle retainer (**Figure 96, item 1**), and spindle assembly (**Figure 96, item 2**) from hex shaft (**Figure 96, item 3**).

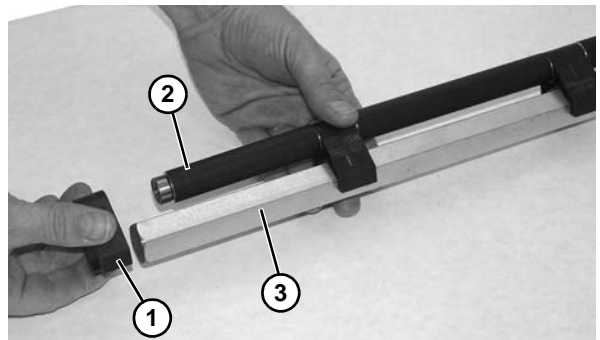


Figure 96

9. Repeat for remaining spindle retainers and each spindle assembly.
10. Remove nose bar half round shaft (**Figure 97, item 1**) and cover (**Figure 97, item 2**) from opposite side backing plate assembly (**Figure 97, item 3**).

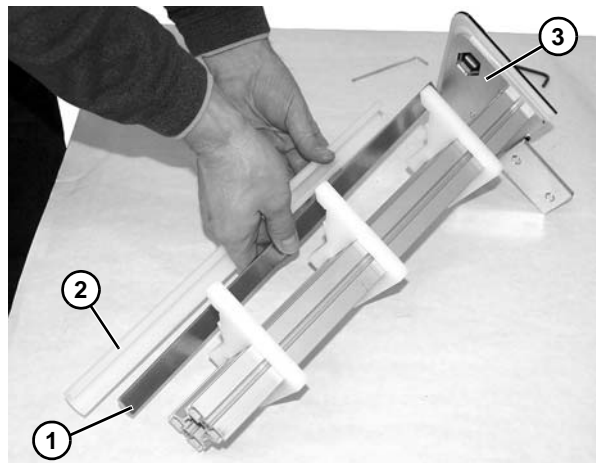


Figure 97

Preventive Maintenance and Adjustment

11. Remove gap filler plates (**Figure 98, item 1**) from crossmember (**Figure 98, item 2**).

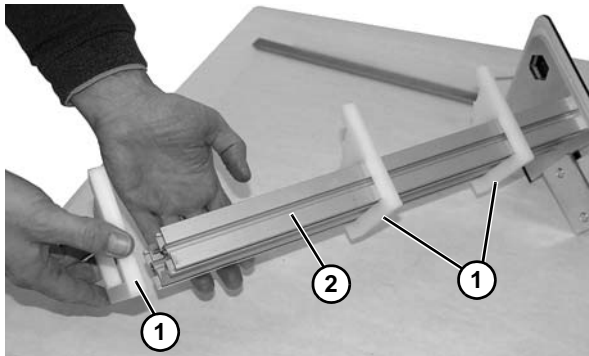


Figure 98

12. Install components reverse of removal, making sure gap filler plates (**Figure 99, item 1**) are evenly spaced on assembly.

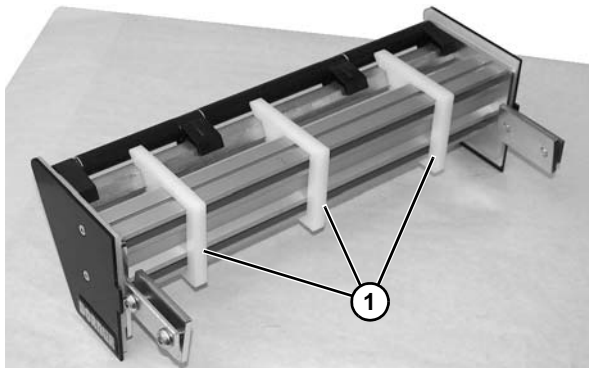


Figure 99

13. Install nose bar idler spindle assembly onto frame.

NOTE

*When reinstalling the idler spindle assembly, the idler tail assembly (**Figure 100, item 1**) should mate flush with the conveyor frame (**Figure 100, item 2**).*

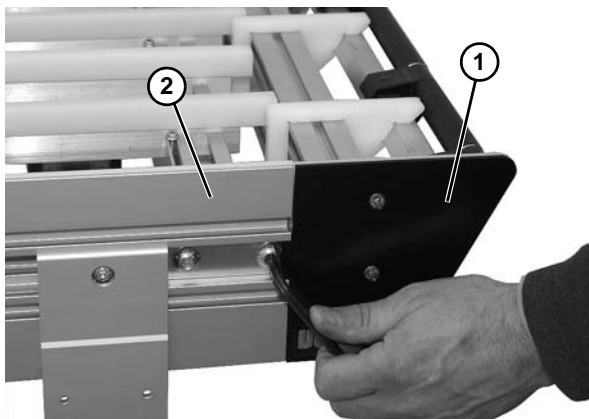


Figure 100

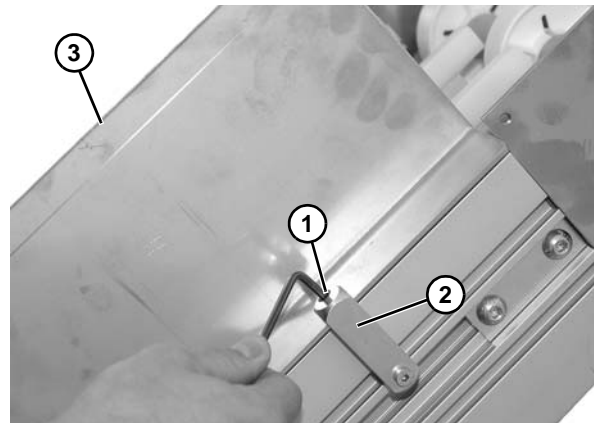
Maintenance of Knuckles

NOTE

Be sure all frame sections are properly supported.

Guides

1. Loosen set screw (**Figure 101, item 1**) on guide block (**Figure 101, item 2**) and remove guide (**Figure 101, item 3**). Repeat on opposite side.



T-Slot Frame Shown

Figure 101

Lower Knuckle

1. Remove two socket head screws (**Figure 102, item 1**) and guide plate (**Figure 102, item 2**) (if applicable).

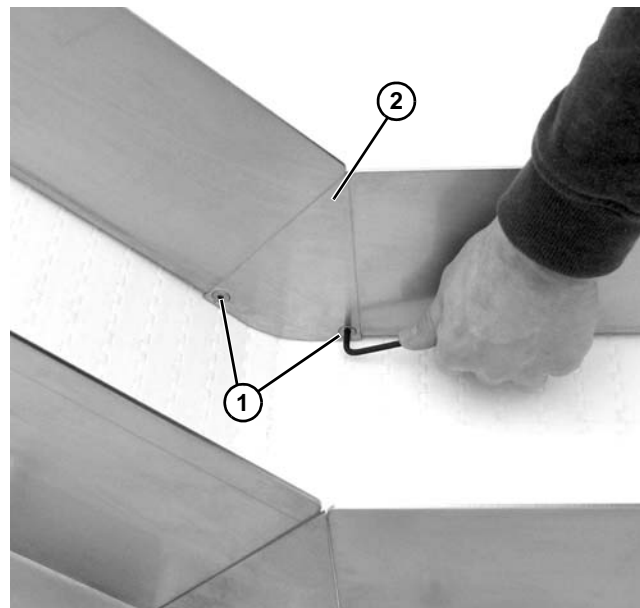


Figure 102

Preventive Maintenance and Adjustment

2. Remove wear bar (**Figure 103, item 1**).

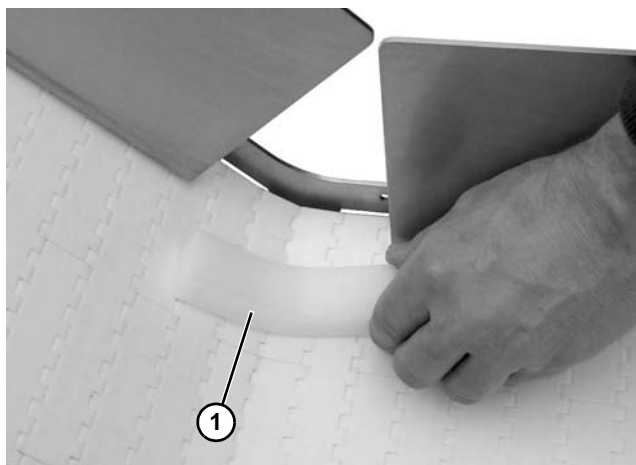


Figure 103

3. Remove lower wear strip (**Figure 104, item 1**).

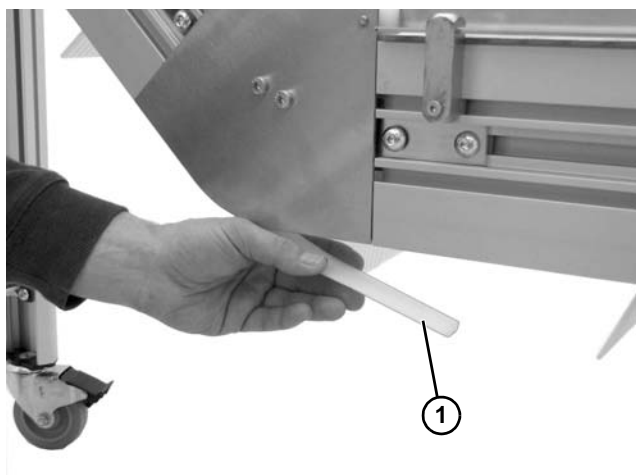


Figure 104

Upper Knuckle

1. Remove two socket head screws (**Figure 105, item 1**) and guide plate (**Figure 105, item 2**) (if applicable).

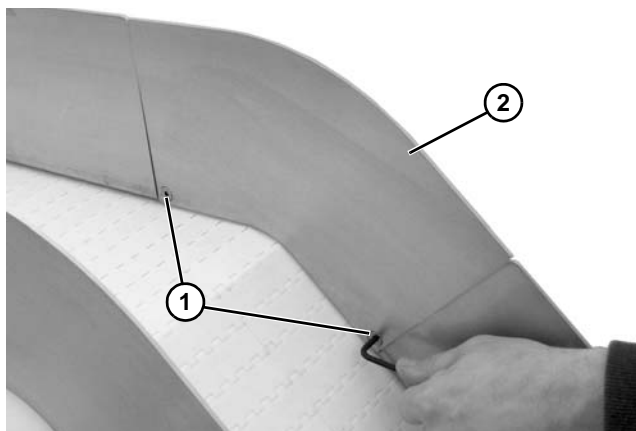


Figure 105

2. Remove wear bar (**Figure 106, item 1**).

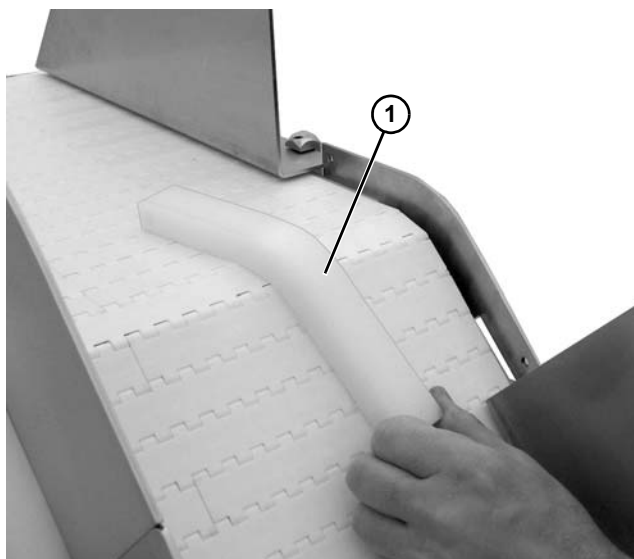


Figure 106

3. Remove belt. See "Conveyor Belt Replacement" on page 15.
4. Remove two socket head screws (**Figure 107, item 1**). Repeat on other side.

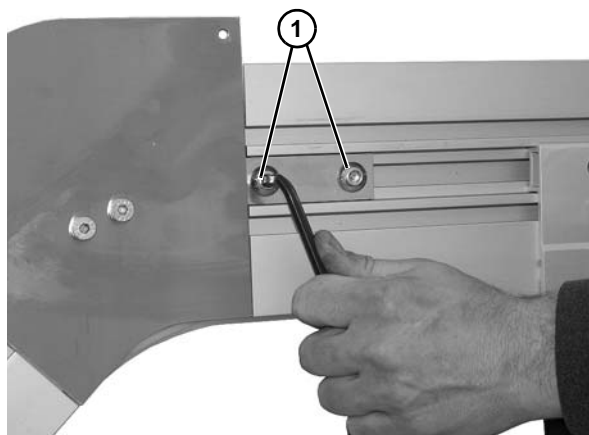


Figure 107

Preventive Maintenance and Adjustment

5. Remove upper frame (**Figure 108, item 1**) from upper knuckle (**Figure 108, item 2**) and off of wearstrips (**Figure 108, item 3**).

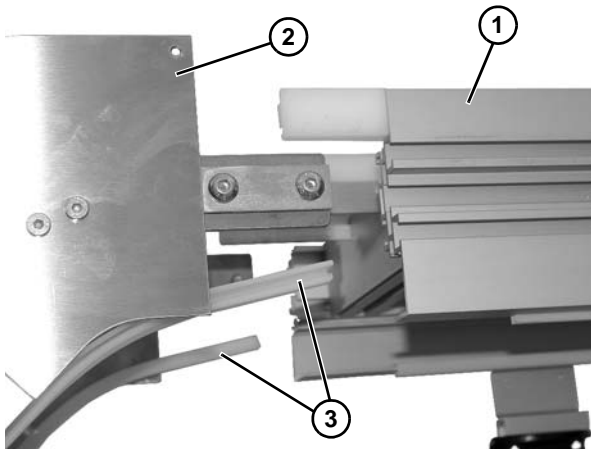


Figure 108

6. Remove two socket head screws (**Figure 109, item 1**) and remove cover plate (**Figure 109, item 1**) from knuckle assembly.

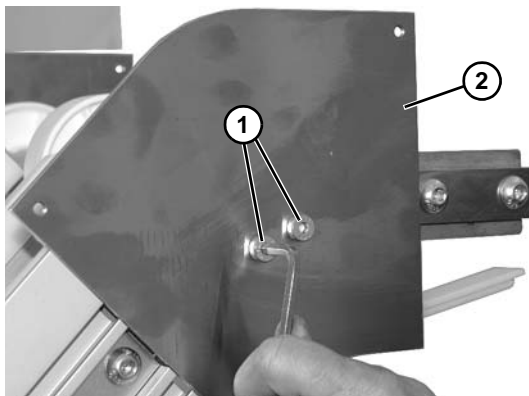


Figure 109

7. Remove cover plate (**Figure 110, item 1**), along with two socket head screws and spacer block (**Figure 110, item 2**). Repeat on other side.

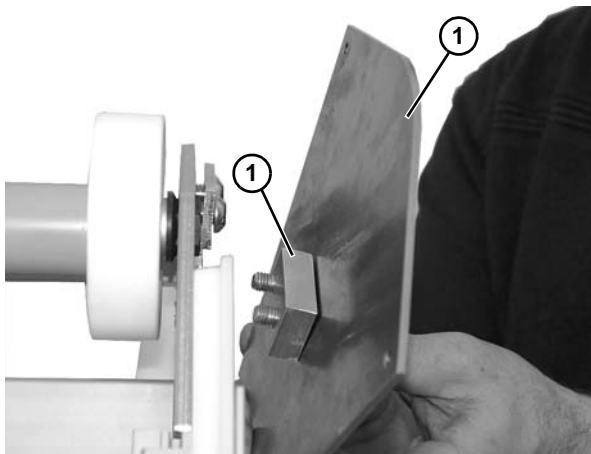


Figure 110

8. Loosen two socket head screws (**Figure 111, item 1**), holding upper knuckle to frame. Repeat on other side.

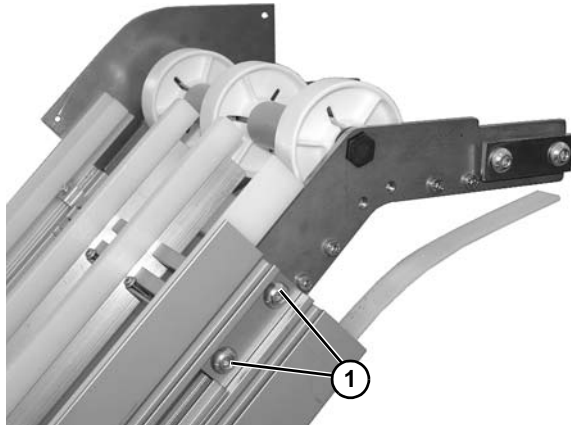


Figure 111

9. Remove upper knuckle assembly (**Figure 112, item 1**), from frame (**Figure 112, item 2**).

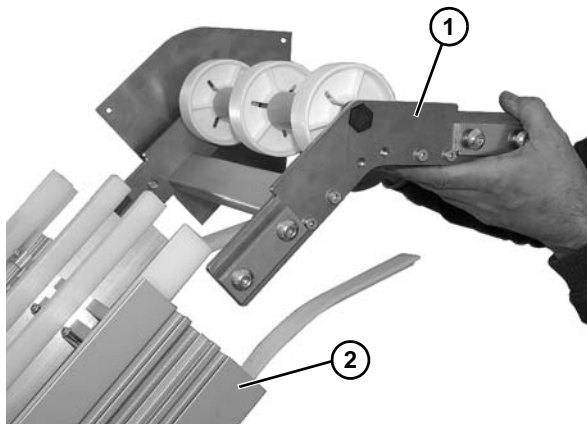


Figure 112

10. Remove four socket head screws (**Figure 113, item 1**) from upper knuckle assembly.

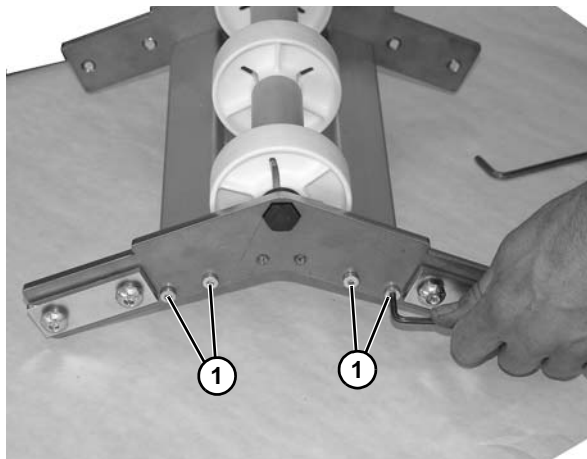


Figure 113

Preventive Maintenance and Adjustment

11. Remove backing plate (**Figure 114, item 1**), from both cross supports (**Figure 114, item 2**) and roller assembly (**Figure 114, item 3**).

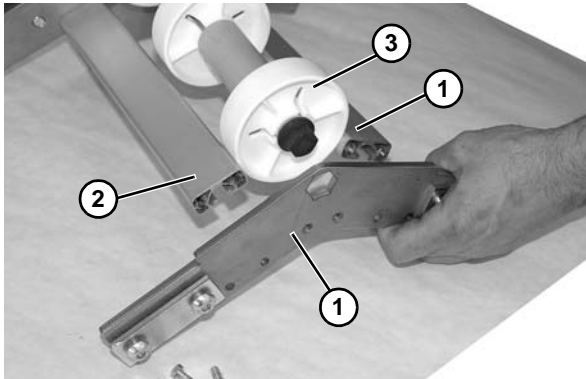


Figure 114

12. Remove roller assembly (**Figure 115, item 1**), from opposite end backing plate (**Figure 115, item 2**).

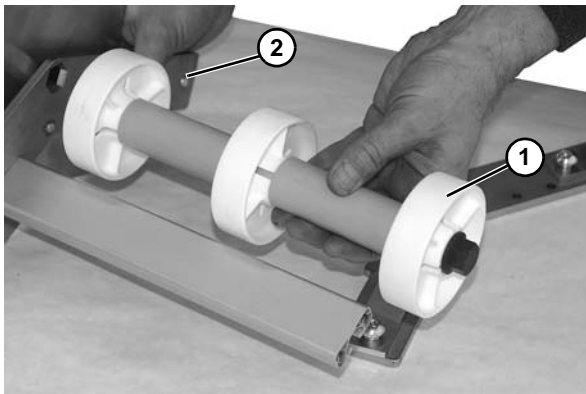


Figure 115

13. Use wrenches to remove both bolts (**Figure 116, item 1**) from each side of roller assembly.

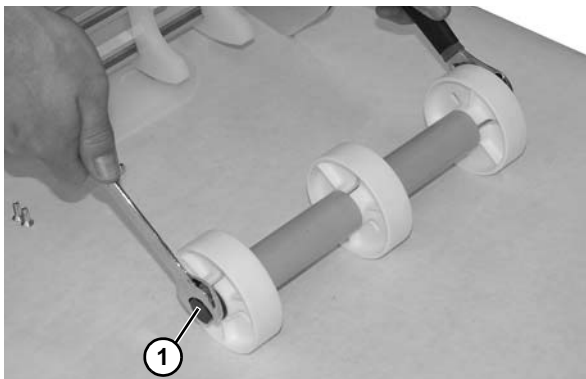


Figure 116

14. Remove idler pucks (**Figure 117, item 1**) and tube spacers (**Figure 117, item 2**), as needed, from each side of assembly.

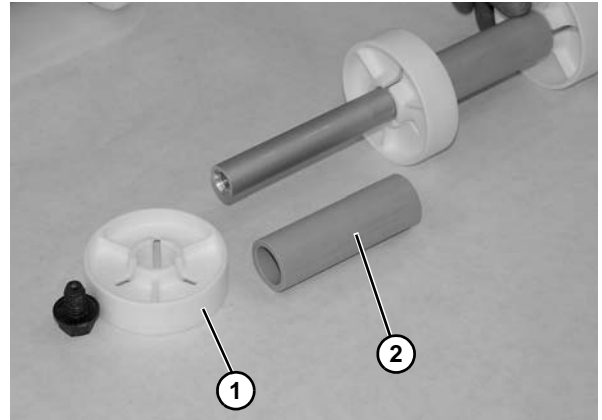


Figure 117

15. Replace parts as necessary.
16. Install parts reverse of removal.
17. To install each frame portion on lower and upper part of knuckles, attach upper frame (**Figure 118, item 1**) to upper knuckle (**Figure 118, item 2**), taking care to install both lower wearstrips (**Figure 118, item 3**) onto frame channel (**Figure 118, item 4**).

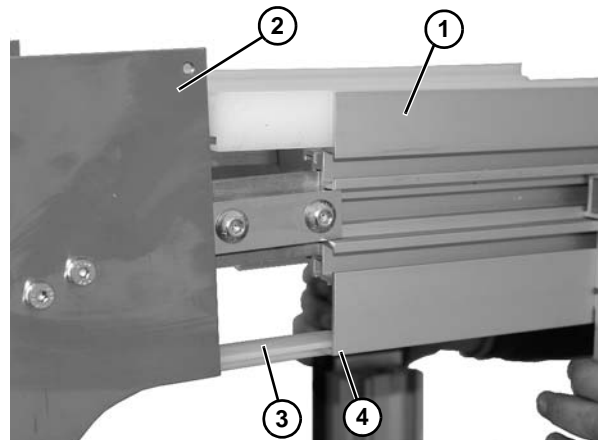


Figure 118

Preventive Maintenance and Adjustment

Weighted Take-Up

1. Remove two socket head screws (**Figure 119, item 1**) securing side plate (**Figure 119, item 2**) to weighted take-up plate from one side of conveyor.

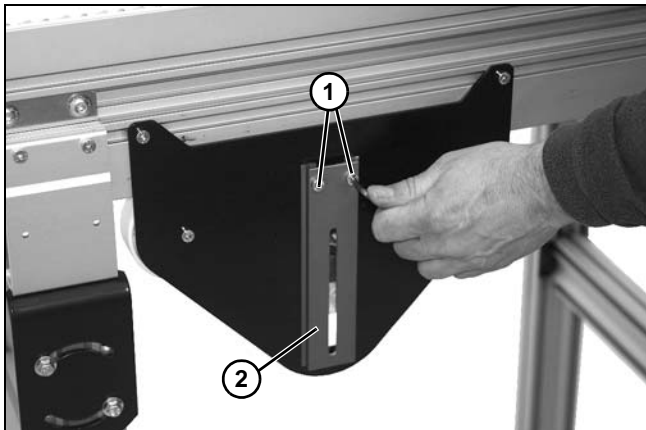


Figure 119

IMPORTANT

Avoid injury. Assembly is heavy and may fall when remaining hardware is removed.

2. Remove two socket head screws (**Figure 120, item 1**) holding weighted take-up assembly (**Figure 120, item 2**) to conveyor frame (**Figure 120, item 3**).

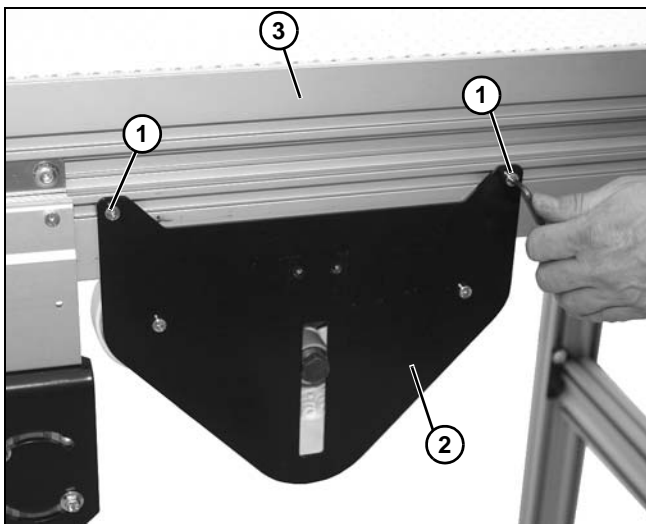


Figure 120

3. While holding belt from underneath, remove weighted take-up plate assembly (**Figure 121, item 1**) from weighted pulley assembly (**Figure 121, item 2**).

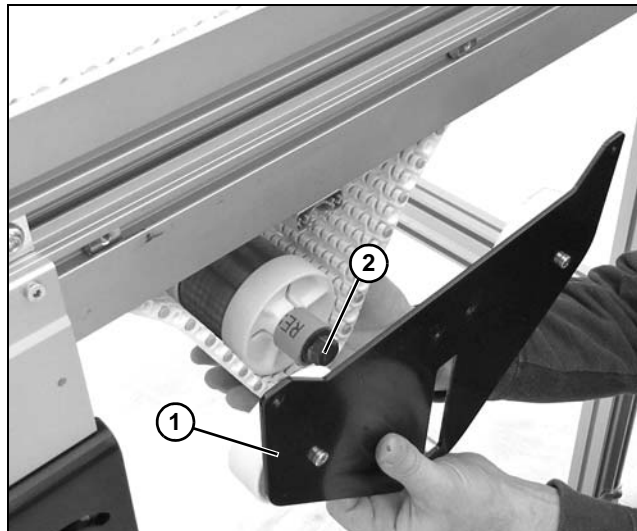


Figure 121

4. Remove weighted pulley assembly (**Figure 122, item 1**) from belt (**Figure 122, item 2**).

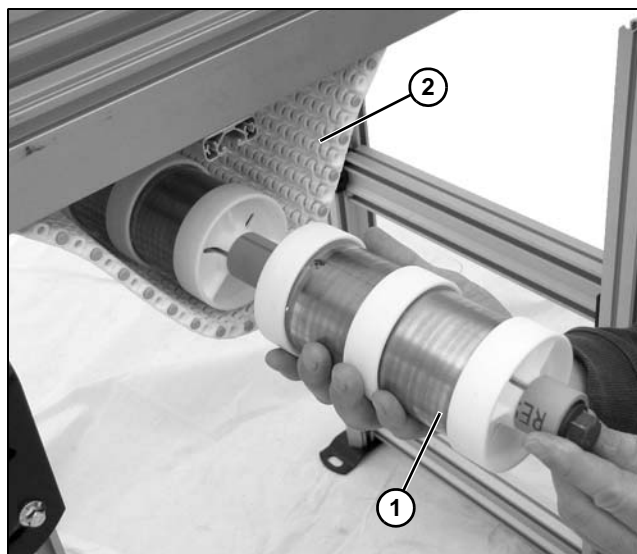


Figure 122

Preventive Maintenance and Adjustment

5. Use wrenches to remove bolt (**Figure 123, item 1**) from each side of roller assembly.

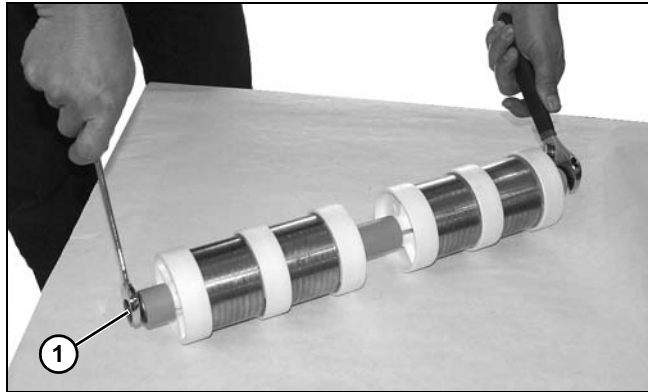


Figure 123

6. Remove tube spacer (**Figure 124, item 1**), as needed, from each side of assembly.

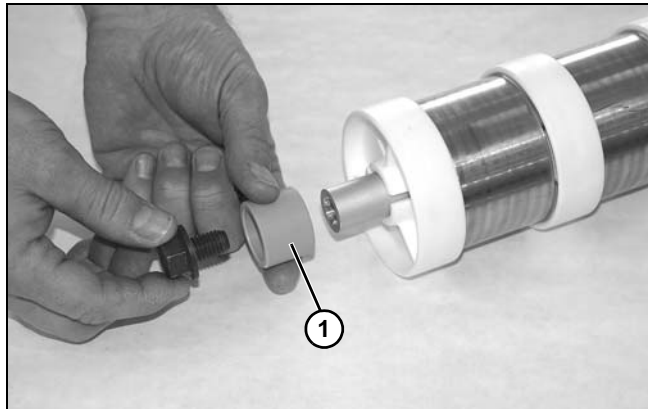


Figure 124

7. Remove idler puck (**Figure 125, item 1**) and weight (**Figure 125, item 2**) off of shaft, as needed, from belt.

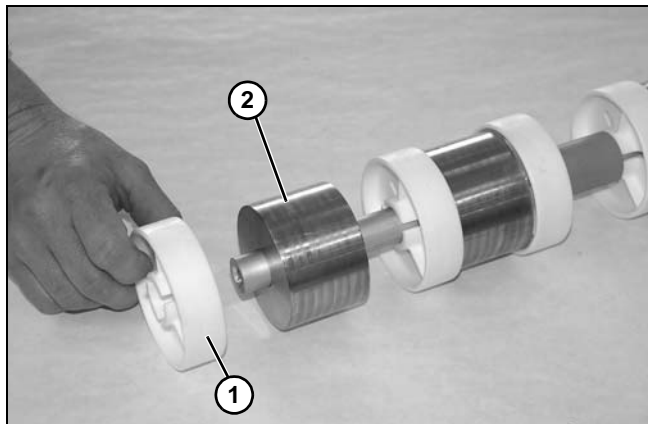


Figure 125

8. Remove socket head screw (**Figure 126, item 1**) on weighted take-up plate assembly (**Figure 126, item 2**).

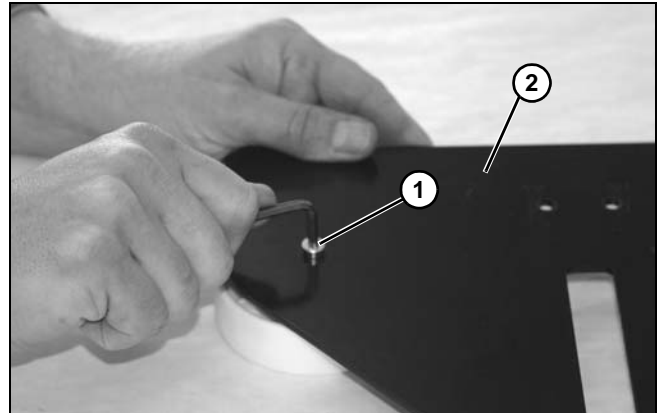


Figure 126

9. On opposite side of socket head screw just removed, remove idler puck (**Figure 127, item 1**), idler stub (**Figure 127, item 1**), and spacer (**Figure 127, item 2**).

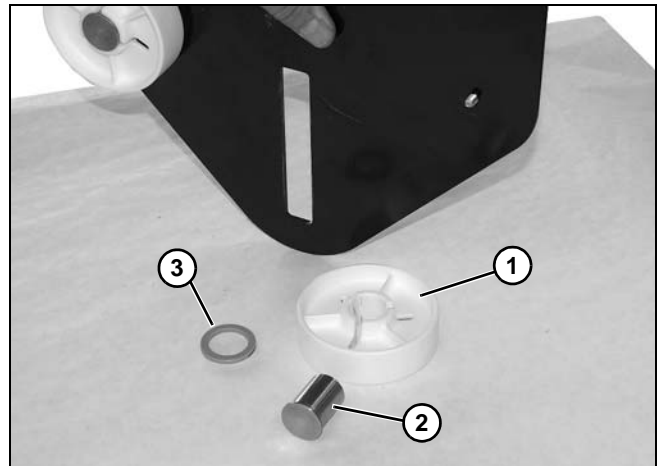



Figure 127

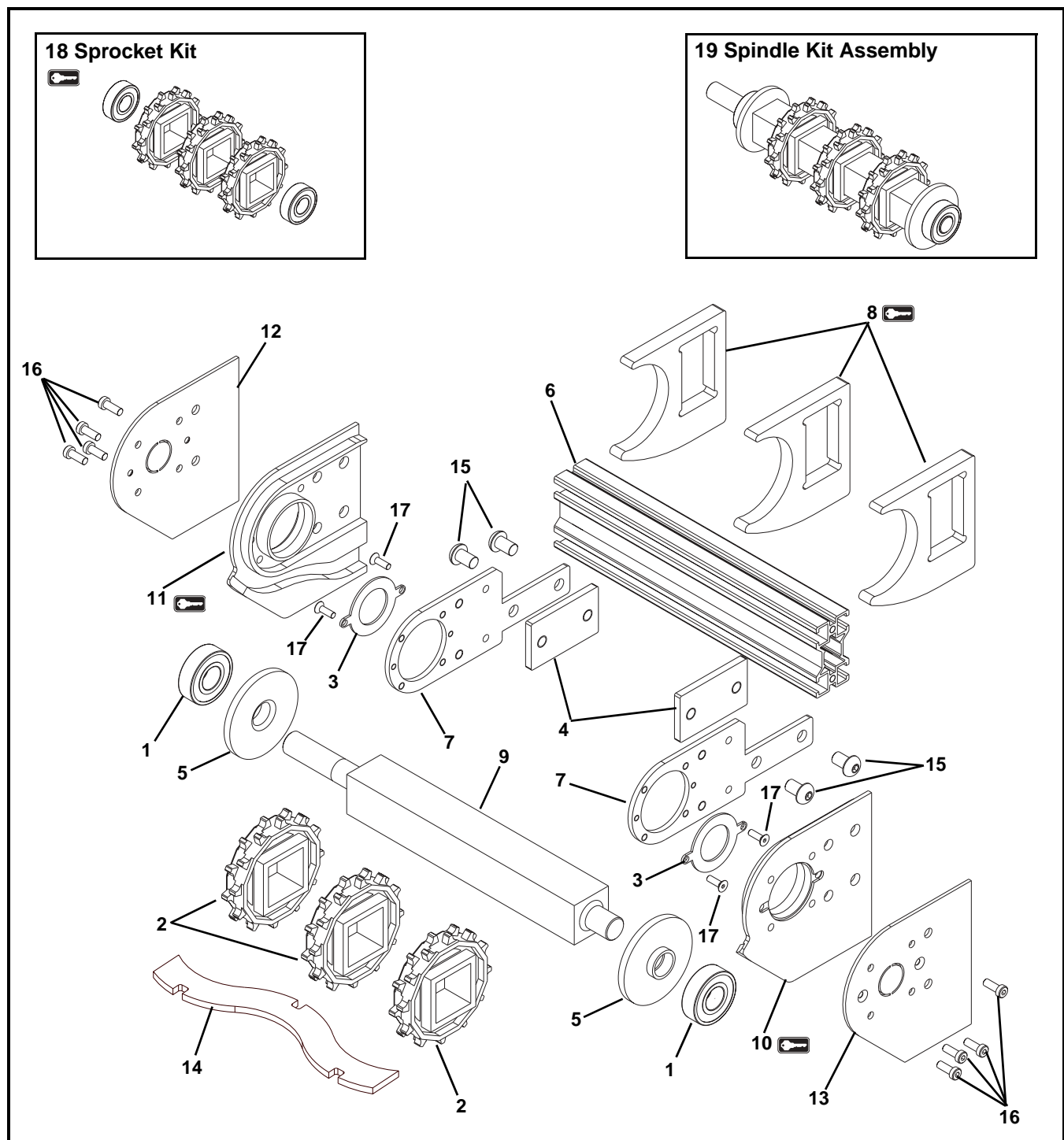
10. Install components reverse of removal.

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 Tail Assembly



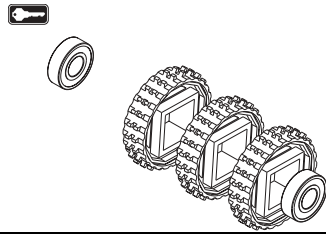
Item	Part Number	Description
1	802-126	Bearing
2	807-1444	Sprocket
3	350365	Bearing Stop Plate
4	350372	Nut Clamp Plate
5	350394	Washer
6	350459- <u>WW</u>	Crossmember
7	350462	Drive Backing Plate
8	350463	Gap Filler Plate
9	350464- <u>WW</u>	Spindle
	350554- <u>WW</u>	Dual Shaft Spindle
10	350466	Bearing Housing - Left hand
11	350467	Bearing Housing - Right hand
12	350661	Drive Plate - Right Hand
13	350662	Drive Plate - Left Hand
14	350768- <u>WW</u>	Sprocket Alignment Key
15	911016M	Button Head Screw, M10-1.50 x 16mm
16	920693M	Low Head Cap Screw, M6-1.00 x 16 mm
17	930516M	Flat Head Screw, M5-.80 x 16 mm
18	32CSK- <u>WW</u>	Sprocket Kit (Includes Items 1 and 2)
19	32CSAK- <u>WW</u>	Spindle Assembly Kit (Includes items 1, 2, 5, 9, and 14)
	32CDSSAK- <u>WW</u>	Dual Shaft Spindle Assembly Kit (Includes items 1, 2, 5, 9, and 14)
<u>WW</u> = Conveyor width reference: 06 – 48 in 02 increments		

Quantity Chart		
Conveyor Width	Item #2 Sprocket	Item #8 Gap Filler Plate
6"	2	2
8"	2	2
10"	3	3
12"	3	3
14"	4	3
16"	4	4
18"	5	4
20"	5	4
22"	6	4
24"	6	5
26"	7	5
28"	7	5
30"	8	5
32"	8	6
34"	9	6
36"	9	6
38"	9	6
40"	9	6
42"	9	7
44"	9	7
46"	9	7
48"	9	7

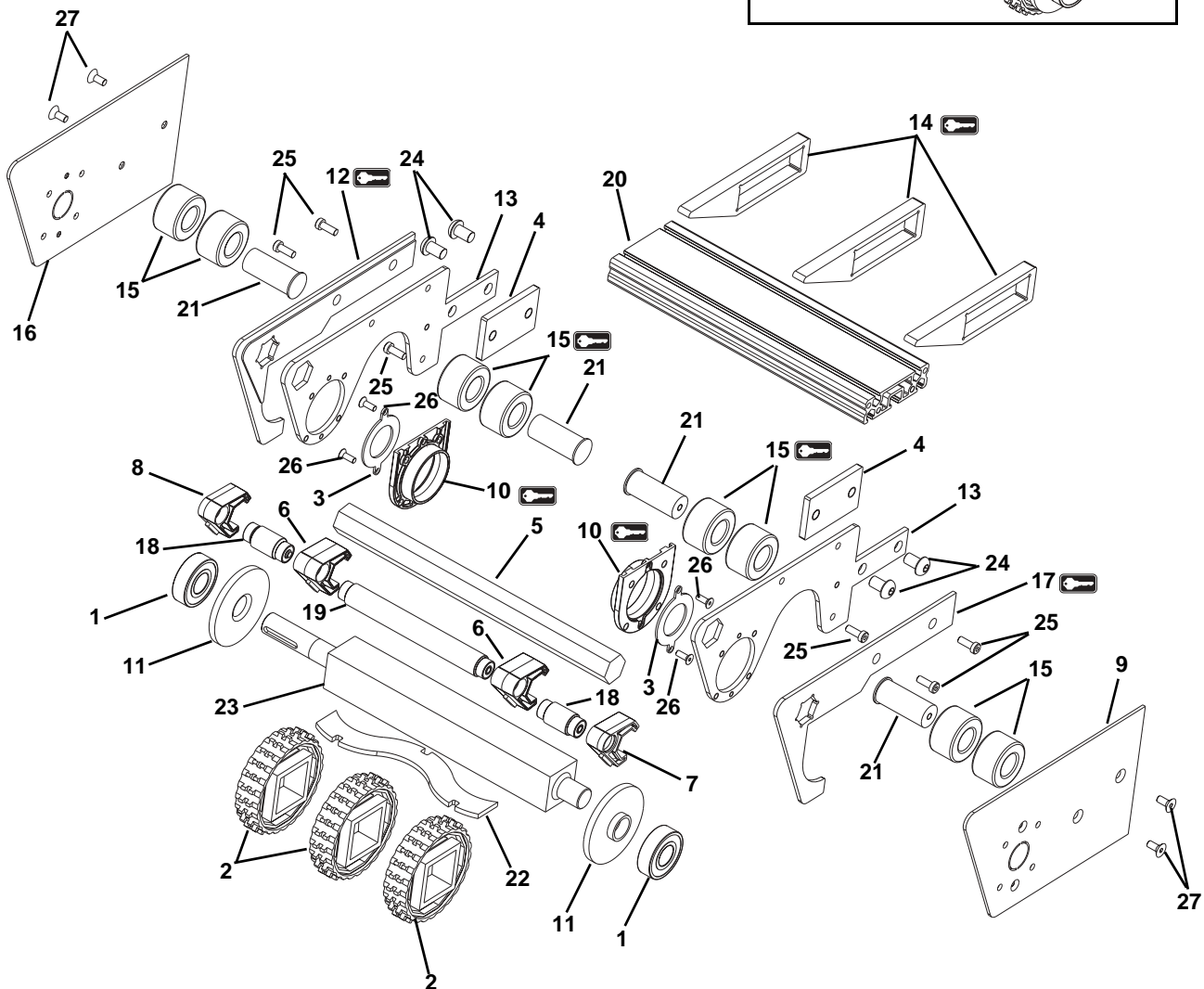
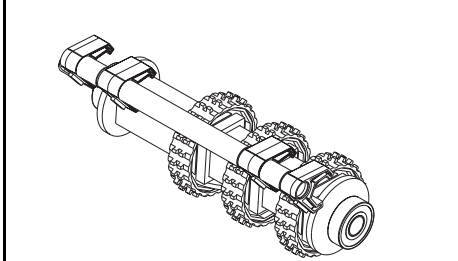
Service Parts

Nose Bar Drive End Tail Assembly

28 Nose Bar Sprocket Kit



29 Nose Bar Spindle Assembly Kit



Service Parts

Item	Part Number	Description
1	802-126	Ball Bearing
2	807-1443	Sprocket
3	350365	Bearing Stop Plate
4	350372	Nut Clamp Plate
5	350389- <u>WW</u>	Hex Shaft
6	350390	Spindle Retainer
7	350390-LEFT	Spindle Retainer - Left Hand
8	350390-RIGHT	Spindle Retainer - Right Hand
9	350391	Drive Cover Plate - Left Hand
10	350393	Bearing Housing
11	350394	Washer
12	350396	Nose Bar Spacer
13	350397	Nose Bar Backing Plate
14	350400	Gap Filler Plate
15	350401	Return Roller
16	350422	Drive Cover Plate - Right Hand
17	350423	Nose Bar Spacer
18	See Spindle Part Number Chart	Spindle Assembly
19	350432- <u>WWC</u>	Center Spindle Assembly (for widths 8" - 36")
20	350436- <u>WW</u>	Crossmember
21	350437	Idler Stub
22	350438- <u>WW</u>	Sprocket Key
23	350464- <u>WW</u>	Drive Spindle
24	911016M	Button Head Screw, M10-1.50 x 16 mm
25	920693M	Low Head Cap Screw, M6-1.00 x 16 mm
26	930514M	Flat Head Screw, M5-.80 x 14 mm

Item	Part Number	Description
27	930614M	Flat Head Screw, M6-1.00 x 14 mm
28	32CNSK- <u>WW</u>	Nose Bar Sprocket Kit (Includes items 1 and 2)
29	32CNSAK- <u>WW</u>	Nose Bar Spindle Assembly Kit (Includes items 1, 2, 6, 7, 8, 11, 18, 19, 22, and 23)

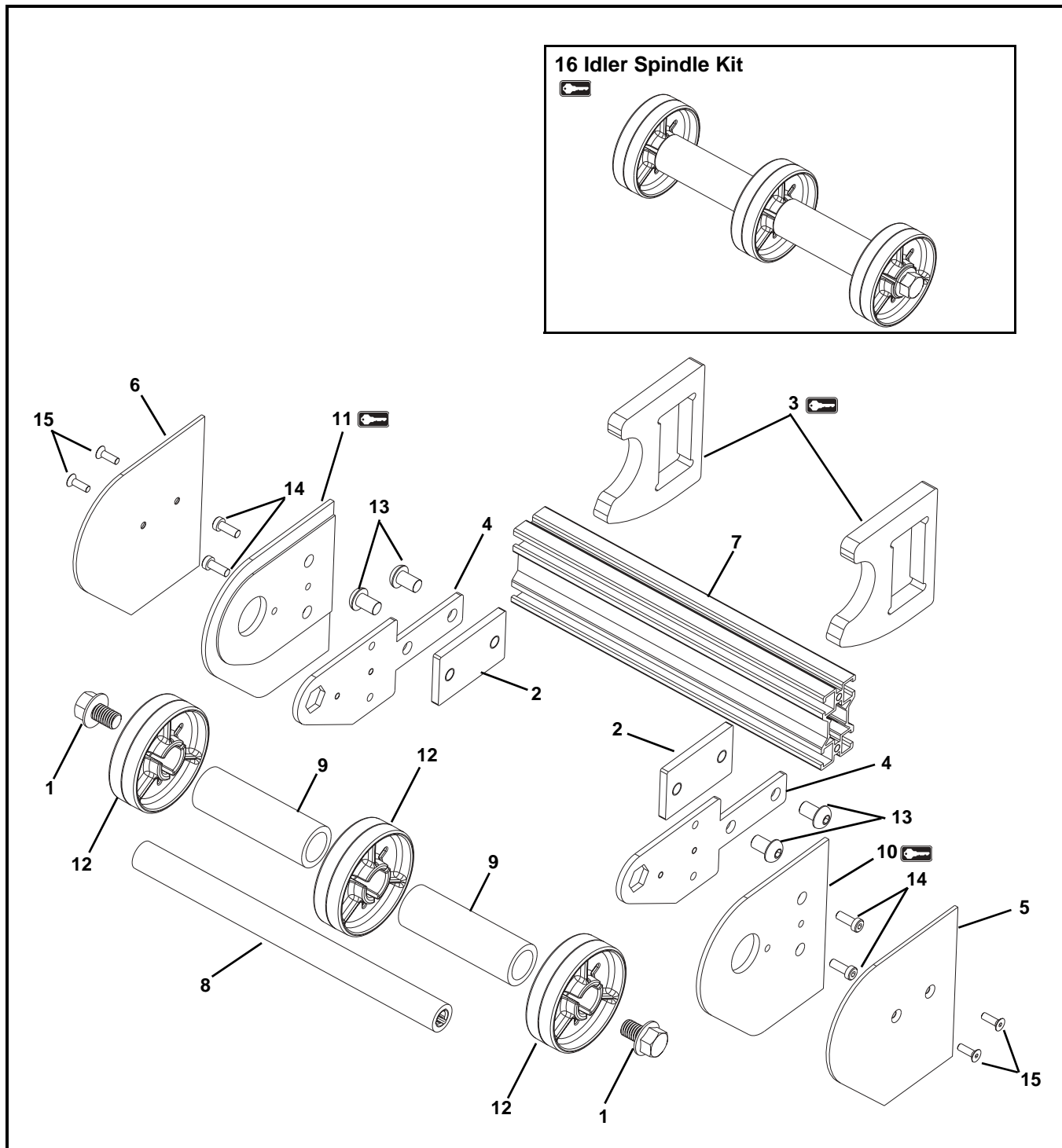
WW = Conveyor width reference: 06 – 48 in 02 increments

#18 Spindle Assembly Part Number Chart	
Conveyor Width	Item #2 Sprocket
6"	350432-04
8"	350432-01
10"	350432-01
12"	350432-01
14"	350432-04
16"	350432-04
18"	350432-04
20"	350432-06
22"	350432-06
24"	350432-04
26"	350432-04
28"	350432-04
30"	350432-04
32"	350432-04
34"	350432-06
36"	350432-06
38"	350432-06
40"	350432-06
42"	350432-08
44"	350432-08
46"	350432-08
48"	350432-08

Quantity Chart				
Conveyor Width	Item #2 Sprocket	Item #6 Spindle Retainer	Item #14 Gap Filler Plate	Item #18 Spindle Assembly
6"	2	0	2	0
8"	2	2	3	2
10"	3	2	3	2
12"	3	2	3	2
14"	3	2	3	2
16"	3	2	3	2
18"	5	2	3	2
20"	5	2	3	2
22"	5	2	3	2
24"	5	4	5	4
26"	7	4	5	4
28"	7	4	5	4
30"	7	4	5	4
32"	7	4	5	4
34"	9	4	5	4
36"	9	4	5	4
38"	9	4	5	4
40"	9	4	5	4
42"	11	4	5	4
44"	11	4	5	4
46"	11	4	5	4
48"	11	4	5	4

Service Parts

Idler Tail Assembly

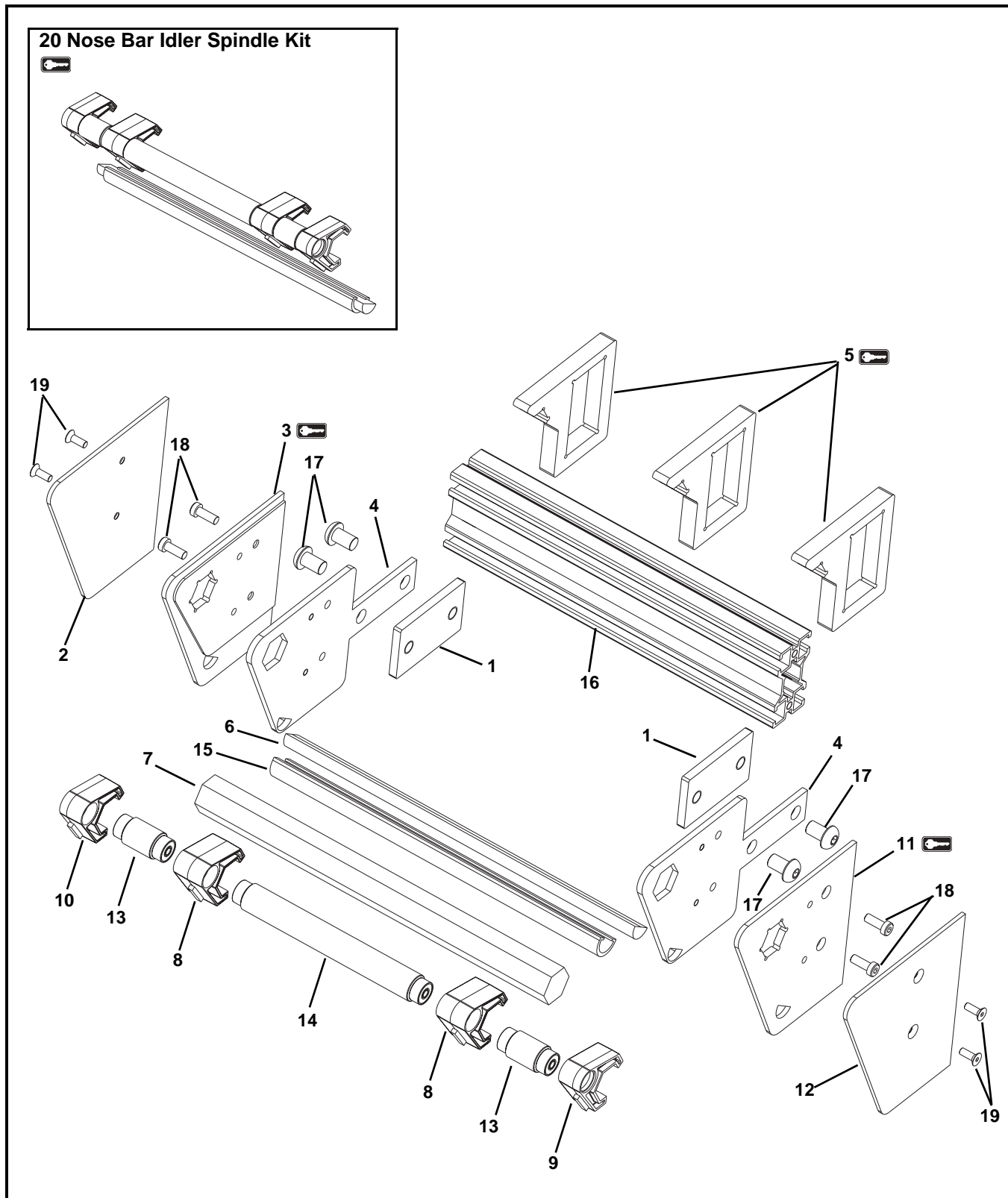


Item	Part Number	Description
1	807-2278	Hex Flange Screw, 1/2"-13 x 0.75"
2	350372	Nut Clamp Plate
3 	350453	Gap Filler Plate
4	350456	Idler Backing Plate
5	350457	Cover Plate - Right Hand
6	350458	Cover Plate - Left Hand
7	350459- <u>WW</u>	Crossmember
8	350460- <u>WW</u>	Idler Tube
9	350461- <u>WW</u>	Tube Spacer
10 	350566	Filler Plate - Right Hand
11 	350567	Filler Plate - Left Hand
12	506296	Idler Puck
13	911016M	Button Head Screw, M10-1.50 x 16 mm
14	920693M	Low Head Cap Screw, M6-1.00 x 16 mm
15	930516M	Flat Head Screw, M5-.80 x 16 mm
16 	32CCESK- <u>WW</u>	Idler Spindle Kit (Includes items 1, 8, 9, and 12)
<u>WW</u> = Conveyor width reference: 06 – 48 in 02 increments		

Quantity Chart			
Conveyor Width	Item # 3 Gap Filler Plate	Item # 9 Tube Spacer	Item # 12 Idler Puck
6"	2	1	2
8"	2	2	3
10"	2	2	3
12"	2	2	3
14"	3	3	4
16"	3	3	4
18"	3	3	4
20"	4	4	5
22"	4	4	5
24"	4	4	5
26"	5	5	6
28"	5	5	6
30"	5	5	6
32"	6	6	7
34"	6	6	7
36"	7	7	8
38"	7	7	8
40"	7	7	8
42"	8	8	9
44"	8	8	9
46"	8	8	9
48"	9	9	10

Service Parts

Nose Bar Idler Tail Assembly



Service Parts

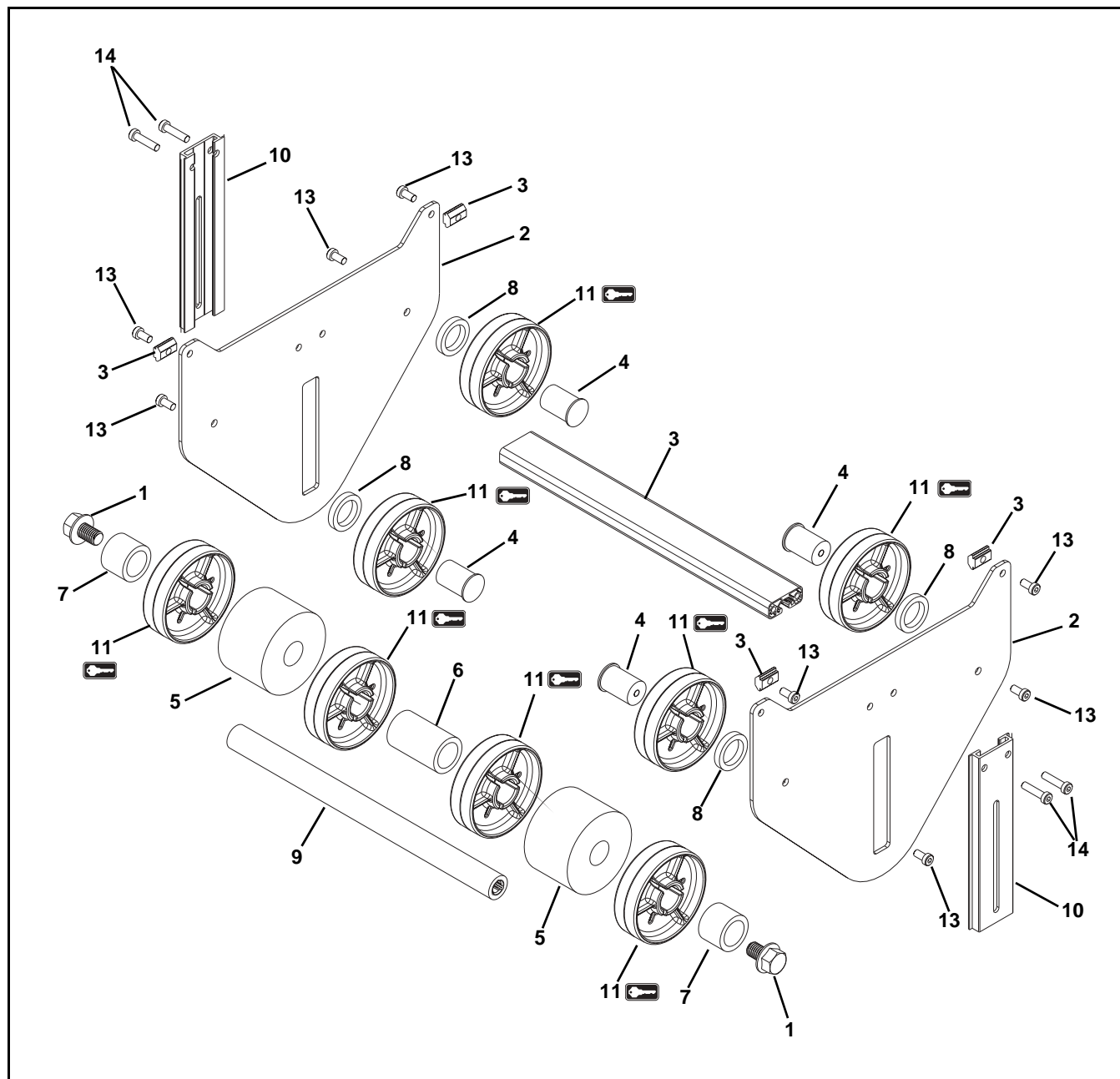
Item	Part Number	Description
1	350372	Nut Clamp Plate
2	350383	Cover Plate - Right Hand
3	350385	Nose Bar Spacer - Right Hand
4	350386	Backing Plate
5	350387	Gap Filler Plate
6	350388- <u>WW</u>	Nose Bar Half Round Shaft
7	350389- <u>WW</u>	Hex Shaft
8	350390	Spindle Retainer
9	350390-LEFT	Spindle Retainer - Left Hand
10	350390-RIGHT	Spindle Retainer - Right Hand
11	350420	Nose Bar Spacer - Left Hand
12	350421	Cover Plate - Left Hand
13	See Spindle Part Number Chart	Spindle Assembly
14	350432- <u>WWC</u>	Center Spindle Assembly (for widths 8" - 36")
15	350434- <u>WW</u>	Cover
16	350459- <u>WW</u>	Crossmember
17	911016M	Button Head Screw, M10-1.50 x 16 mm
18	920693M	Low Head Cap Screw, M6-1.00 x 16 mm
19	930514M	Flat Head Screw, M5-.80 x 16 mm
20	32CNESK- <u>WW</u>	Nose Bar Idler Spindle Kit (Includes items 6, 8, 9, 10, 13, 14, and 15)
<u>WW</u> = Conveyor width reference: 06 – 48 in 02 increments		

#13 Spindle Assembly Part Number Chart	
Conveyor Width	Spindle Assembly
6"	350432-04
8"	350432-01
10"	350432-01
12"	350432-01
14"	350432-04
16"	350432-04
18"	350432-04
20"	350432-06
22"	350432-06
24"	350432-04
26"	350432-04
28"	350432-04
30"	350432-04
32"	350432-04
34"	350432-06
36"	350432-06
38"	350432-06
40"	350432-06
42"	350432-08
44"	350432-08
46"	350432-08
48"	350432-08

Quantity Chart			
Conveyor Width	Item # 5 Gap Filler Plate	Item # 8 Spindle Retainer	Item # 13 Spindle Assembly
6"	2	0	0
8"	3	2	2
10"	3	2	2
12"	3	2	2
14"	3	2	2
16"	3	2	2
18"	3	2	2
20"	3	2	2
22"	3	2	2
24"	5	4	4
26"	5	4	4
28"	5	4	4
30"	5	4	4
32"	5	4	4
34"	5	4	4
36"	5	4	4
38"	5	4	4
40"	5	4	4
42"	5	4	4
44"	5	4	4
46"	5	4	4
48"	5	4	4

Service Parts

Weighted Take-Up Assembly



Item	Part Number	Description
1	807-2383	Hex Flange Screw, 1/2"-13 x 0.75"
2	350469	Weighted Take-up Plate
3	350471- <u>WW</u>	Cross Support
4	350472	Idler Stub
5	350473	Weight
6	350474- <u>WW</u>	Mid Spacer Tube
7	See Spacer Part Number Chart	Outer Spacer Tube
8	350474-STUB	Stub Spacer
9	350475- <u>WW</u>	Tube

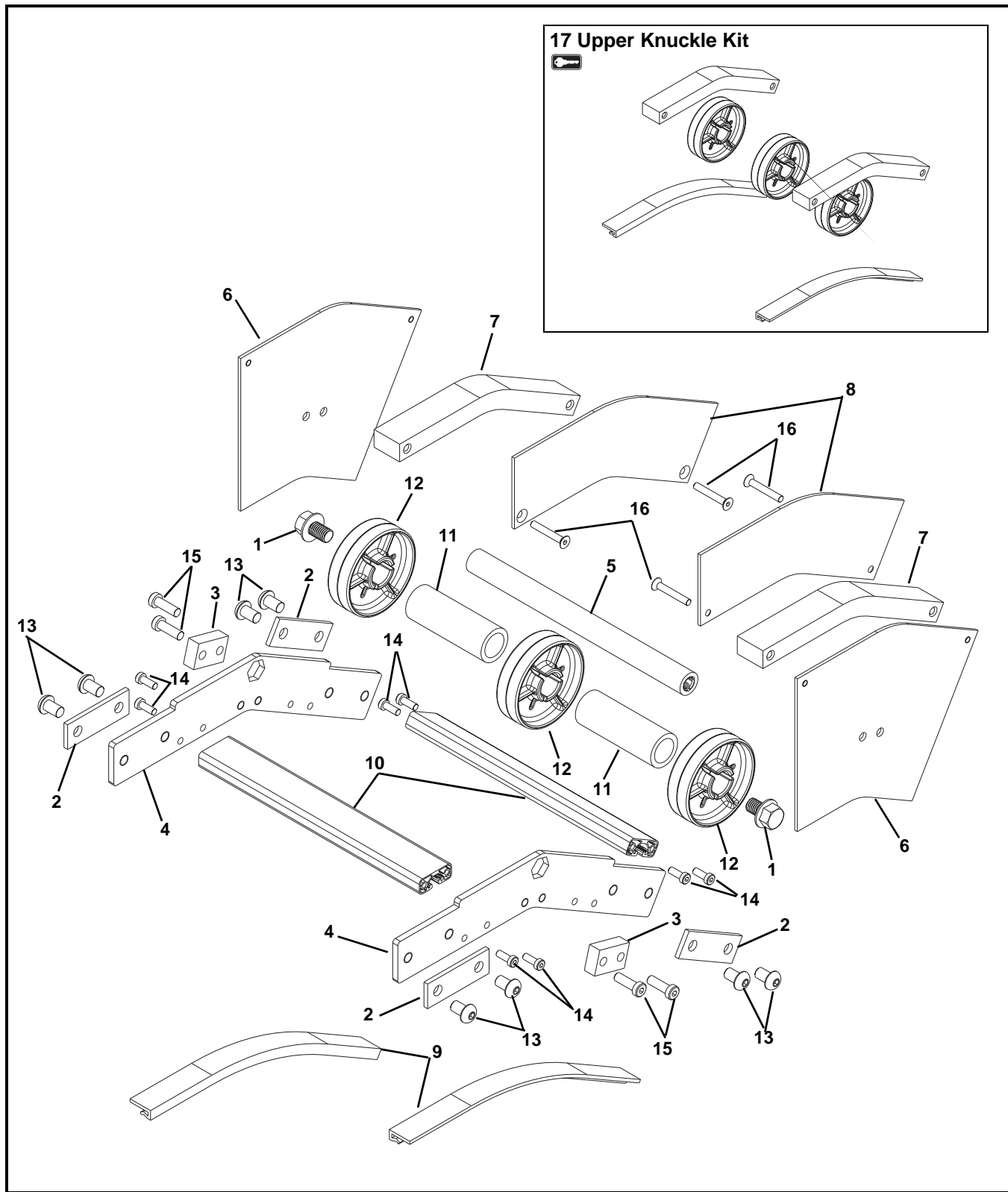
Item	Part Number	Description
10	350524	Cover
11	506296	Idler Puck
12	639971M	Single Drop-In T-Bar
13	920692M	Low Head Cap Screw, M6-1.00 x 12 mm
14	920695M	Low Head Cap Screw, M6-1.00 x 25 mm
<u>WW</u> = Conveyor Width Reference: 06 - 48 in 02 increments		

#7 Outer Spacer Tube Part Number Chart	
Conveyor Width	Outer Spacer Tube
6"	350474-06
8"	350474-08
10"	350474-10
12"	350474-OUTER
14"	350474-OUTER
16"	350474-OUTER
18"	350474-OUTER
20"	350474-OUTER
22"	350474-OUTER
24"	350474-OUTER
26"	350474-OUTER
28"	350474-OUTER
30"	350474-OUTER
32"	350474-OUTER
34"	350474-OUTER
36"	350474-OUTER
38"	350474-OUTER
40"	350474-OUTER
42"	350474-OUTER
44"	350474-OUTER
46"	350474-OUTER
48"	350474-OUTER

Quantity Chart			
Conveyor Width	Item # 5 Weight	Item # 6 Mid Spacer Tube	Item # 11 Idler Puck
6"	1	0	6
8"	2	0	6
10"	2	0	8
12"	2	1	8
14"	2	1	8
16"	4	1	8
18"	4	1	10
20"	4	1	10
22"	4	1	10
24"	4	1	10
26"	4	1	10
28"	4	1	10
30"	4	1	10
32"	4	1	10
34"	4	1	10
36"	4	1	10
38"	4	1	10
40"	4	1	10
42"	4	1	10
44"	4	1	10
46"	4	1	10
48"	4	1	10

Service Parts

Upper Knuckle

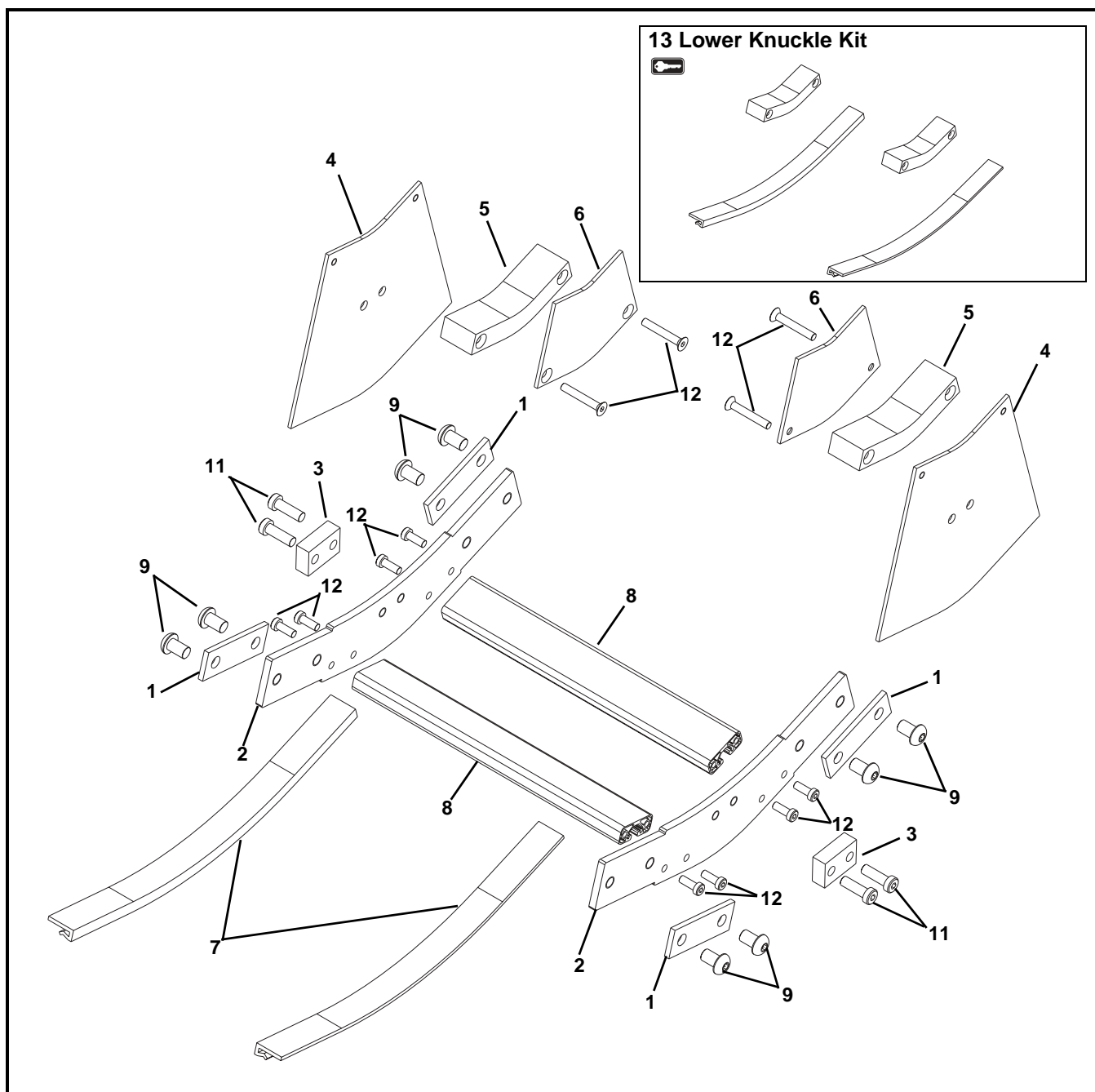


Item	Part Number	Description
1	807-2278	Hex Flange Screw, 1/2"-13 x 0.75"
2	350496	Clamp Plate
3	350515	Spacer Block
4	350518-AA	Backing Plate for T-Slot Frames
	350810-AA	Backing Plate for SmartSlot Frames
5	350519-WW	Tube
6	350529-AA	Cover Plate
7	350530-AA	Guard Bar
8	350532-AA	1" Guide Plate
	350531-AA	3" Guide Plate
	350630-AA	4" Guide Plate
	350631-AA	6" Guide Plate
9	350622-AA	Wear Strip
10	350793-WW	Cross Support
11	350801-WW	Tube Spacer
12	506296	Idler Puck
13	911016M	Button Head Screw, M10-1.50 x 16 mm
14	920693M	Low Head Cap Screw, M6-1.00 x 16 mm
15	920895M	Low Head Cap Screw, M8-1.25 x 25 mm
16	930640M	Flat Head Screw, M6-1.00 x 40 mm
17	32CUKK-WW-AA	Upper Knuckle Kit (Includes items 7, 9 and 12)
WW = Conveyor Width Reference: 06 - 24 in 02 increments		
AA = Angle 05, 10, 15, 30, 45, and 60		

Quantity Chart		
Conveyor Width	Item # 11 Tube Spacer	Item # 12 Idler Puck
6"	1	2
8"	2	3
10"	2	3
12"	2	3
14"	3	4
16"	3	4
18"	3	4
20"	4	5
22"	4	5
24"	4	5

Service Parts

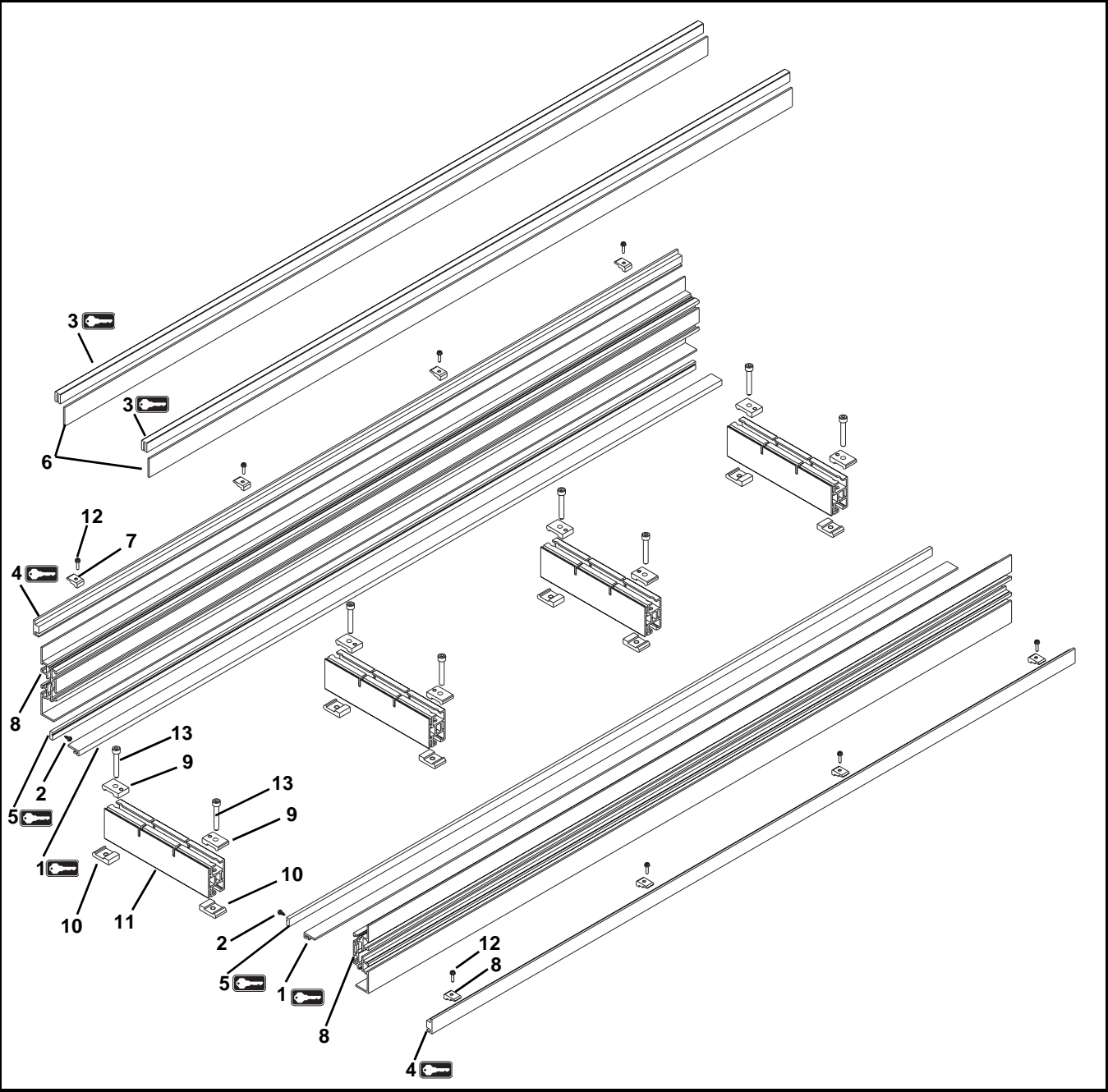
Lower Knuckle



Item	Part Number	Description
1	350496	Clamp Plate
2	350512-AA	Backing Plate for T-Slot Frames
	350811-AA	Backing Plate for SmartSlot Frames
3	350515	Spacer Block
4	350525-AA	Cover Plate
5	350526-AA	Wear Bar
6	350528-AA	1" Guide Plate
	350527-AA	3" Guide Plate
	350628-AA	4" Guide Plate
	350629-AA	6" Guide Plate

Item	Part Number	Description
7	350623-AA	Wear Strip
8	350793-WW	Cross Support
9	911016M	Button Head Screw, M10-1.50 x 16 mm
10	920693M	Low Head Cap Screw, M6-1.00 x 16 mm
11	920895M	Low Head Cap Screw, M8-1.25 x 25 mm
12	930640M	Flat Head Screw, M6-1.00 x 40 mm
13	32CLKK-AA	Lower Knuckle Kit (Includes items 5 and 7)
WW = Conveyor Width Reference: 06 - 24 in 02 increments		
AA = Angle 05, 10, 15, 30, 45, and 60		

Frame Assembly

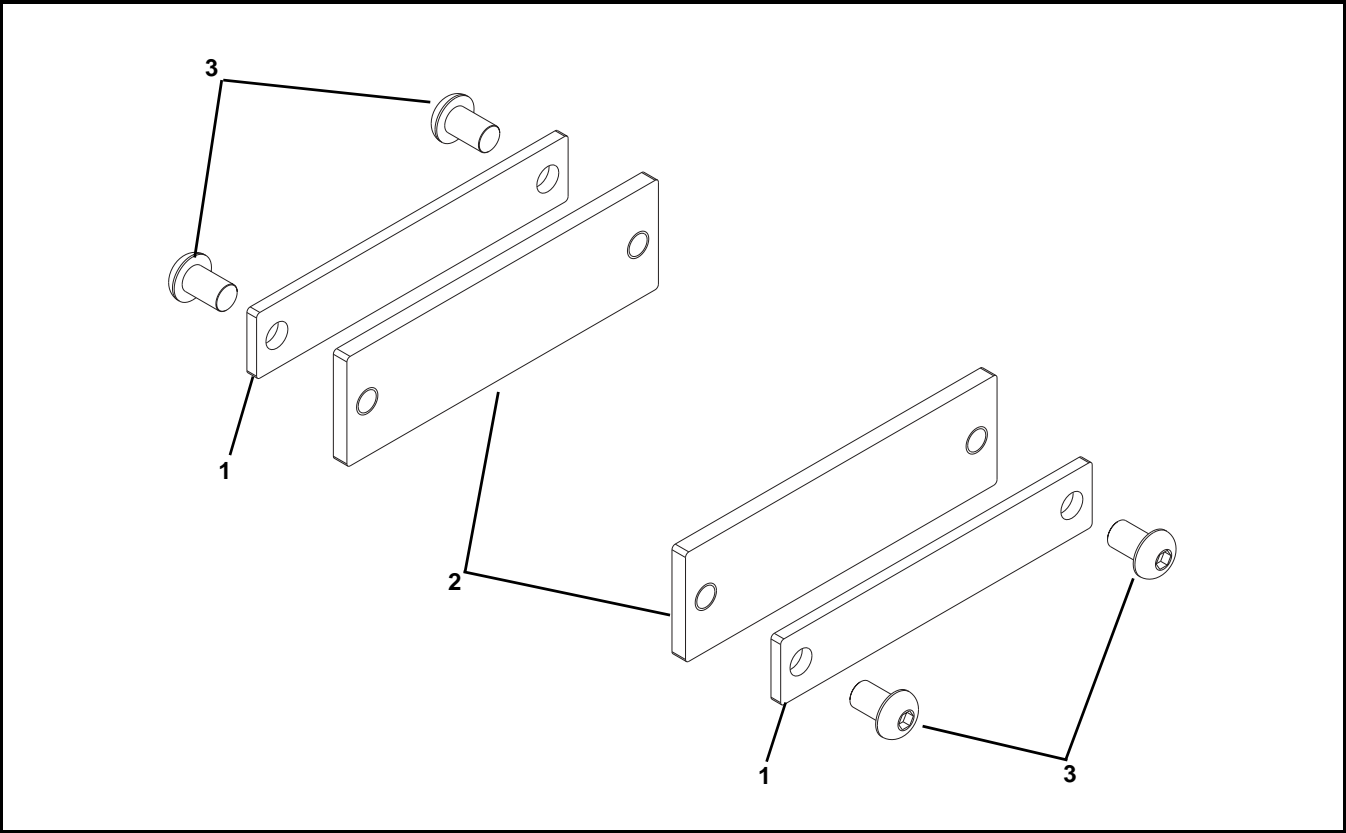


Item	Part Number	Description
1	807-1102	J-Leg Wear Strip
2	807-1926	Pan Screw, 7/16"
3	807-2302	Clip On Wear Strip
4	350336- <u>LLLLL</u>	Outer Top Wear Strip
5	350337- <u>LLLLL</u>	Tenting Wear Strip
6	350341- <u>LLLLL</u>	Wear Strip Support
7	350342	Retaining Clip

Item	Part Number	Description
8	350307- <u>LLLLL</u>	T-Slot Side Rail
	350319- <u>LLLLL</u>	SmartSlot Side Rail
9	350309	Top Clip
10	350310	Bottom Clip
11	350327- <u>WW</u>	Crossmember
12	920484M	Flange Screw, M4-.70 x 16 mm
13	920850M	Socket Head Screw, M8-1.25 x 25 mm
<u>WW</u> = Conveyor width reference: 06 – 48 in 02 increments		
<u>LLLLL</u> = Length in inches with 2 decimal places.		
Length Example: Length = 35.25" LLLLL = 03525		

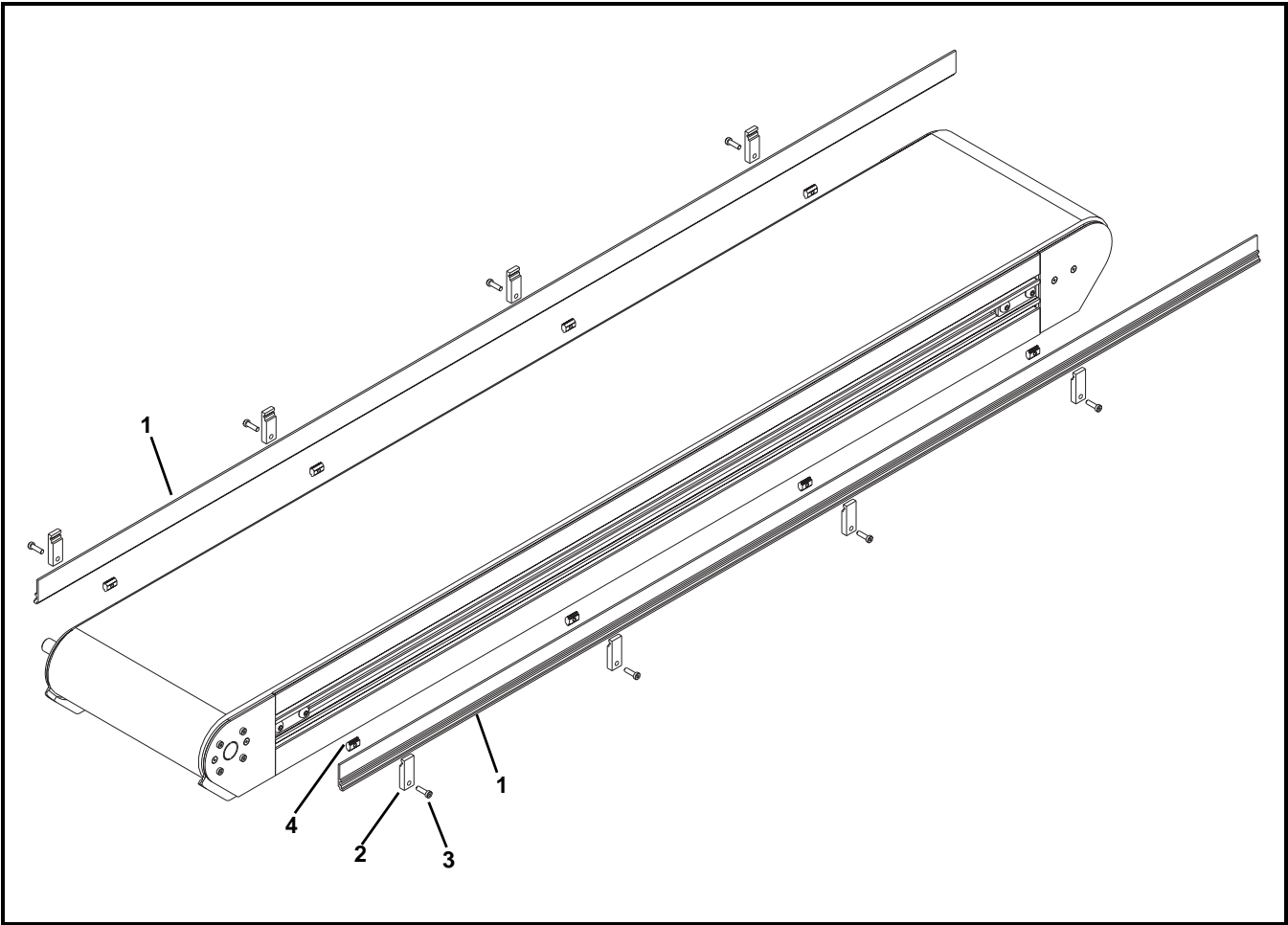
Service Parts

Connecting Assembly



Item	Part Number	Description
1	350580	Cover Plate
2	350581	Clamp Plate for T-Slot Frames
	350808	Clamp Plate for SmartSlot Frames
3	911016M	Button Head Screw, M10-1.50 x 16 mm

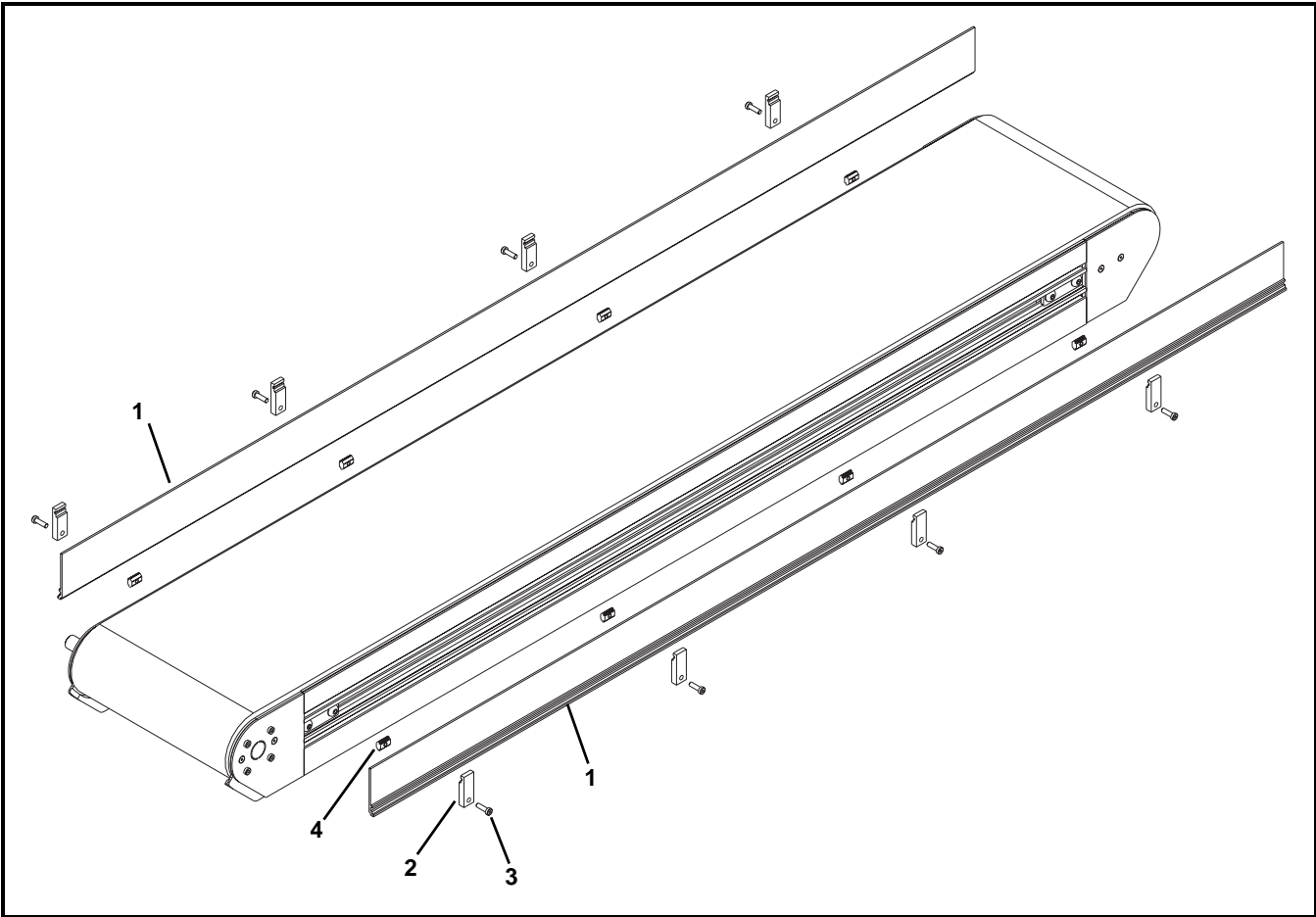
1.5” (38 mm) High Sides



Item	Part Number	Description
1	380500- <u>LLLLL</u>	1.50" Guides
2	350491	Guide Clip
3	920694M	Low Head Cap Screw, M6-1.00 x 20 mm for T-Slot Frames
	807-1937	Self-Drilling Hex Head Screw, 1/4-20 x 1" For SmartSlot Frames
4	639971MK10	Single Drop-In Tee Bar (x10)
<u>LLLLL</u> = Length in inches with 2 decimal places.		
Length Example: Length = 35.25" <u>LLLLL</u> = 03525		

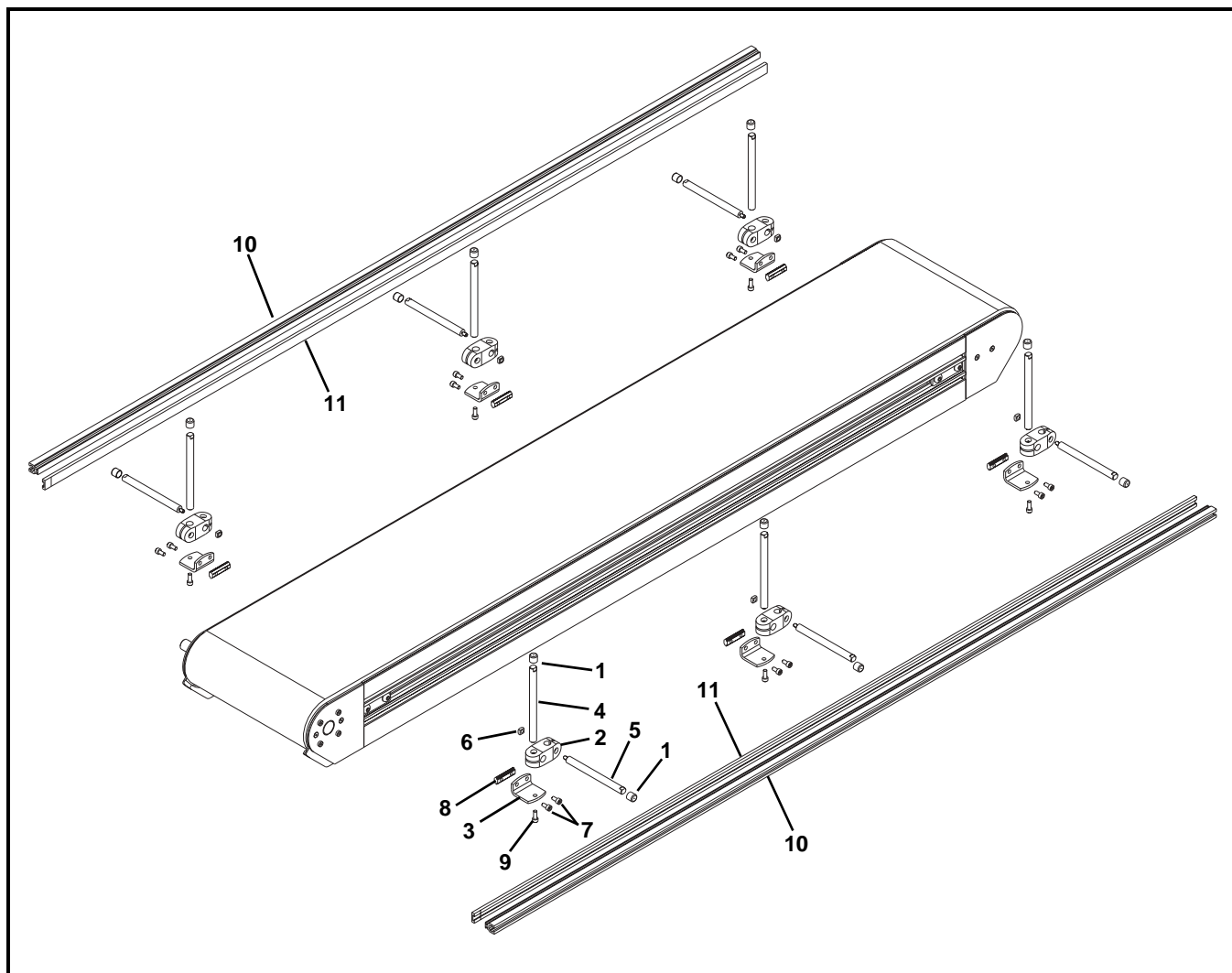
Service Parts

3" (76 mm) High Sides



Item	Part Number	Description
1	380400- <u>LLLLL</u>	3.00" Guides
2	350491	Guide Clip
3	920694M	Low Head Cap Screw, M6-1.00 x 20 mm for T-Slot Frames
	807-1937	Self-Drilling Hex Head Screw, 1/4-20 x 1" For SmartSlot Frames
4	639971MK10	Single Drop-In Tee Bar (x10)
<u>LLLLL</u> = Length in inches with 2 decimal places.		
Length Example: Length = 35.25" <u>LLLLL</u> = 03525		

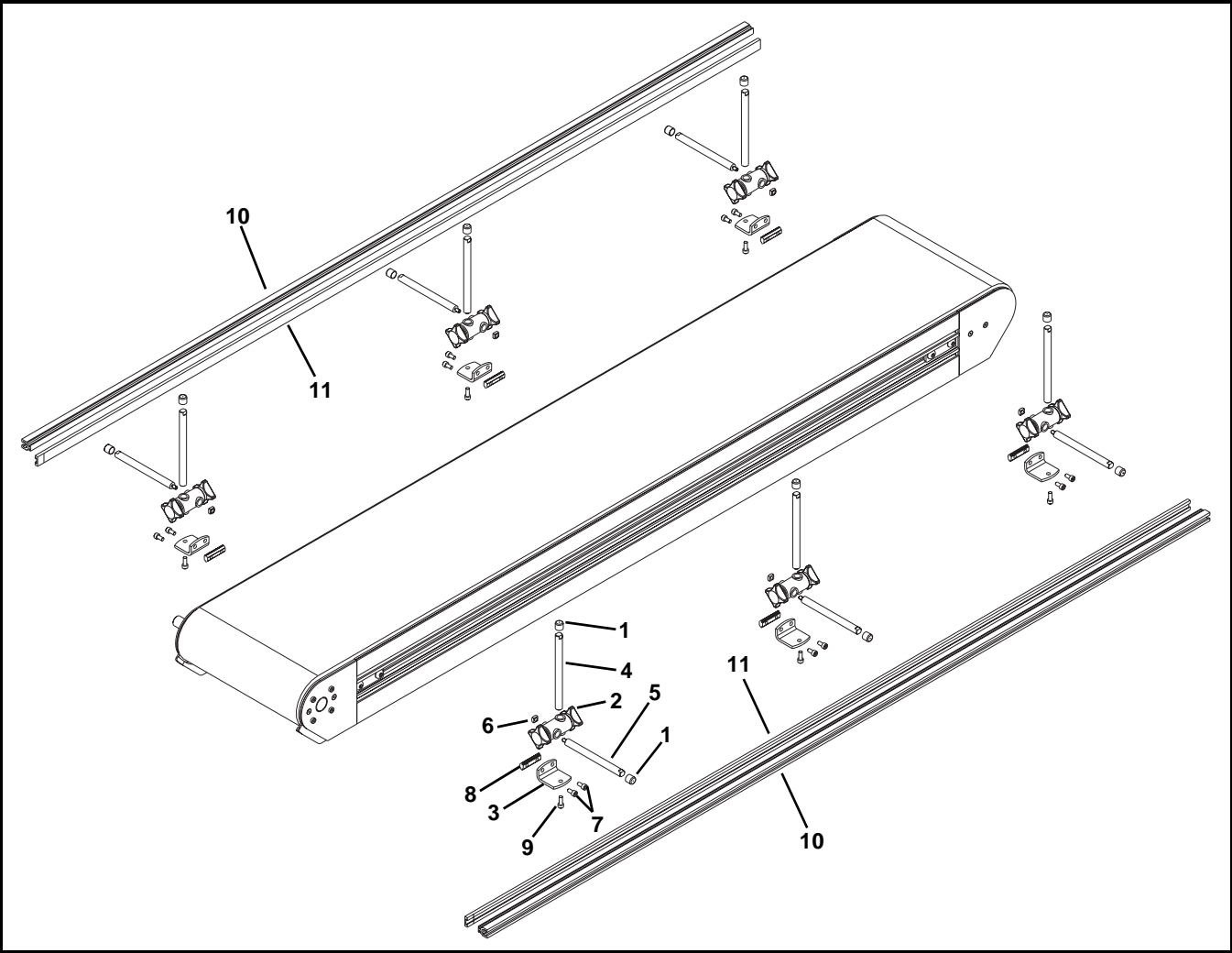
Fully Adjustable Guiding



Item	Part Number	Description
1	807-948	Shaft Cap
2	807-652	Cross Block
3	202004	Mounting Bracket
4	202027M	Vertical Mounting Guide Shaft
5	202028M	Horizontal Mounting Guide Shaft
6	674175MP	Square Nut, M6-1.00
7	920612M	Socket Head Screw, M6-1.00 x 12 mm for T-Slot Frames
	807-1937	Self-Drilling Hex Head Screw, 1/4-20 x 1" For SmartSlot Frames
8	200830M	Drop-In Tee Bar for T-Slot Frames Only
9	920616M	Socket Head Screw, M6-1.00 x 16 mm
10	460063- <u>LLLLL</u>	Aluminum Profile Guide
11	614068P- <u>LLLLL</u>	Extruded Guide
<u>LLLLL</u> = Length in inches with 2 decimal places.		
Length Example: Length = 35.25" <u>LLLLL</u> = 03525		

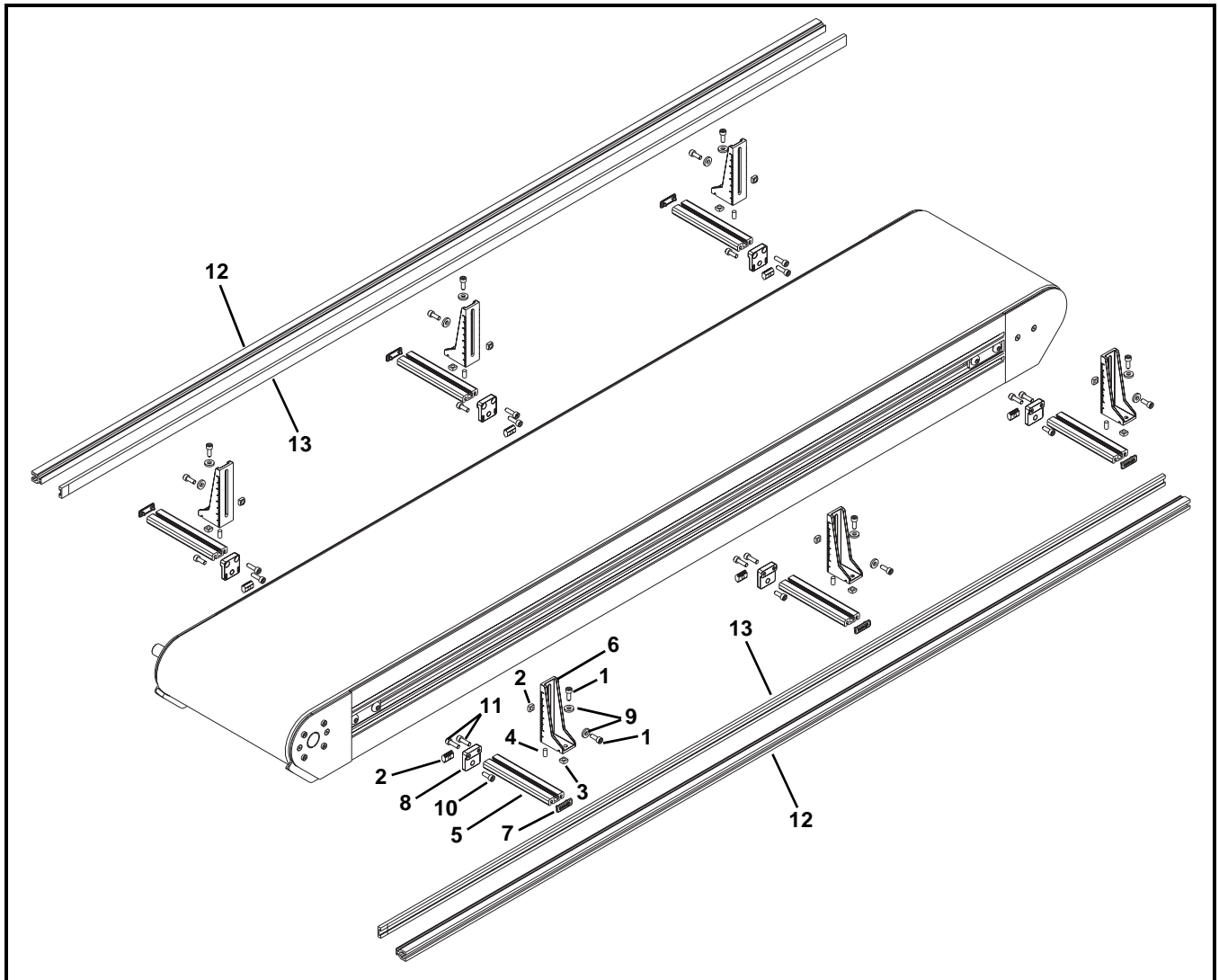
Service Parts

Tool-Less Fully Adjustable Guiding



Item	Part Number	Description
1	807-948	Shaft Cap
2	807-1470	Cross Block
3	202004	Mounting Bracket
4	202027M	Vertical Mounting Guide Shaft
5	202028M	Horizontal Mounting Guide Shaft
6	674175MP	Square Nut, M6-1.00
7	920612M	Socket Head Screw, M6-1.00 x 12 mm for T-Slot Frames
	807-1937	Self-Drilling Hex Head Screw, 1/4-20 x 1" For SmartSlot Frames
8	200830M	Drop-In Tee Bar for T-Slot Frames Only
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 = 35.25" LLLLL = 03525		

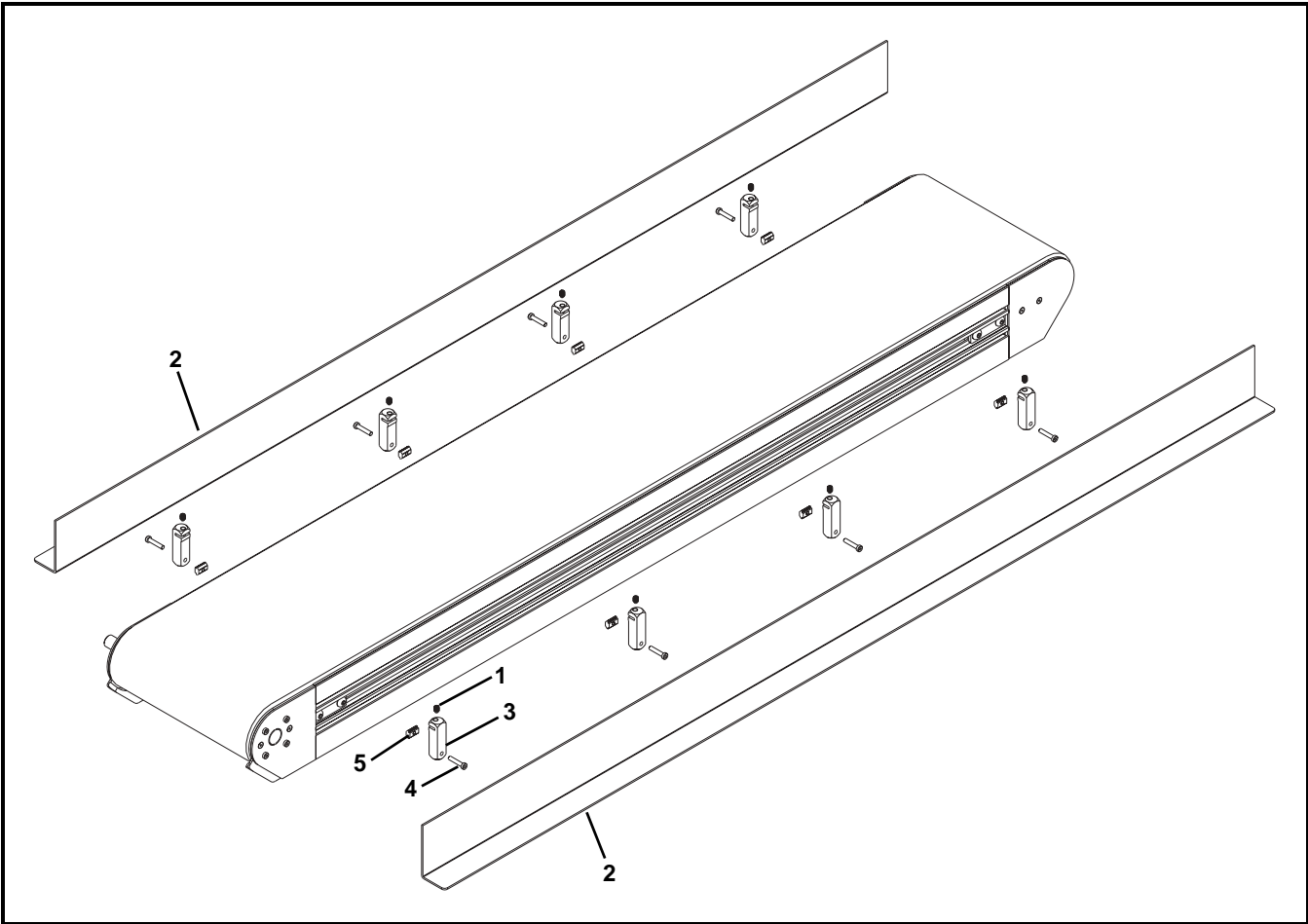
Adjustable Outboard Guiding



Item	Part Number	Description
1	920612M	Socket Head Screw, M6-1.00 x 12 mm for T-Slot Frames
	807-1937	Self-Drilling Hex Head Screw, 1/4-20 x 1" For SmartSlot Frames
2	639971M	Drop-In Tee Bar for T-Slot Frames Only
3	807-920	Square Nut, M6-1.00
4	913-051	Roll Pin
5	210846-00600	Base Extrusion
6	210847	Mounting Bracket
7	210849	Cap
8	350791	Mounting Block
9	605279P	Washer
10	920616M	Socket Head Screw, M6-1.00 x 16 mm
11	920620M	Socket Head Screw, M6-1.00 x 20 mm
12	460063-LLLLL	Aluminum Profile Guide
13	614068P-LLLLL	Extruded Guide
LLLLL = Length in inches with 2 decimal places.		
Length Example: Length = 35.25" LLLLL = 03525		

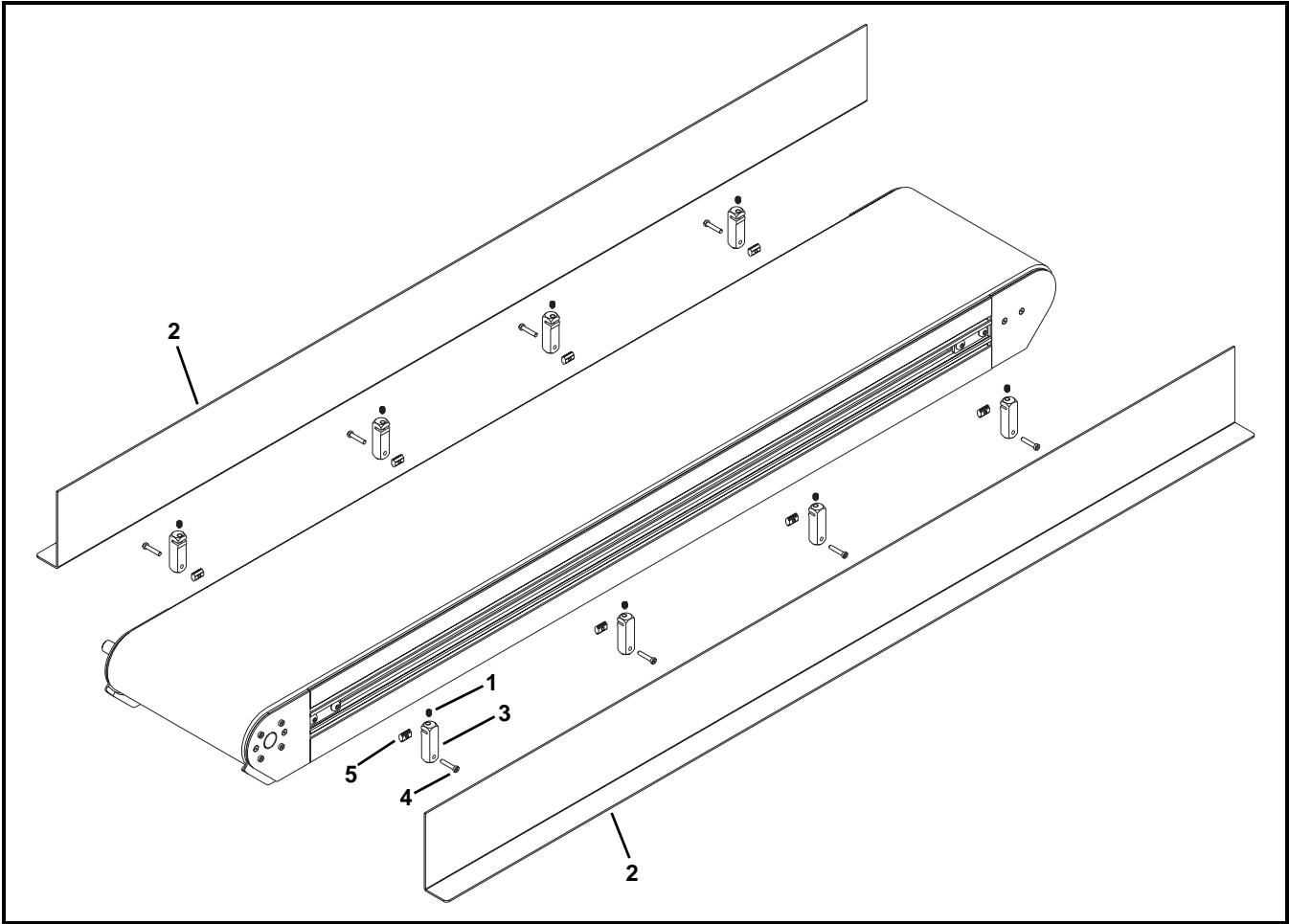
Service Parts

4.00” (102 mm) High Side Profiles



Item	Part Number	Description
1	807-2121	Set Screw
2	350445-04- <u>LLLLL</u>	4.00" Guides
3	350514	Guide Block
4	920696M	Low Head Cap Screw, M6-1.00 x 30 mm for T-Slot Frames
	807-1944	Self-Drilling Hex Head Screw, 1/4-20 x 1.50" For SmartSlot Frames
5	639971MK10	Single Drop-In Tee Bar (x10)
<u>LLLLL</u> = Length in inches with 2 decimal places.		
Length Example: Length = 35.25" <u>LLLLL</u> = 03525		

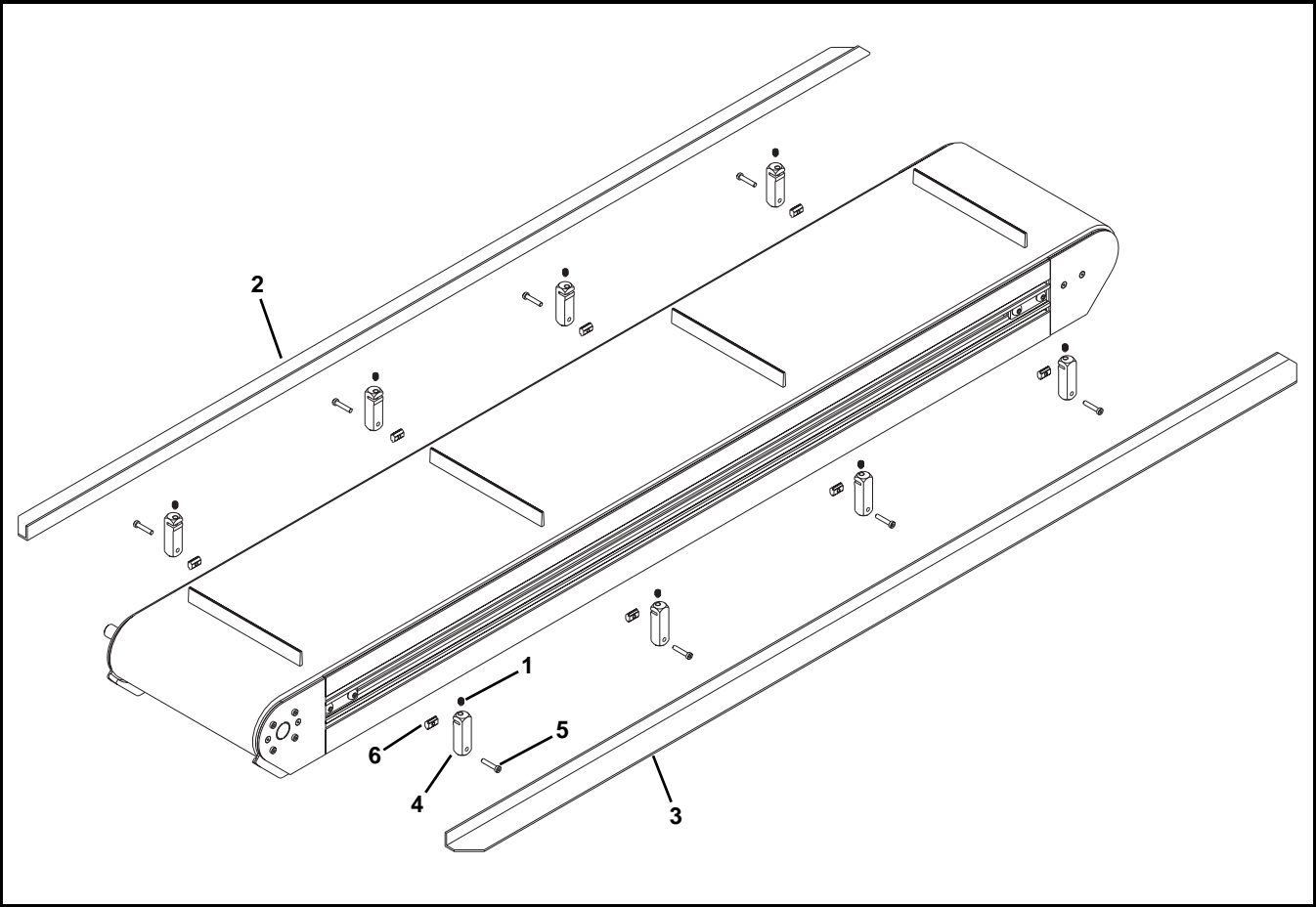
6.00” (152 mm) High Side Profiles



Item	Part Number	Description
1	807-2121	Set Screw
2	350445-06- <u>LLLLL</u>	6.00" Guides
3	350514	Guide Block
4	920696M	Low Head Cap Screw, M6-1.00 x 30 mm for T-Slot Frames
	807-1944	Self-Drilling Hex Head Screw, 1/4-20 x 1.50" For SmartSlot Frames
5	639971MK10	Single Drop-In Tee Bar (x10)
<u>LLLLL</u> = Length in inches with 2 decimal places.		
Length Example: Length = 35.25" <u>LLLLL</u> = 03525		

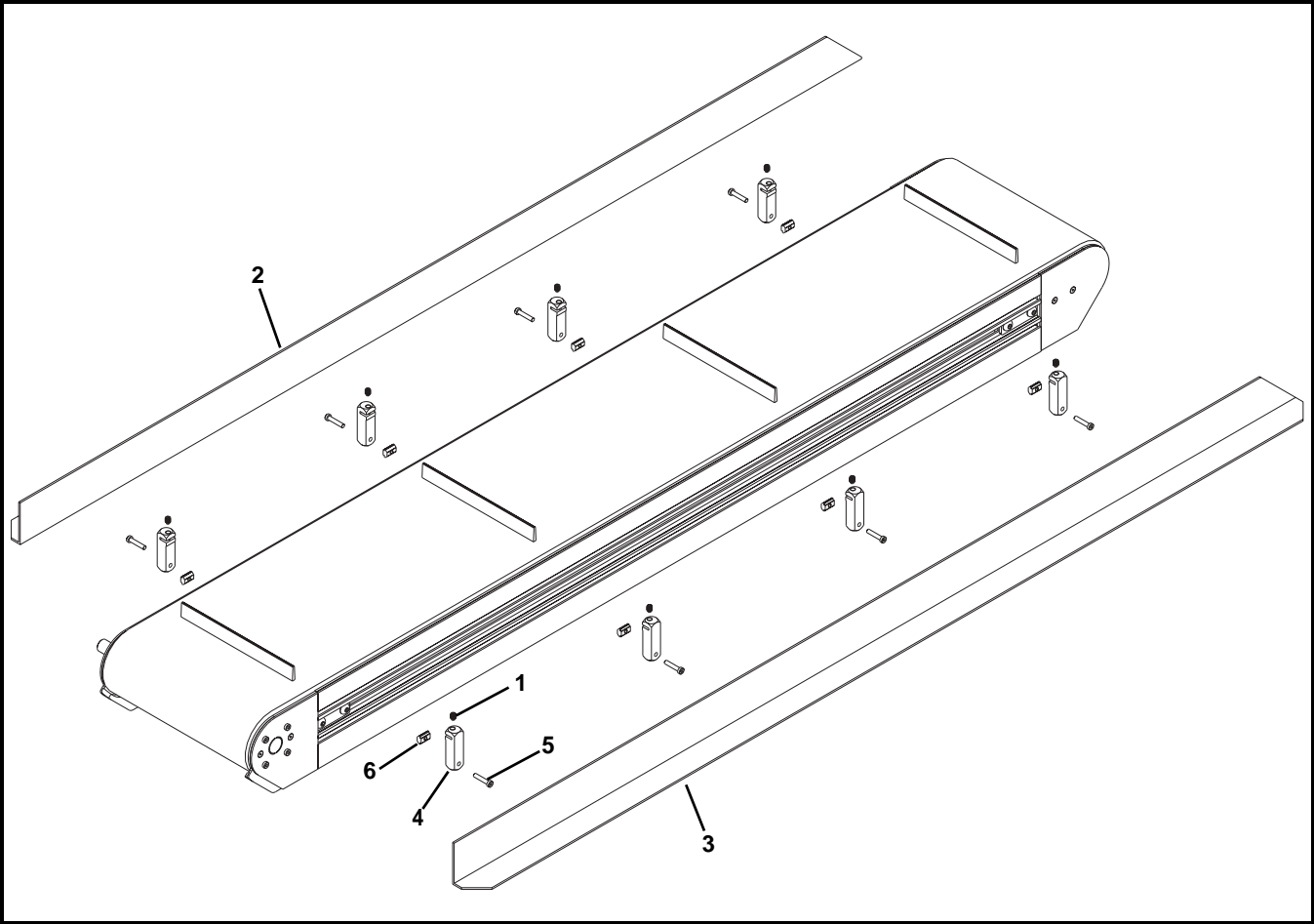
Service Parts

1.00" (25 mm) Cleated High Side Profiles



Item	Part Number	Description
1	807-2121	Set Screw
2	352486-LLLLL	1.00" Cleated Guides Right Hand
3	352487-LLLLL	1.00" Cleated Guides Left Hand
4	350514	Guide Block
5	920696M	Low Head Cap Screw, M6-1.00 x 30 mm for T-Slot Frames
	807-1944	Self-Drilling Hex Head Screw, 1/4-20 x 1.50" For SmartSlot Frames
6	639971MK10	Single Drop-In Tee Bar (x10)
LLLLL = Length in inches with 2 decimal places.		
Length Example: Length = 35.25" LLLLL = 03525		

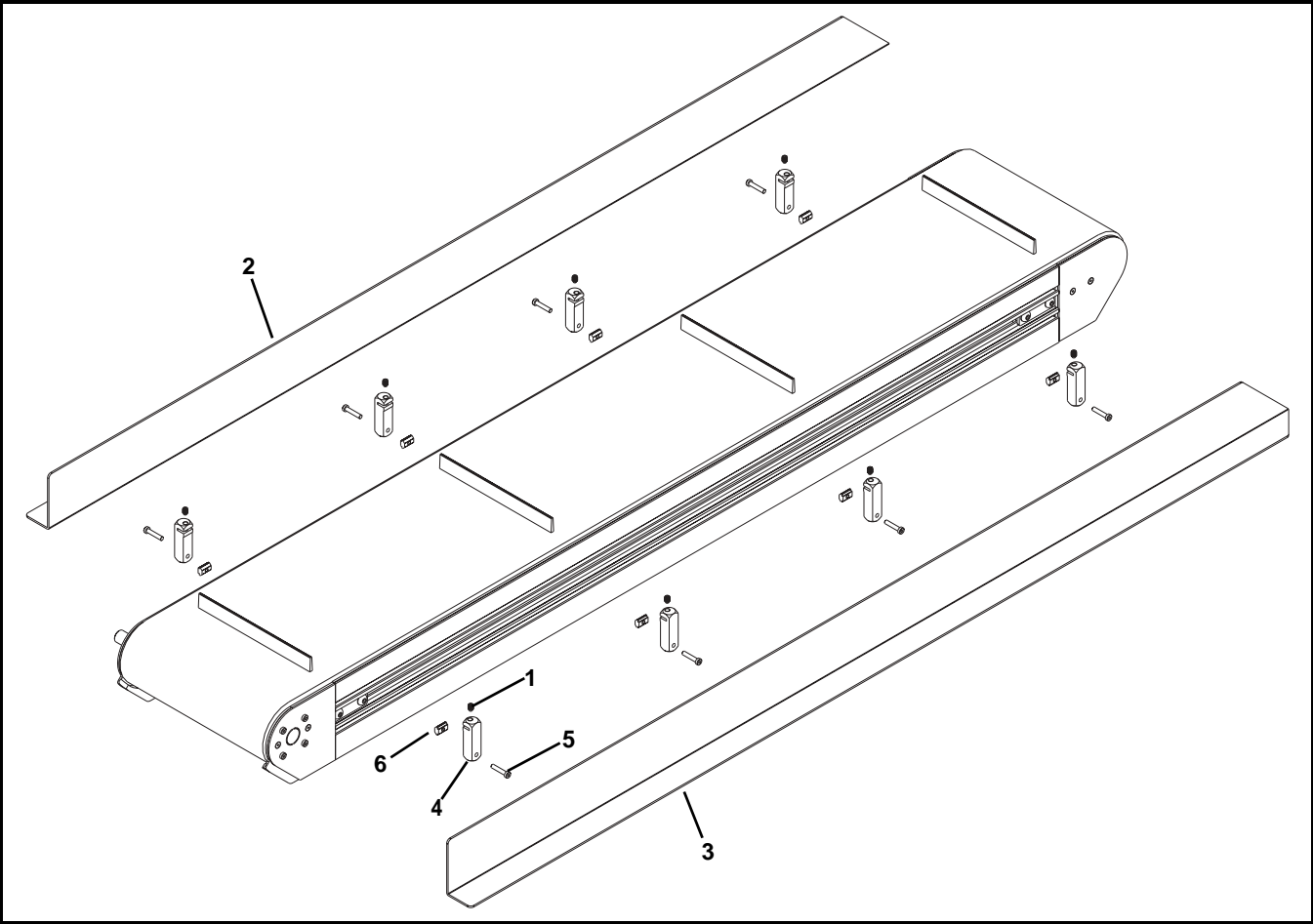
3.00" (76 mm) Cleated High Side Profiles



Item	Part Number	Description
1	807-2121	Set Screw
2	352473-LLLLL	3.00" Cleated Guides Right Hand
3	352474-LLLLL	3.00" Cleated Guides Left Hand
4	350514	Guide Block
5	920696M	Low Head Cap Screw, M6-1.00 x 30 mm for T-Slot Frames
	807-1944	Self-Drilling Hex Head Screw, 1/4-20 x 1.50" For SmartSlot Frames
6	639971MK10	Single Drop-In Tee Bar (x10)
LLLLL = Length in inches with 2 decimal places.		
Length Example: Length = 35.25" LLLLL = 03525		

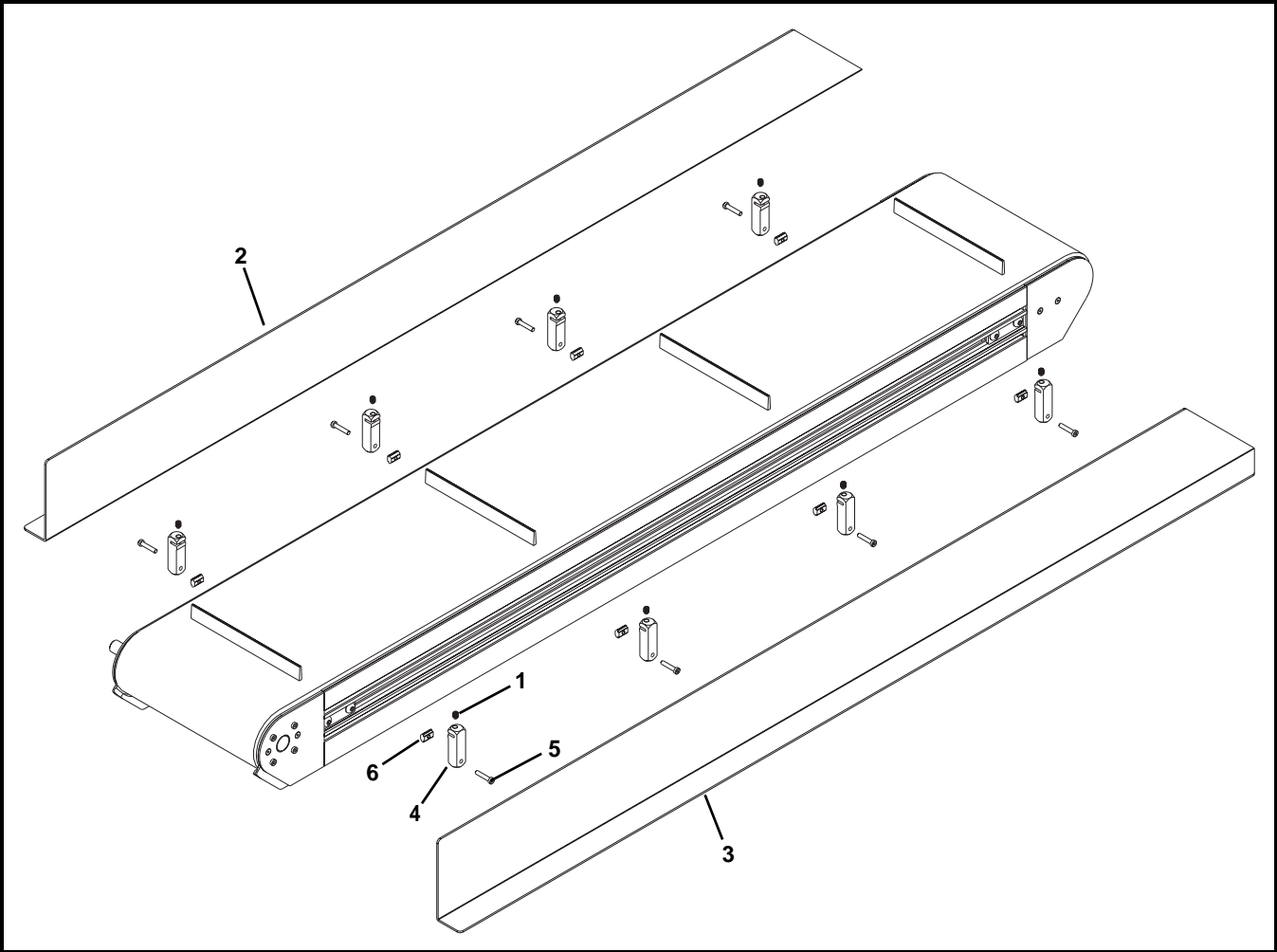
Service Parts

4.00" (102 mm) Cleated High Side Profiles



Item	Part Number	Description
1	807-2121	Set Screw
2	350625-04- <u>LLLLL</u>	4.00" Cleated Guides Right Hand
3	350626-04- <u>LLLLL</u>	4.00" Cleated Guides Left Hand
4	350514	Guide Block
5	920696M	Low Head Cap Screw, M6-1.00 x 30 mm for T-Slot Frames
	807-1944	Self-Drilling Hex Head Screw, 1/4-20 x 1.50" For SmartSlot Frames
6	639971MK10	Single Drop-In Tee Bar (x10)
<u>LLLLL</u> = Length in inches with 2 decimal places.		
Length Example: Length = 35.25" LLLLL = 03525		

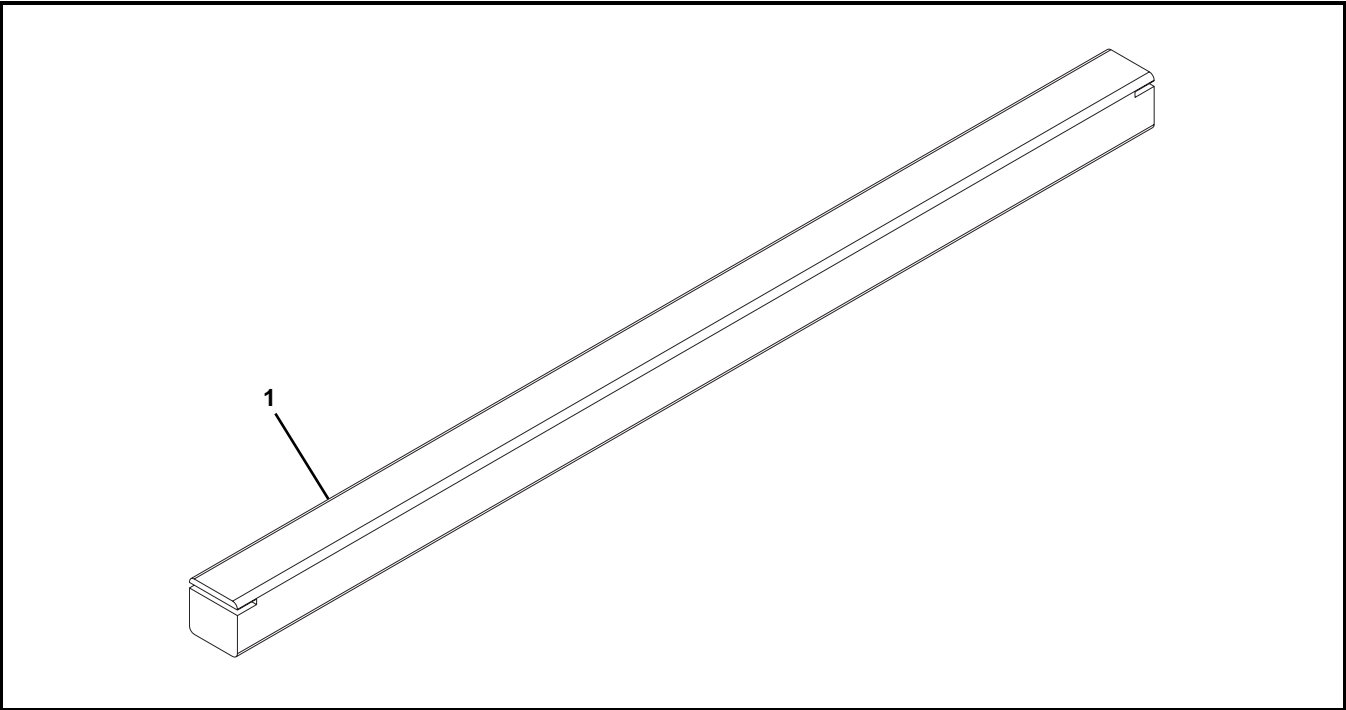
6.00" (152 mm) Cleated High Side Profiles



Item	Part Number	Description
1	807-2121	Set Screw
2	350625-06- <u>LLLL</u>	6.00" Cleated Guides Right Hand
3	350626-06- <u>LLLL</u>	6.00" Cleated Guides Left Hand
4	350514	Guide Block
5	920696M	Low Head Cap Screw, M6-1.00 x 30 mm for T-Slot Frames
	807-1944	Self-Drilling Hex Head Screw, 1/4-20 x 1.50" For SmartSlot Frames
6	639971MK10	Single Drop-In Tee Bar (x10)
<u>LLLL</u> = Length in inches with 2 decimal places.		
Length Example: Length = 35.25" LLLLL = 03525		

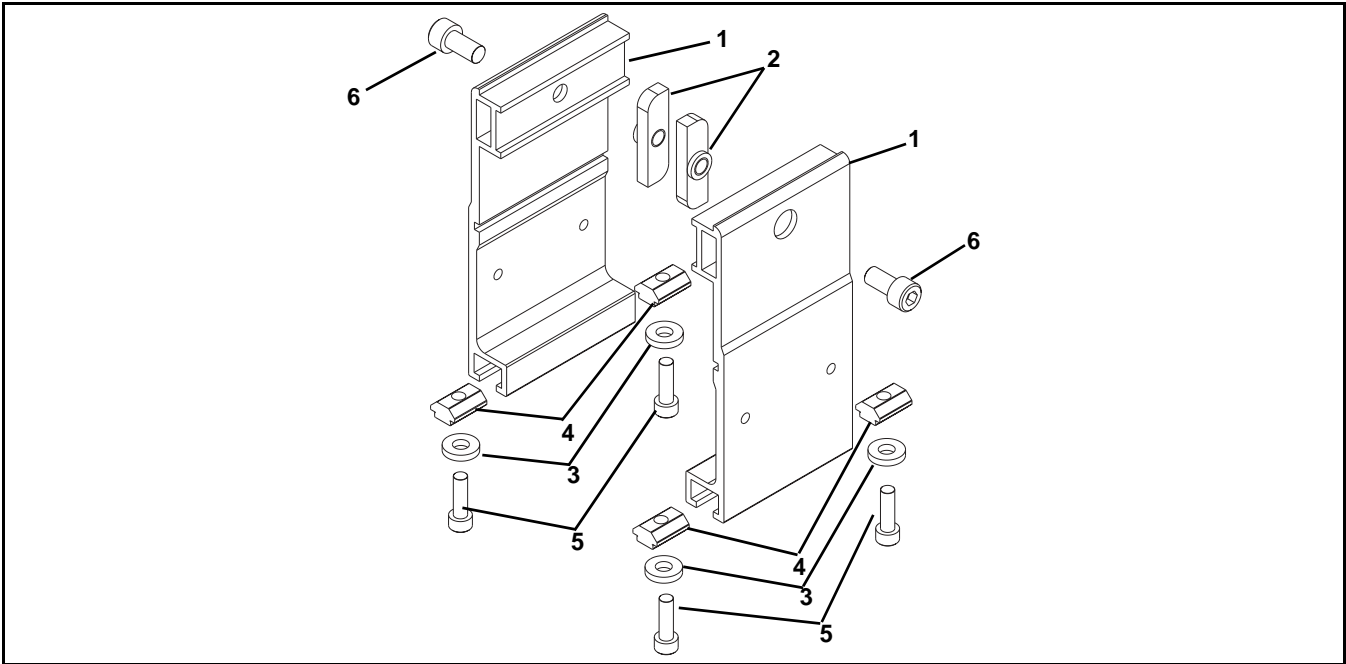
Service Parts

Flat Belt Returns



Item	Part Number	Description
1	350578- <u>WW</u>	Return Bar
<u>WW</u> = Conveyor Width Reference: 24 - 36 in 02 increments		

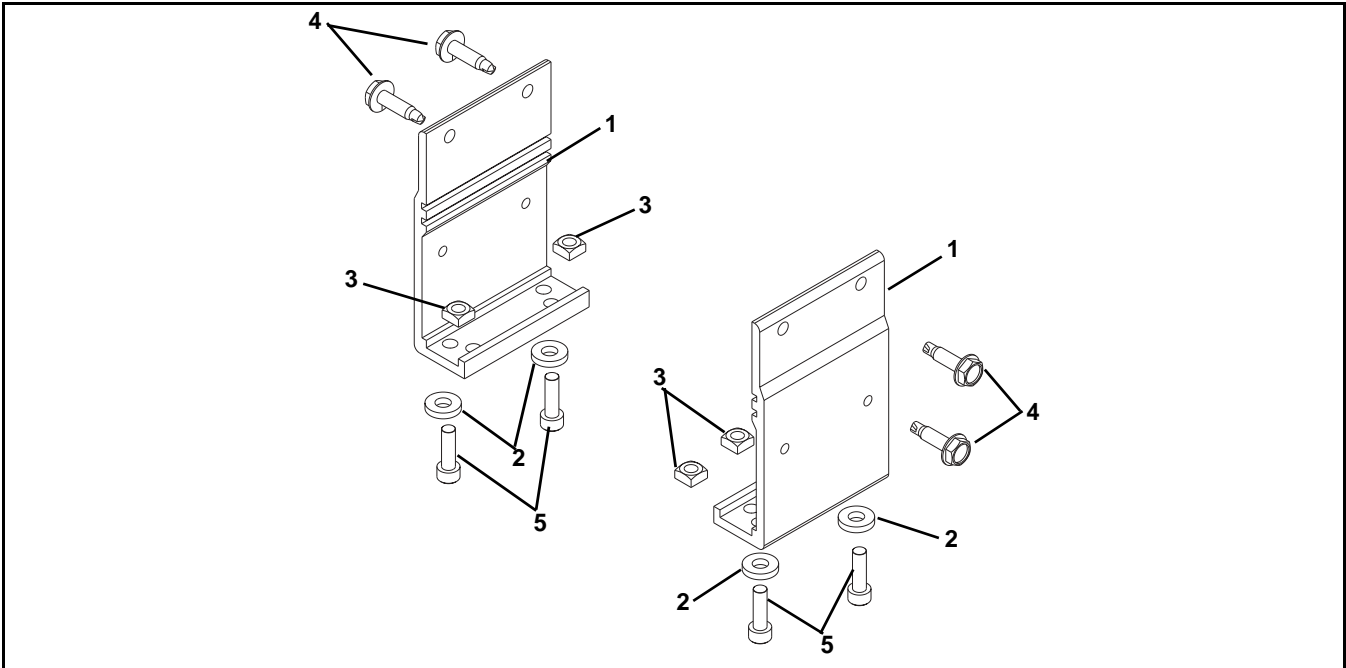
Flat Belt Mounting Brackets for T-Slot Conveyors



Item	Part Number	Description
1	350533	Stand Mount
2	350534	Nut
3	605279P	Washer

Item	Part Number	Description
4	639971M	Single Drop-In T-Bar
5	920620M	Socket Head Screw, M6-1.00 x 20 mm
6	920816M	Socket Head Screw, M8-1.25 x 16 mm

Flat Belt Mounting Brackets for SmartSlot Conveyors

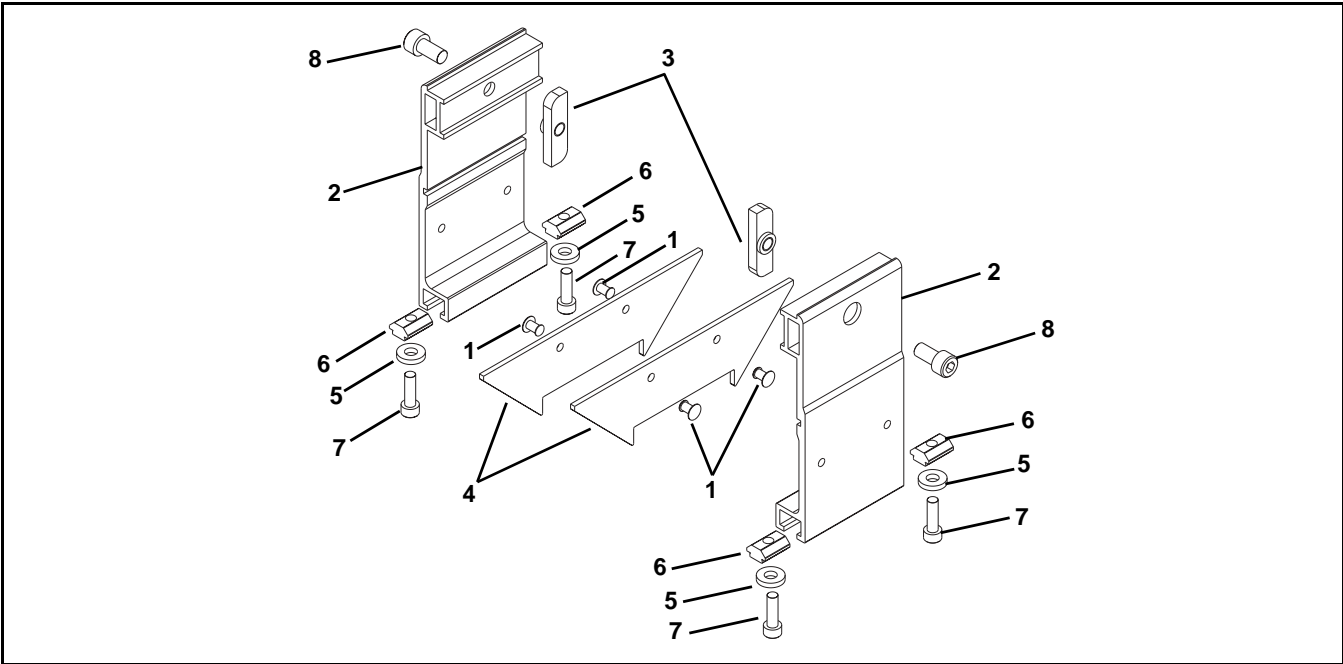


Item	Part Number	Description
1	240831	Stand Mount
2	605279P	Washer
3	807-920	Square Nut, M6-1.0

Item	Part Number	Description
4	807-1937	Drilling Screw, 1/4"-20 x 1"
5	920620M	Socket Head Screw, M6-1.00 x 20 mm

Service Parts

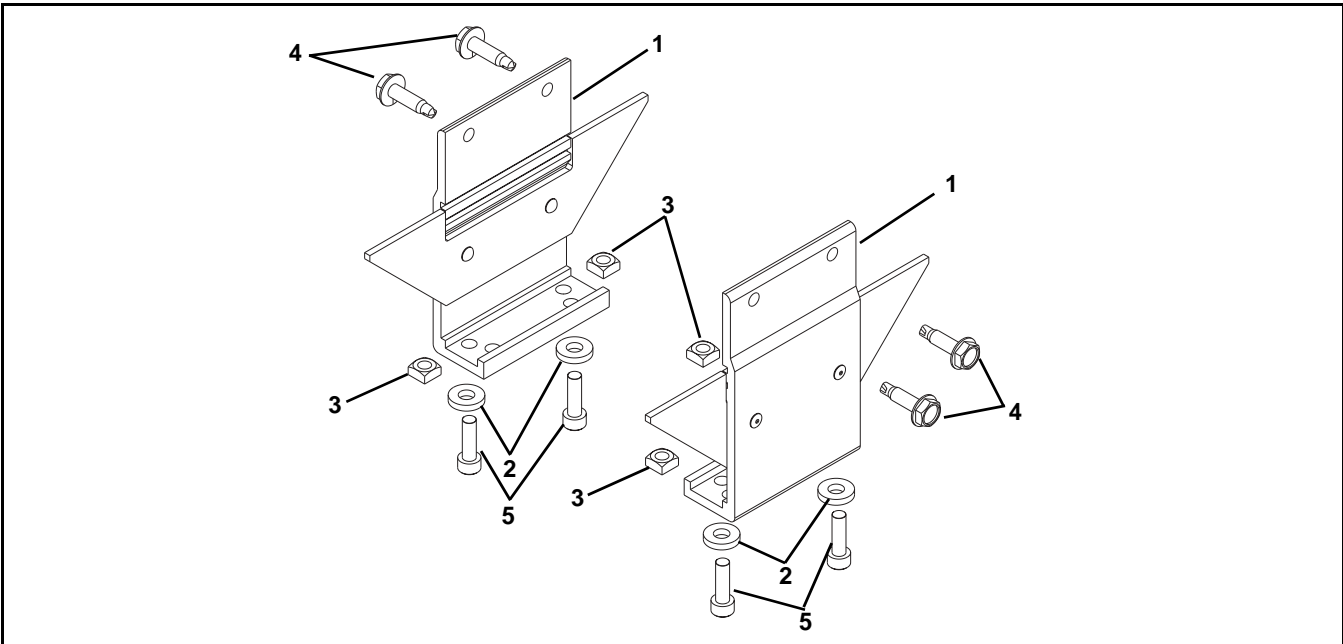
Cleated Belt Mounting Brackets for T-Slot Conveyors



Item	Part Number	Description
1	914-006	Rivet
2	350533	Stand Mount
3	350534	Nut
4	350897	Cleated Mount Plate

Item	Part Number	Description
5	605279P	Washer
6	639971M	Single Drop-In T-Bar
7	920620M	Socket Head Screw, M6-1.00 x 20 mm
8	920816M	Socket Head Screw, M8-1.25 x 16 mm

Cleated Belt Mounting Brackets for SmartSlot Conveyors



Item	Part Number	Description
1	240836	Cleated Stand Mount
2	605279P	Washer
3	807-920	Square Nut, M6-1.0

Item	Part Number	Description
4	807-1937	Drilling Screw, 1/4"-20 x 1"
5	920620M	Socket Head Screw, M6-1.00 x 20 mm

Ordering a Replacement Chain

Determine the length of chain required for the conveyor and round up to the nearest foot length. Order the proper number of chain repair kits (1' long each) for your conveyor. Dorner will ship chain kits that are of a reasonable length fully assembled

Example:

Overall chain length = 42' 5" (rounded up = 43')


Order: Qty (43) of 52BB-WW

BB = Chain reference number

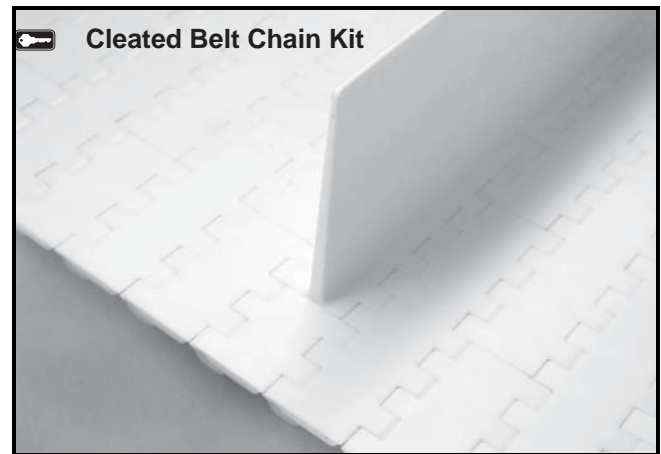
WW = Conveyor width ref: 06-36 in 02 increments


Flat Belt Chain Repair Kit



Item	Part Number	Description
1 	52 <u>BB</u> - <u>WW</u>	Flat Belt Chain Repair Kit (Includes 1 ft (305 mm) of flat belt chain and assembly pins)
<u>BB</u> = Chain Reference number		
<u>WW</u> = Conveyor width ref: 06 - 48 in 02 increments		

Cleated Belt Chain Repair Kit



Item	Part Number	Description
1 	52 <u>BB</u> - <u>WW</u>	Cleated Belt Chain Repair Kit (Includes cleats on 1 ft (305mm) of belt chain and assembly pins)
<u>BB</u> = Chain Reference number		
<u>WW</u> = Conveyor width ref: 06 - 24 in 02 increments		

Return Policy

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

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

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

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

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

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

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

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



Dorner Mfg. Corp. reserves the right to change or discontinue products without notice. All products and services are covered in accordance with our standard warranty. All rights reserved. © Dorner Mfg. Corp. 2014

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