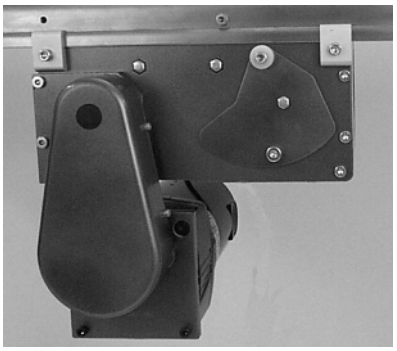
DORNER®

Installation, Maintenance & Parts Manual

6100 Series Industrial Center Drive Conveyors



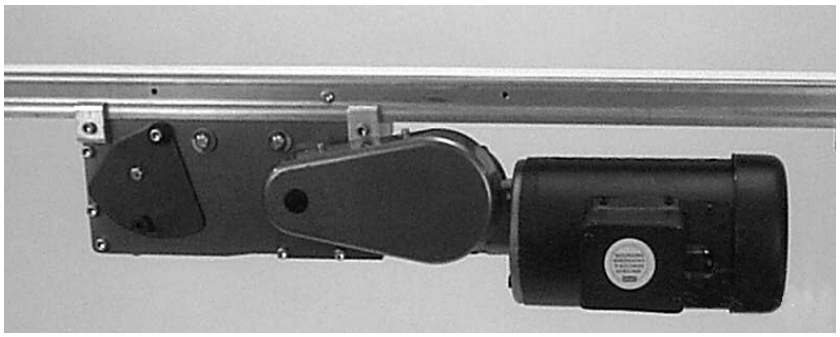


Table of Contents

Warnings – General Safety

WARNING

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

DANGER

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

KEEP OFF CONVEYORS.

DANGER

DO NOT OPERATE CONVEYORS IN AN EXPLOSIVE ENVIRONMENT.

WARNING

Exposed moving parts can cause severe injury.

LOCK OUT POWER before removing guards or performing maintenance.

WARNING

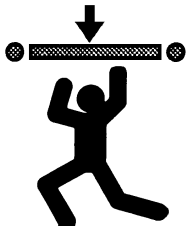
Gearmotors may be HOT.

DO NOT TOUCH Gearmotors.

WARNING

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

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



WARNING

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

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

Introduction

IMPORTANT: Some illustrations may show guards removed. Do NOT operate equipment without guards.

Upon receipt of shipment:

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

Dorner's Limited Warranty applies.

Dorner 6100 Series conveyors are covered by Patent Nos. 5174435, 6109427, and corresponding patents and patent applications in other countries.

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

Product Description

Refer to Figure 1 for typical conveyor components.

Typical Components	
A	Conveyor
B	Center Drive Module
C	Gearmotor Mounting Package
D	Guiding & Accessories
E	Gearmotor
F	Mounting Brackets with Return Rollers
G	Support Stands
H	Variable Speed Controller
I	Fixed End
J	Tension End

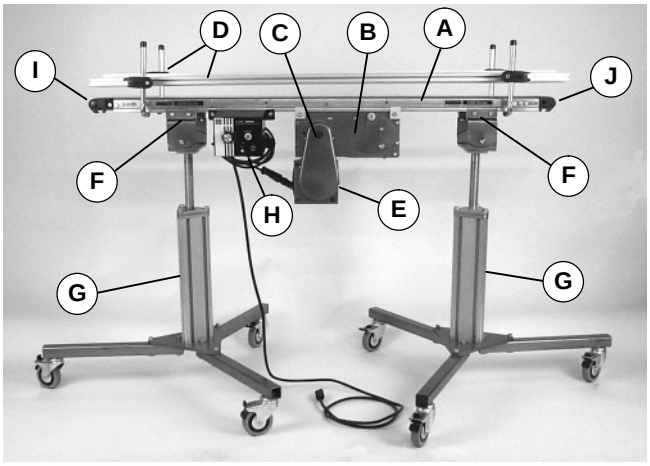


Figure 1

Specifications

Models:

6100 Series Industrial Center Drive Conveyor

6150 M WW LL A 01 / 02

- **02** — Belt Type*
- **01** — Conveyor Profile*
- **A** — Mount Position (A or D)*
- **LL** — Conveyor Length Reference
- **WW** — Conveyor Width Reference

*** See "Ordering and Specifications" Catalog for details.**

Conveyor Supports:

Maximum Distances:

K = 18¨ (457 mm)

L = 6 ft (1829 mm)**

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

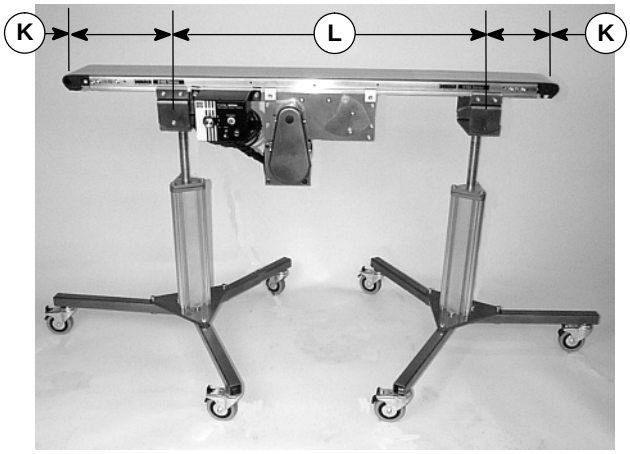


Figure 2

Specifications

Specifications:

Conveyor Width Reference (WW)	02	03	04	05	06	08	10	12	18
Conveyor Belt Width	1.75¨ (44 mm)	2.75¨ (70 mm)	3.75¨ (95 mm)	5¨ (127 mm)	6¨ (152 mm)	8¨ (203 mm)	10¨ (254 mm)	12¨ (305 mm)	18” (457mm)
Maximum Conveyor Load* (See NOTE Below)	40 lb (18 kg)	50 lb (23 kg)	60 lb (27 kg)	75 lb (34 kg)	90 lb (41 kg)	105 lb (47 kg)	120 lb (54 kg)	120 lb (54 kg)	120 lb (54kg)
Conveyor Start-up Torque*	9 in-lb (1.0 Nm)	10 in-lb (1.1 Nm)	11 in-lb (1.2 Nm)	12 in-lb (1.4 Nm)	15 in-lb (1.7 Nm)	20 in-lb (2.3 Nm)	23 in-lb (2.6 Nm)	25 in-lb (2.8 Nm)	30 in–lb (8.4Nm)
Belt Travel	3.5¨ (88 mm) per revolution of pulley								
Maximum Belt Speed*	235 feet/minute (72 meters/minute)								
Belt Take-up	1¨ (25 mm) of stroke = 2¨ (51 mm) of belt take-up								

Conveyor Length Reference (LL)	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Conveyor Length	2-ft (610 mm)	3-ft (914 mm)	4-ft (1219 mm)	5-ft (1524 mm)	6-ft (1829 mm)	7-ft (2134 mm)	8-ft (2438 mm)	9-ft (2743 mm)	10-ft (3048 mm)	11-ft (3353 mm)	12-ft (3658 mm)	13-ft (3962 mm)	14-ft (4267 mm)	15-ft (4572 mm)	16-ft (4877 mm)	17-ft (5182 mm)	18-ft (5486 mm)	19-ft (5791 mm)	20-ft (6096 mm)	21-ft (6401 mm)	22-ft (6706 mm)	23-ft (7010 mm)	24-ft (7315 mm)

*** See “Ordering and Specifications” Catalog for details.**

NOTE: Maximum conveyor loads based on:

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

Installation

NOTE: Conveyor MUST be mounted straight, flat and level within confines of conveyor. Use a level (M of Figure 3) for set-up.

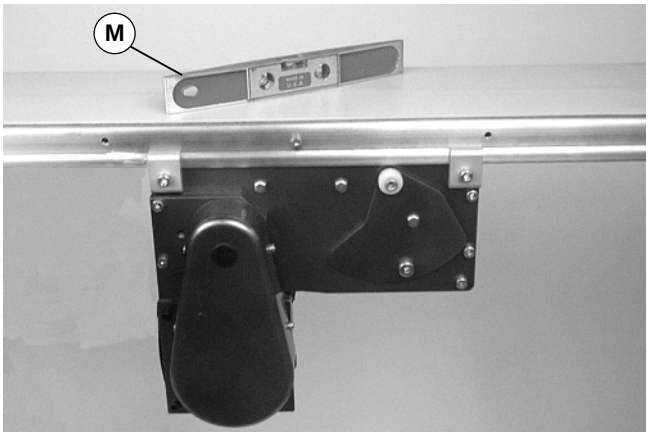


Figure 3

Illustration References

M	Level
N	Conveyor frame without belt
O	M6 x 10 mm Low Head Socket Head Screws (6x) (shipped loose)
P	Connector Strips (2x) (Attached to conveyor section)
Q	Conveyor frame with belt
R	Label
S	Screw
T	Pinion Gear
U	1¨ (25 mm) Distance
V	M6 x 12 mm Socket Head Screws (4x)
W	M6 x 18 mm Socket Head Screw & Hard Washer Assemblies (4x)

Required Tools

Standard Tools

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

Recommended Installation Sequence (see Table of Contents for page number)

- Assemble conveyor (if required)
- Attach mounting bracket(s) with return roller to conveyor (see page 6)
- Install stands (see accessory instructions)
- Attach conveyor to stands
- Mount gearmotor mounting package (see accessory instructions)
- Attach guides/accessories (see "Service Parts" section, pages 18 through 28)

Conveyors Up to 13 ft (3962 mm)

No additional assembly is required.

Conveyors Longer Than 13 ft (3962 mm)

1. Typical components (Figure 4)

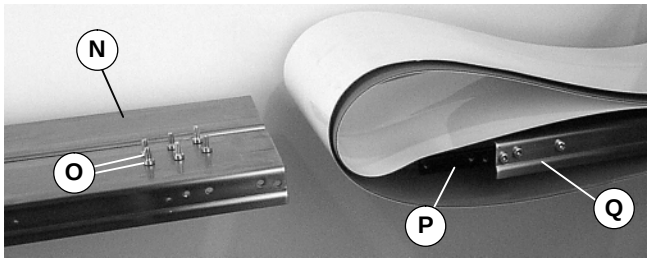


Figure 4

2. On tension end of the conveyor identified with  label (R of Figures 5 & 6), loosen screw (S of Figure 5). Rotate pinion gear (T of Figure 6) clockwise until headplate shoulder contacts conveyor frame.

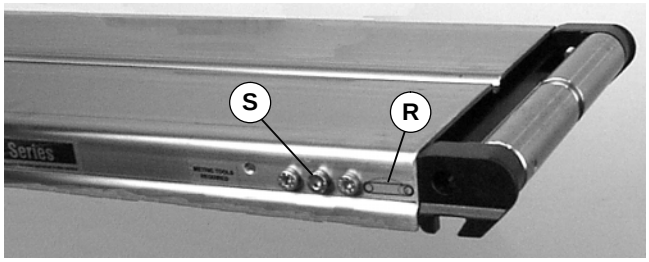


Figure 5

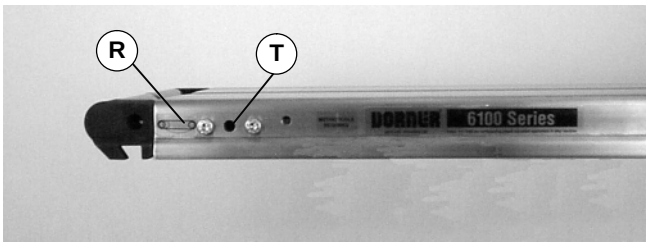


Figure 6

3. Roll out conveyor belt.

4. Place conveyor frame (N of Figure 7) into belt loop.

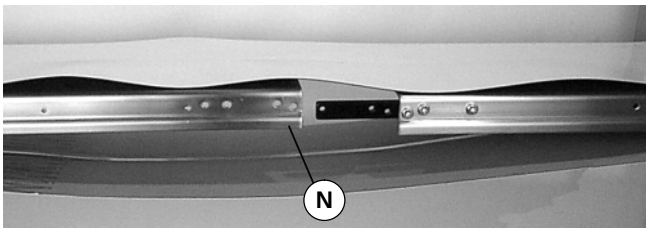


Figure 7

5. Join conveyor sections (N & Q of Figure 8). Install screws (O) on both sides. Tighten to 60 in-lb (7 Nm).

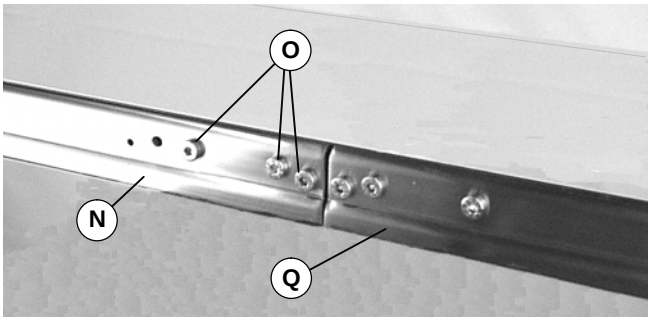


Figure 8

6. Rotate pinion gear (T of Figure 6) counter-clockwise to a distance of 1¨ (25 mm) (U of Figure 9).

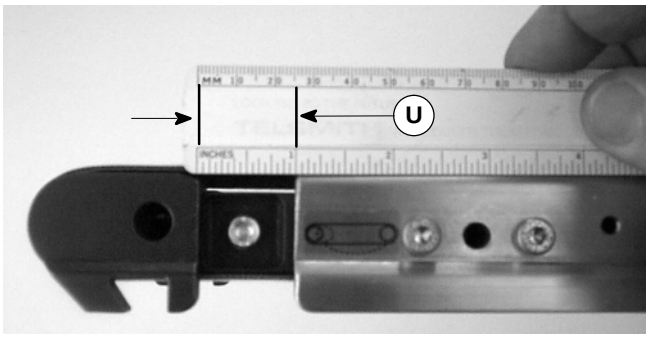


Figure 9

7. Tighten lock screw (S of Figure 5) to 40 in-lb (4.5 Nm).

Mounting Brackets with Return Rollers

2¨ to 6¨ (44 mm to 152 mm) Wide Flat Belt Conveyors

1. Typical components (Figure 10)

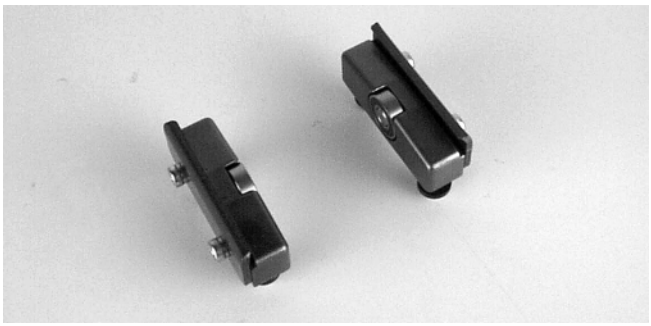


Figure 10

2. Loosen screws (V of Figure 11) and remove screws and washers (W).

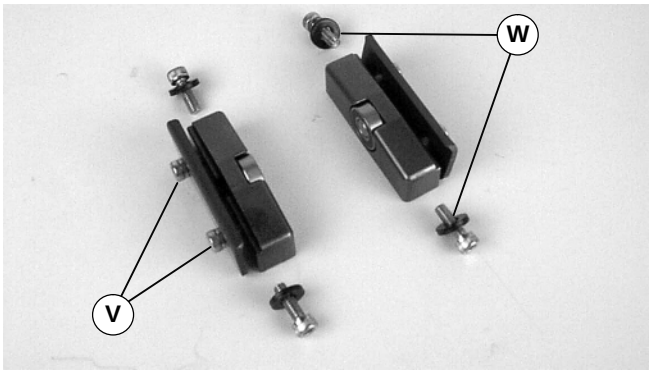


Figure 11

3. Attach clamp plates on each side of conveyor (Figure 12). Tighten the screws (V) to 80 in-lb (9 Nm).

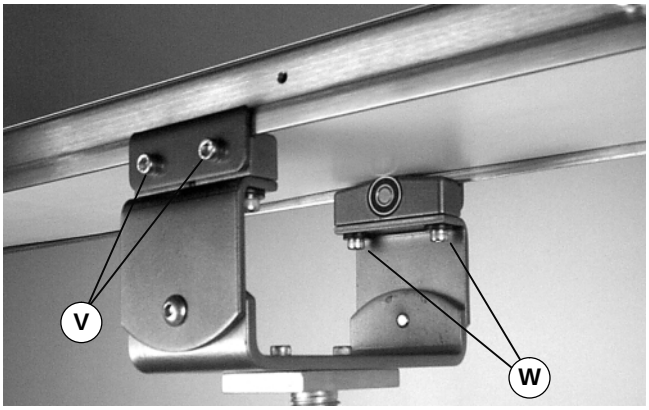


Figure 12

4. Attach to support stand. Tighten screws (W) to 80 in-lb (9 Nm). Make sure belt is free to move.

8¨ (203 mm) & Wider Flat Belt Conveyors

1. Typical components (Figure 13)

Figure 13

2. Loosen screws (V of Figure 14) and remove screws and washers (W).

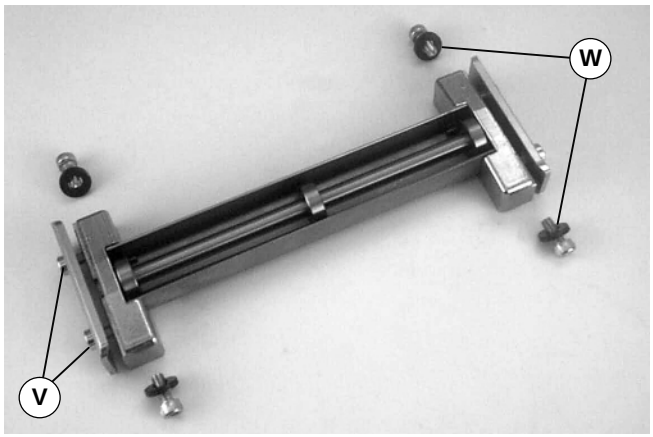


Figure 14

3. Attach clamp plates on each side of conveyor (Figure 15). Tighten the screws (V) to 80 in-lb (9 Nm).

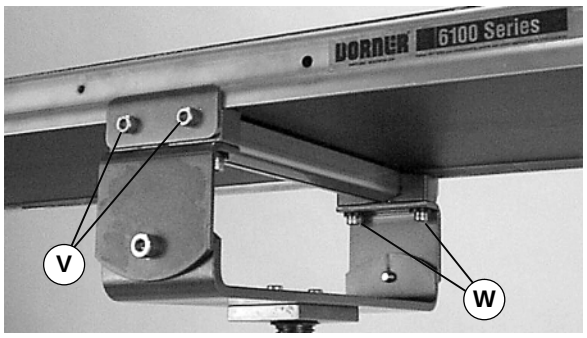


Figure 15

4. Attach to support stand. Tighten screws (W) to 80 in-lb (9 Nm). Make sure belt is free to move.

Required Tools

Standard Tools

- Hex key wrenches

– 2 mm	– 2.5 mm	– 3 mm
– 4 mm	– 5 mm	– 6 mm

- Adjustable wrench
- Arbor press

Special Tools

- 450281 Sealed Bearing Removal Tool
- 450282 Sealed Bearing Installation Tool

Checklist

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

Lubrication

Conveyor

No lubrication is required. Replace bearings if worn.

Mounting Brackets with Return Rollers

No lubrication is required. Replace bearings if worn.

Maintaining Conveyor Belt

Troubleshooting

Inspect conveyor belt for:

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

Surface cuts and wear indicate:

- Sharp or heavy parts impacting belt
- Jammed parts
- Improperly installed bottom wiper
- Accumulated dirt in wiper
- Foreign material inside the conveyor
- Improperly positioned accessories
- Bolt-on guiding is pinching belt

Stalling or slipping indicates:

- Excessive load on belt
- Conveyor belt or drive timing belt are not properly tensioned
- Worn knurl or impacted dirt on drive pulley
- Intermittent jamming or drive train problems

Damage to V-guide indicates:

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

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

Cleaning

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

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

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

Conveyor Belt Replacement

WARNING

Exposed moving parts can cause severe injury.

LOCK OUT POWER before removing guards or performing maintenance.

Conveyor Belt Replacement Sequence (see Table of Contents for page number)

- Remove old conveyor belt
  - Conveyor without Gearmotor Mounting Package or Stands
  - Conveyor with Stands and/or Gearmotor Mounting Package
- Center Drive Module Removal
- Conveyor Belt Removal from Center Drive Module
- Install New Conveyor Belt
- Tension Conveyor Belt

Belt Removal for Conveyor Without Gearmotor Mounting Package or Stands

1. Remove and retain bottom wiper (X of Figure 16).

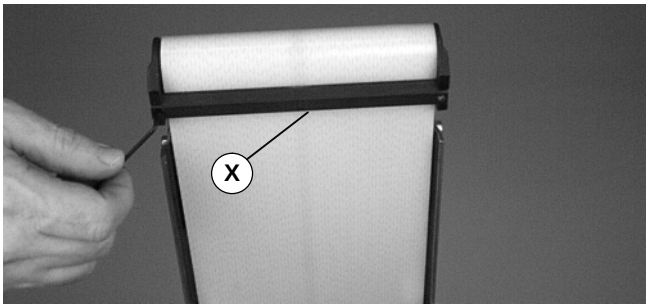


Figure 16

2. If the conveyor is equipped with guiding and accessories, remove them from one side.
3. Loosen screw (Y of Figures 17 & 18) on each side of center drive module (Z).

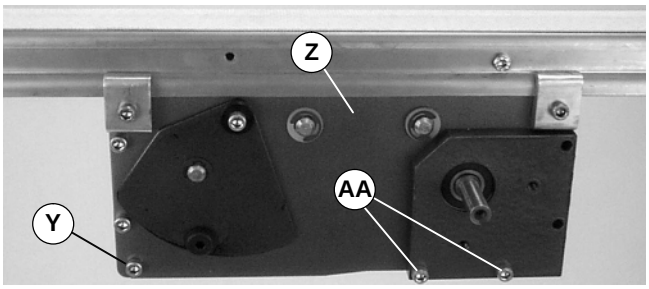


Figure 17

4. Remove screws (AA of Figures 17 & 18) on each side of center drive module (Z).
5. Using finger grip holes (AB of Figure 18), open tension door (AC) to release conveyor belt tension.

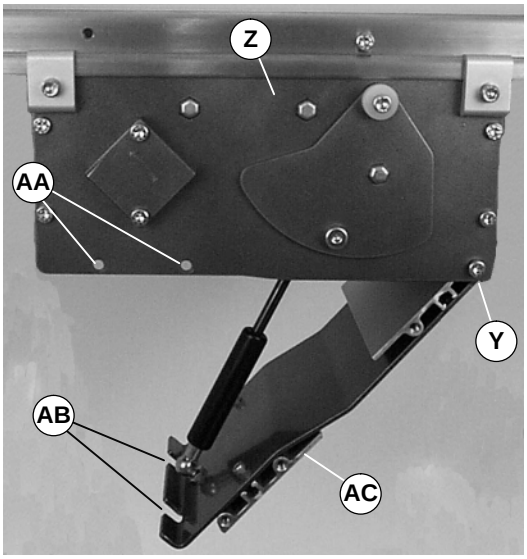


Figure 18

6. On tension end of the conveyor identified with  label (R of Figures 19 & 20), loosen screw (S of Figure 19). Rotate pinion gear (T of Figure 20) clockwise until headplate shoulder contacts conveyor frame.

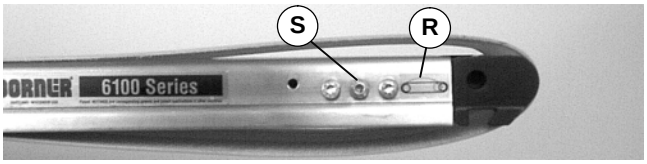


Figure 19

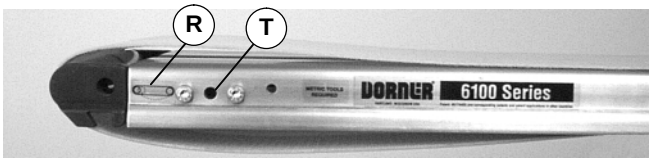


Figure 20

NOTE: On 4-foot (1219 mm) and shorter by 8¨ (203 mm) and wider conveyors, it will be necessary to remove the center drive module at the same time the conveyor belt is removed. See "Center Drive Module Removal" on page 10.

7. Remove conveyor belt.
8. Proceed to "Center Drive Module Removal" on page 10.

Belt Removal for Conveyor With Stands and/or Gearmotor Mounting Package

1. Remove and retain bottom wiper (X of Figure 16).
2. If conveyor is equipped with guiding and accessories, remove them from one side.

NOTE: Figures 21 & 22 show a vertical mount in the A1 position with a parallel shaft gearmotor. Horizontal mount, D1 position and/or 90° gearmotor are similar.

3. Remove four (4) screws (AD of Figure 21) and remove cover (AE).

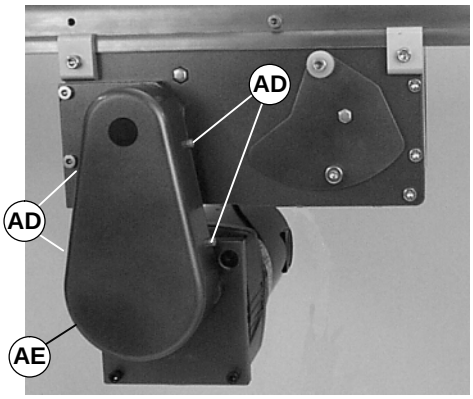


Figure 21

4. Loosen tensioner (AF of Figure 22).

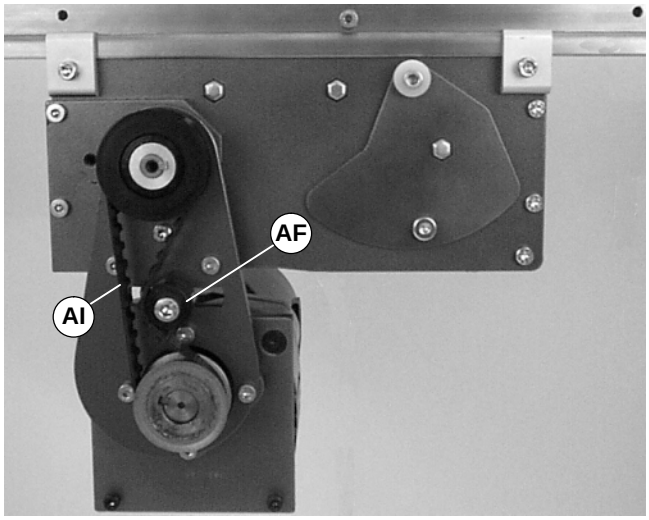


Figure 22

NOTE: If timing belt does not slide over pulley flange, loosen driven pulley set screws (AG of Figure 23) and remove pulley (AH) with belt (AI).

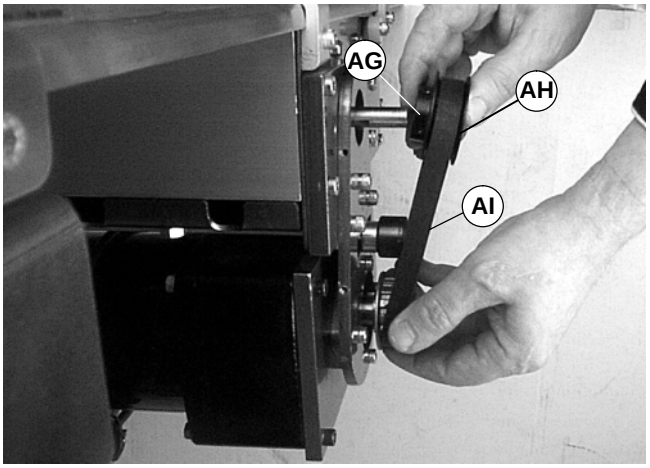


Figure 23

5. Remove timing belt (AI of Figure 22).
6. Remove three (3) screws (AJ of Figure 24) and remove gearmotor mounting package.

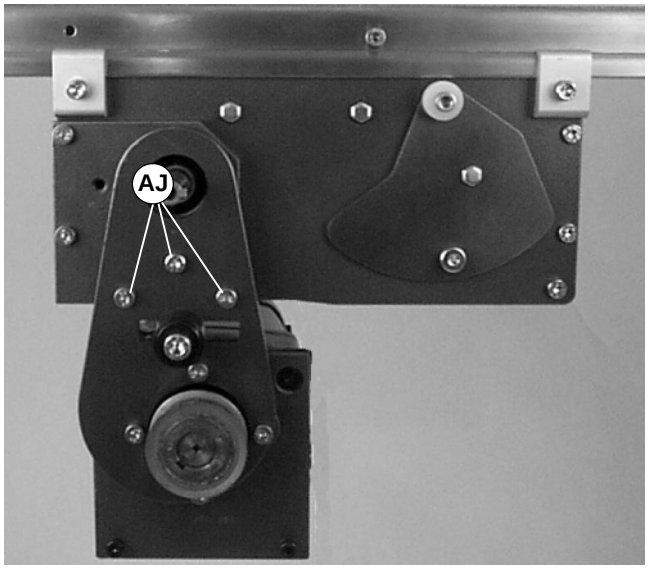


Figure 24

7. Loosen screw (Y of Figures 17 & 18) on each side of center drive module (Z).

NOTE: With a vertical mount, two (2) screws (AJ of Figure 24) were removed in step 6.

8. Remove screws (AA of Figures 17 & 18) on each side of center drive module (Z).
9. Using finger grip holes (AB of Figure 18), open tension door (AC) to release conveyor belt tension.

10. On tension end of the conveyor identified with label (R of Figures 19 & 20), loosen screw (S of Figure 19). Rotate pinion gear (T of Figure 20) clockwise until headplate shoulder contacts conveyor frame.

WARNING

To prevent injury from the support stand tipping-over when conveyor is uncoupled, anchor stand to floor or otherwise stabilize the stand.

NOTE: On 4-foot (1219 mm) and shorter by 8¨ (203 mm) and wider conveyors, it will be necessary to remove the center drive module at the same time the conveyor belt is removed. See "Center Drive Module Removal".

NOTE: To remove belt, complete steps 11 & 12, at each stand location.

11. Loosen the mounting clamp plates (V of Figure 25), on both sides of the conveyor. Raise the conveyor and remove the belt.

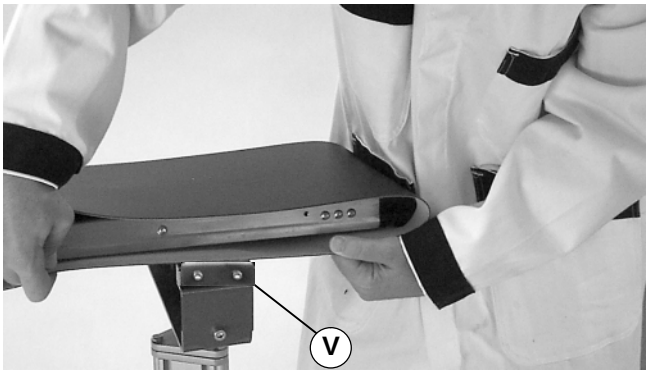


Figure 25

12. With belt removed, secure conveyor with clamp plates (V).

13. Proceed to "Center Drive Module Removal".

Center Drive Module Removal

WARNING

Before loosening clamps (AK of Figure 26), provide a support (AL) under center drive module.

NOTE: If desired, mark center drive module location on conveyor.

1. Loosen clamp screw (AK of Figure 26) in each corner of module.

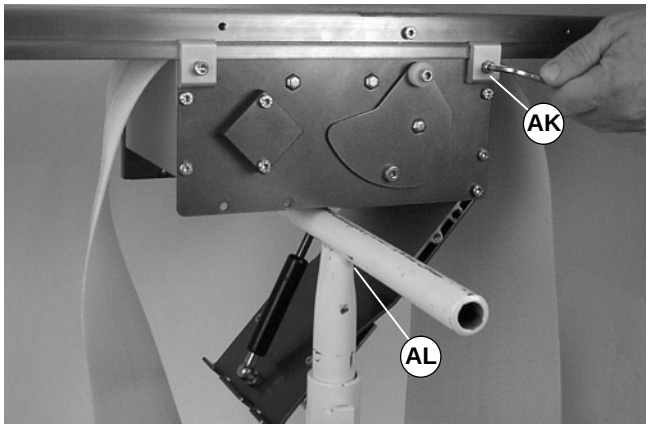


Figure 26

2. Remove module.

Belt Removal from Center Drive Module

1. Remove two (2) screws (AM of Figure 27). Remove tension drive plate (AN).

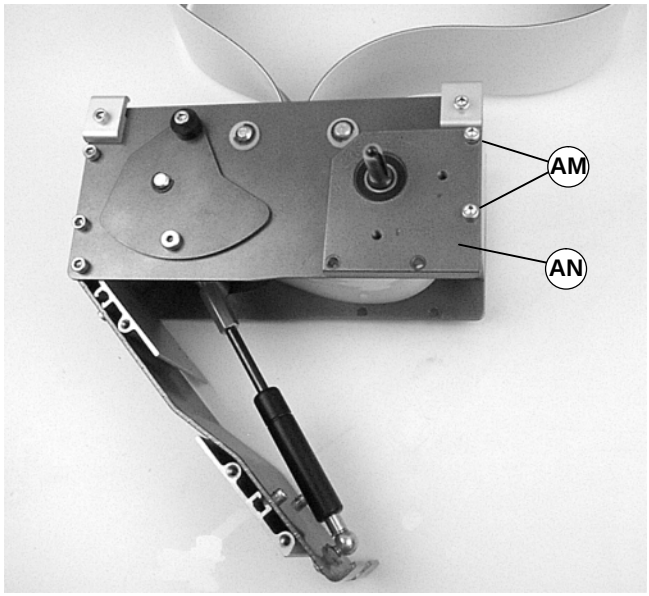


Figure 27

2. Remove drive pulley [AO of Figure 28, 2¨ (44 mm), 3¨ (70 mm) or 4¨ (95 mm) wide conveyor] or [AO of Figure 29, 5¨ (127 mm) or wider conveyor].

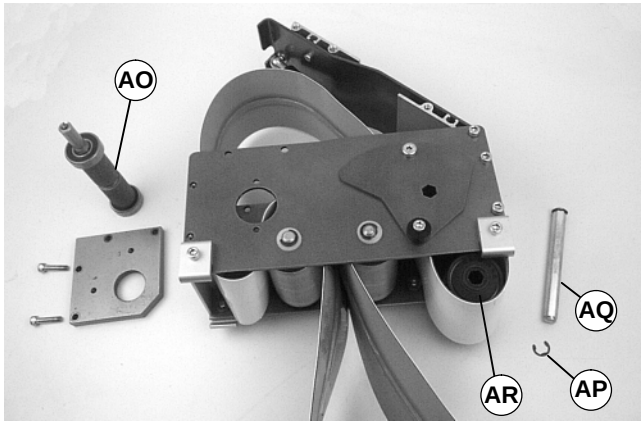


Figure 28

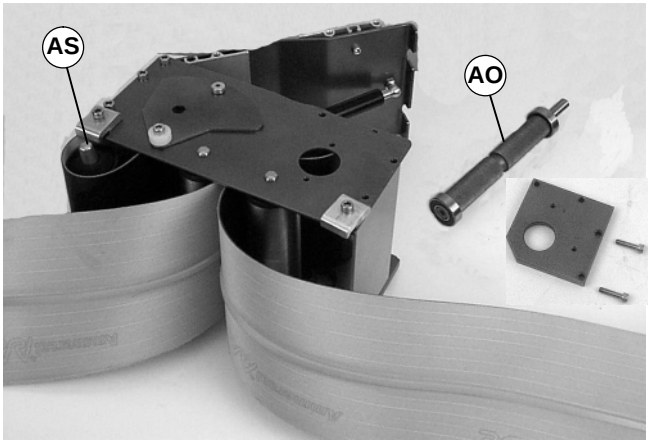


Figure 29

3. Remove grooved idler pulley:

- For 2¨ (44 mm), 3¨ (70 mm) or 4¨ (95 mm) wide conveyor, detach E-ring clip (AP of Figure 28). Remove pulley shaft (AQ) and remove pulley (AR).
- For 5¨ (127 mm) or wider conveyor, depress both sides of spring-loaded shaft and remove pulley (AS of Figure 29).

4. Remove conveyor belt.

Installing a New Conveyor Belt

IMPORTANT: On a center drive conveyor, belt travel direction is identified by an arrow decal on the side of the conveyor (AT of Figures 30 & 31).

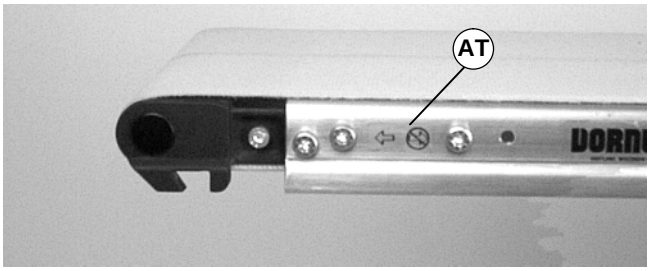


Figure 30

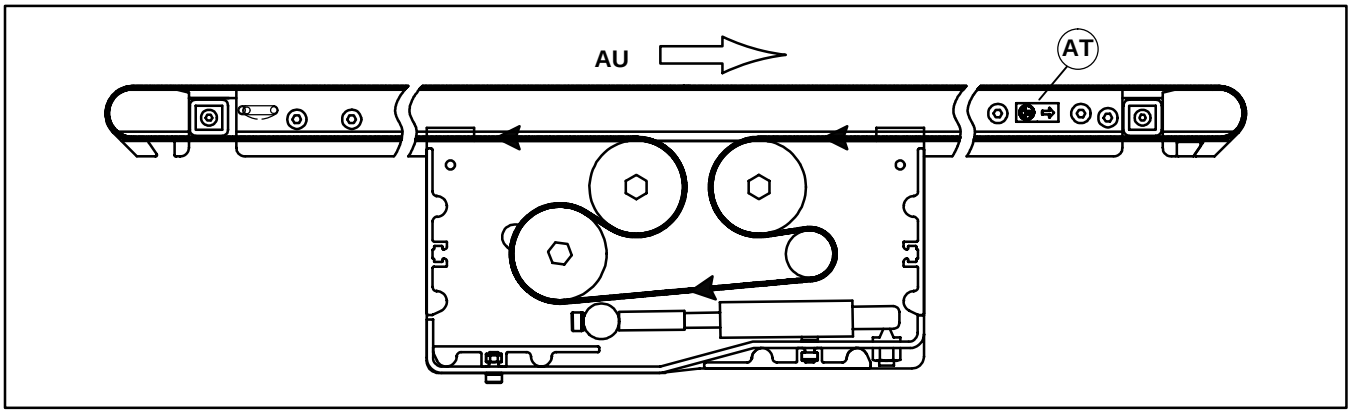


Figure 31

1. Orient the conveyor belt so that the splice leading fingers (AV of Figure 32) point in the direction of belt travel (AU) as identified by the label (AT of Figure 30).

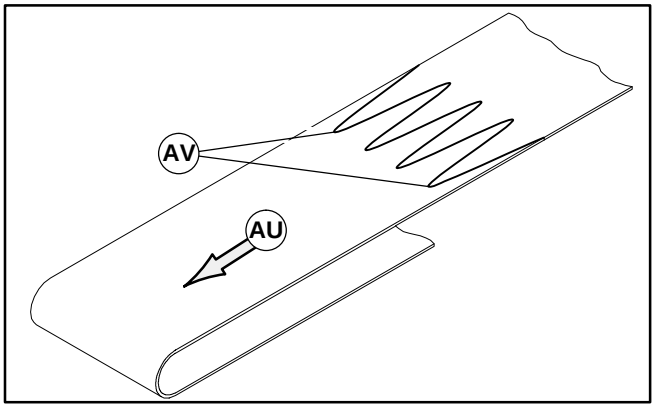


Figure 32

2. Place loop of belt into module (Figure 33).

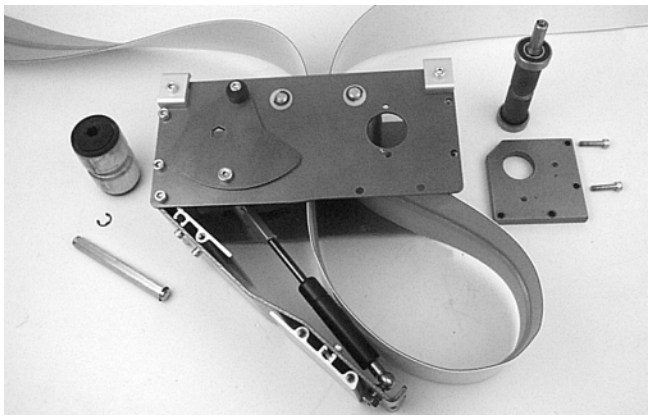


Figure 33

3. Place grooved idler pulley (AR of Figure 28 or AS of Figure 29) into belt loop and replace in center drive module. Refer to "Belt Removal from Center Drive Module" section and reverse step 3 on page 11.

4. Place drive pulley (AO of Figure 28 or 29) into belt loop and replace in center drive module. Refer to "Belt Removal from Center Drive Module" section and reverse steps 1 and 2 on page 10. Tighten screws (AM of Figure 27) to 80 in-lb (9 Nm).

NOTE: On 4-foot (1219 mm) and shorter by 8¨ (203 mm) and wider conveyors, it will be necessary to replace the center drive module at the same time the conveyor belt is replaced.

5. Replace center drive module onto conveyor and attach clamp (AK of Figure 26) in each corner. Tighten screws to 80 in-lb (9 Nm).

NOTE: On conveyor with stands, complete steps 6, 7 & 8 at each stand location.

6. Loosen the mounting clamp plates (V of Figures 25), on both sides of the conveyor. Raise the conveyor and replace the belt.

7. Lower the conveyor onto the mounting blocks being careful not to pinch belt.

8. Tighten clamp plate screws to 80 in-lb (9 Nm).

9. On tension end of the conveyor identified with  label (R of Figures 19 & 20), rotate pinion gear (T of Figure 20) counter-clockwise to a distance of 1¨ (25 mm) (U of Figure 34).

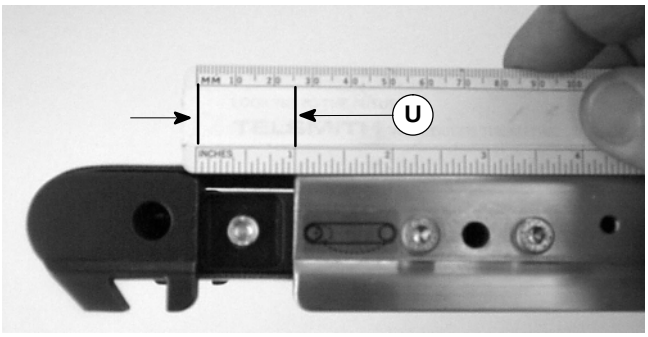
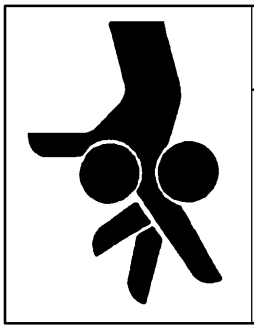


Figure 34

10. Tighten lock screw (S of Figure 19) to 40 in-lb (4.5 Nm).



WARNING

Tension door closes quickly, may cause injury.

KEEP FINGERS CLEAR OF TENSION DOOR.

11. Close tension door (AC of Figure 35).

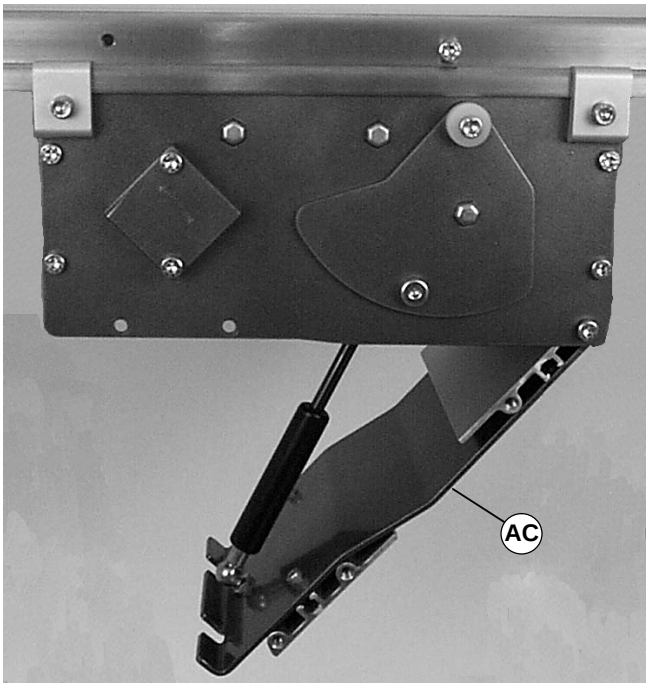


Figure 35

12. Tighten screw (Y of Figures 36) on each side to 80 in-lb (9 Nm).

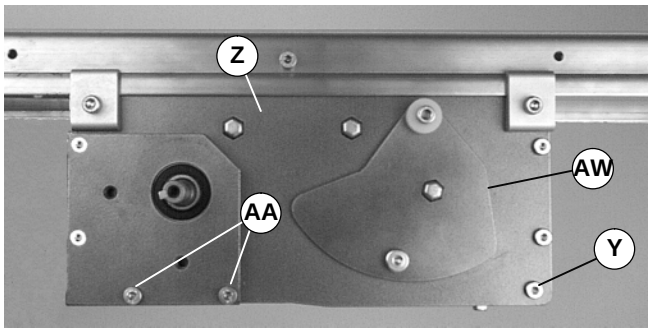


Figure 36

NOTE: If equipped with gearmotor mounting package, replace by completing in reverse order steps 3 through 6 of "Belt Removal for Conveyor With Stands and/or Gearmotor Mounting Package" section on page 9.

13. Replace screws (AA of Figure 36) on each side of center drive module (Z). Tighten screws to 80 in-lb (9 Nm).

14. Install bottom wiper (X of Figure 16). Center set screws in frame and tighten to 33 in-lb (3.7 Nm).

15. Where applicable, replace guiding.

Conveyor Belt Tensioning

NOTE: For a new belt, the tension plate will be in position (AW of Figure 36). When tension plate extends to position (AX of Figure 37), the conveyor belt must be replaced.

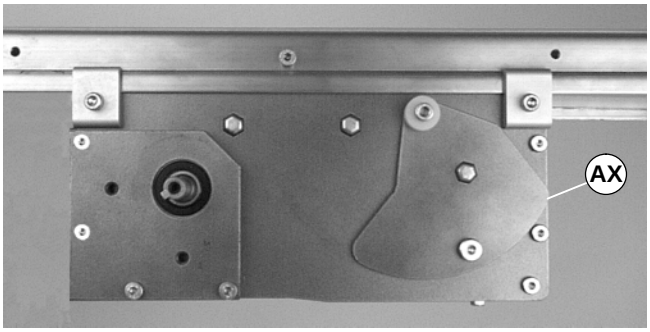


Figure 37

Conveyor is equipped with automatic tensioning cylinder. No tensioning adjustment is required.

Pulley Removal

WARNING

Exposed moving parts can cause severe injury.

LOCK OUT POWER before removing guards or performing maintenance.

Remove conveyor belt to access pulley(s).

- Refer to "Belt Removal for Conveyor Without Gearmotor Mounting Package or Stands" section, steps 1 through 7 on page 8.
- Refer to "Belt Removal for Conveyor With Stands and/or Gearmotor Mounting Package" section, steps 1 through 12 on pages 9 to 10.

Remove the desired pulley following instructions:

- **A** – Tension End Pulley
- **B** – Fixed End Pulley
- **C** – Drive Pulley
- **D** – Idler Pulleys

A – Tension End Pulley Removal

1. Remove screw (S of Figure 38).

2. Remove four (4) tail plate mounting screws (AY of Figures 38 & 39).

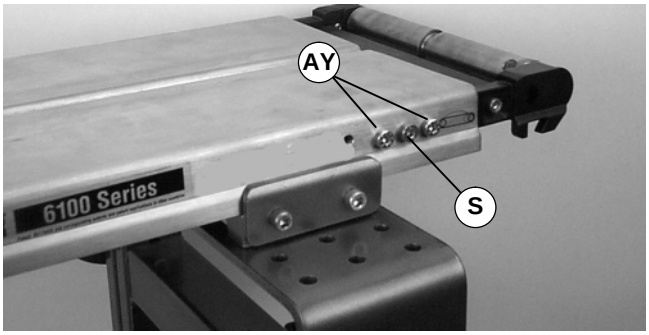


Figure 38

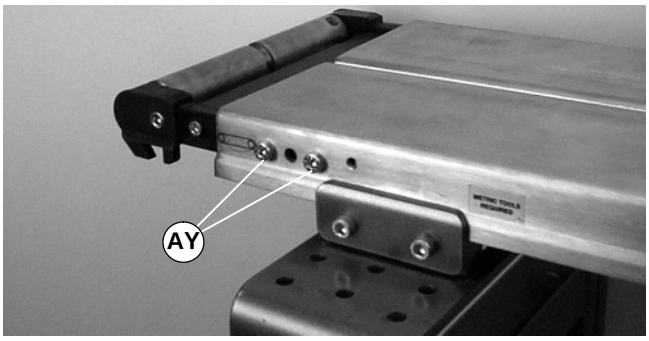


Figure 39

3. Remove tail assembly (AZ of Figure 40).

Figure 40

4. Locate magnet (BA of Figure 41). Remove screw (BB).

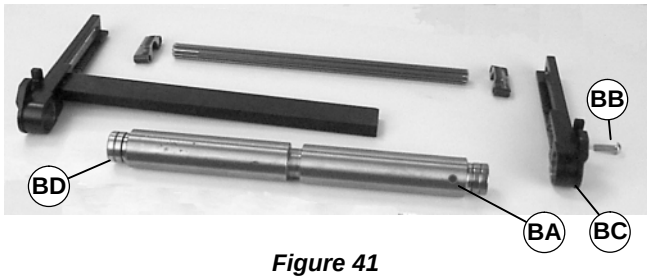


Figure 41

5. Remove headplate (BC).

6. Remove pulley (BD).

B – Fixed End Pulley Removal

1. Remove three (3) screws (BE of Figure 42) on both sides of conveyor.

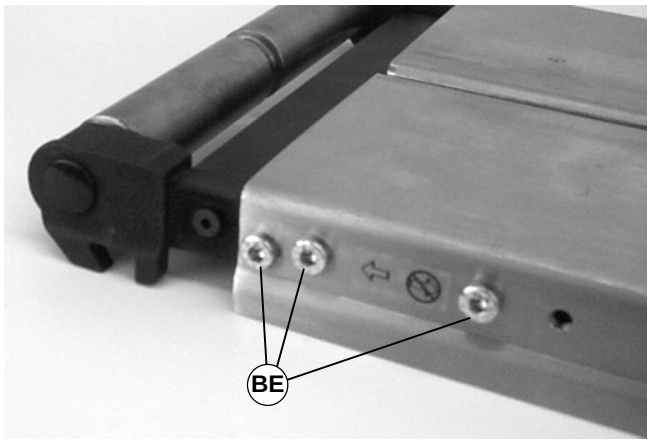


Figure 42

2. Remove fixed end tail assembly.

3. Remove screw (BB of Figure 43).

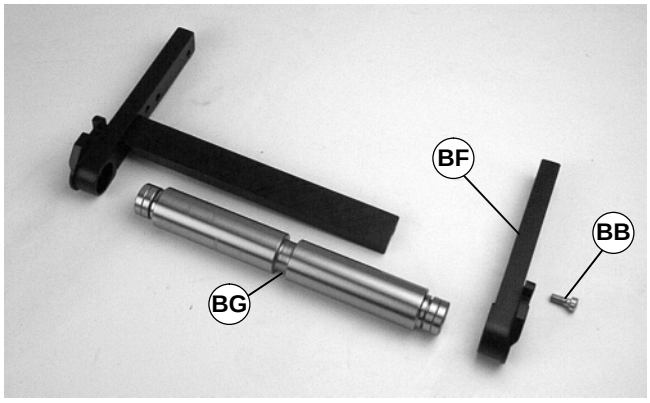


Figure 43

4. Remove headplate (BF).

5. Remove pulley (BG).

C – Drive Pulley Removal

1. Remove gearmotor drive package. Refer to "Belt Removal for Conveyor With Stands and/or Gearmotor Mounting Package" section, steps 3 through 9 on page 9.
2. Remove drive pulley. Refer to "Belt Removal from Center Drive Module" section, steps 1 & 2 on page 10.

D – Idler Pulley Removal

1. Remove gearmotor drive package. Refer to "Belt Removal for Conveyor With Stands and/or Gearmotor Mounting Package" section, steps 3 through 9 on page 9.
2. Detach center drive module. Refer to "Center Drive Module Removal" section on page 10.
3. Remove grooved idler pulley. Refer to "Belt Removal from Center Drive Module" section, step 3 on page 11.
4. Remove smooth idler pulleys:

- For 2¨ (44 mm), 3¨ (70 mm) or 4¨ (95 mm) wide conveyor, detach E-ring clips (BH of Figure 44). Remove washers (BI). Remove pulley shafts (BJ) and pulleys (BK).

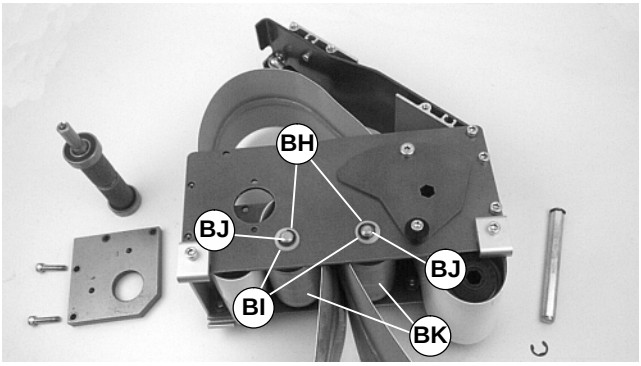


Figure 44

- For 5¨ (127 mm) or wider conveyor, depress both sides of each spring-loaded shaft (BL of Figure 45). Remove pulleys (BM).

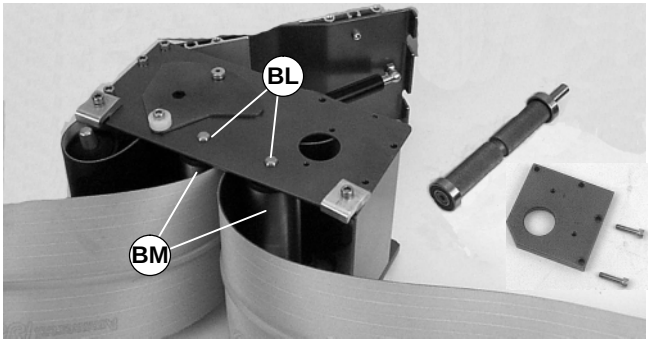


Figure 45

Bearing Replacement for Tension End and Fixed End Pulleys

IMPORTANT: Once removed, do not re-use bearings.

Bearing Removal

1. Place bearing removal tool (part # 450281) over bearing(s) with lip (BN of Figure 46) located in bearing gap (BO) as shown.

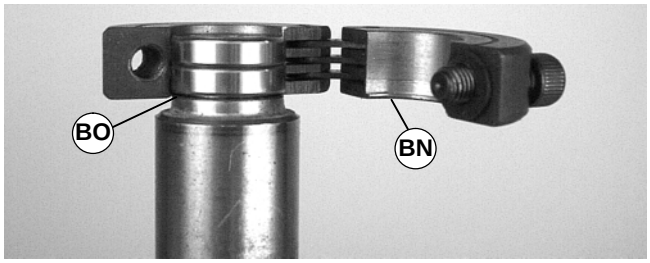


Figure 46

2. Using 3/16¨ hex key wrench (BP of Figure 47), tighten tool.

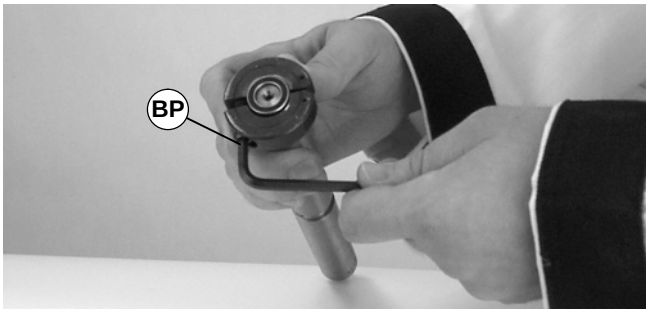


Figure 47

3. Using a puller (BQ of Figure 48), remove and discard bearing(s).

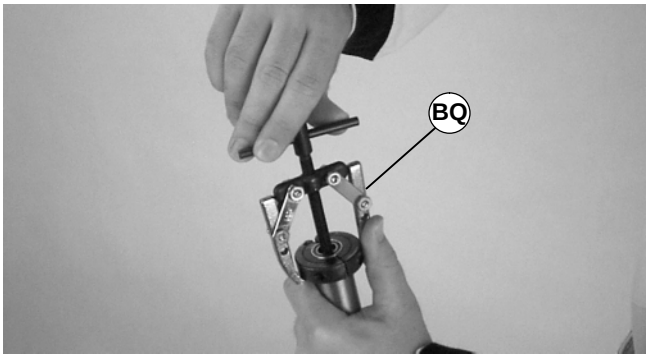


Figure 48

Bearing Installation

IMPORTANT: Install bearings one at a time.

1. Inspect seating surface(s) for damage. Replace if damaged.
2. Slide bearing (part # 802-121) (BR of Figure 49) onto pulley shaft.

Figure 49

3. Slide the sleeve of tool (part # 450282) (BS of Figure 50) over bearing.

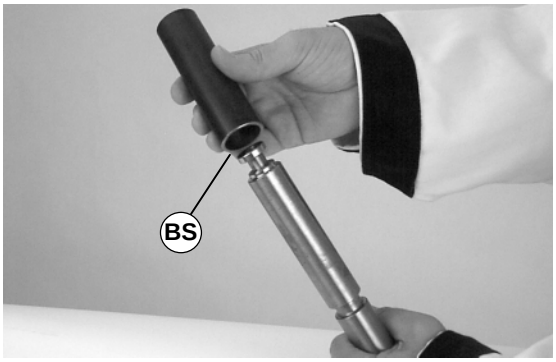


Figure 50

4. Place open end of shaft (BT of Figure 51) into sleeve.

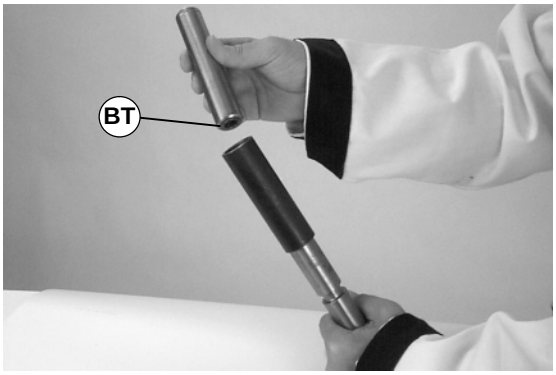


Figure 51

5. Using arbor press or similar device, press bearing onto pulley shaft (see Figure 52).

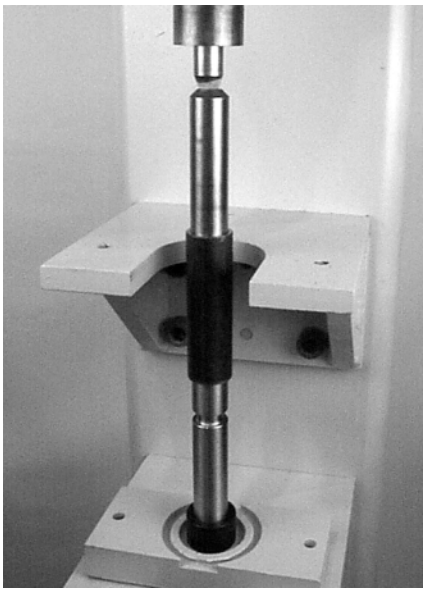


Figure 52

6. Repeat steps 1 through 5 for each bearing.

Bearing Replacement for Drive Pulley

IMPORTANT: Once removed, do not re-use bearings.

Bearing Removal

1. Locate drive pulley (AO of Figure 53) in a standard bearing separator (BU) as shown.

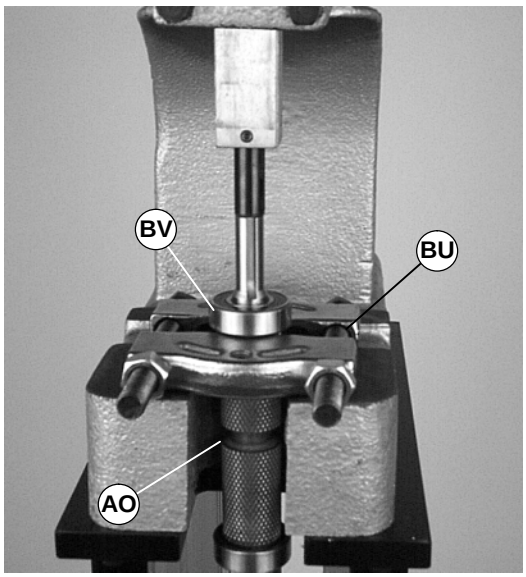


Figure 53

2. Using arbor press or similar device, press-off bearing (BV).

Bearing Installation

1. Inspect seating surface(s) for damage. Replace if damaged.
2. Place two (2) 5/8 flat washers, or equivalent (BW of Figure 54), over the pulley shaft (BX) and against bearing (BV) (part # 802-124).

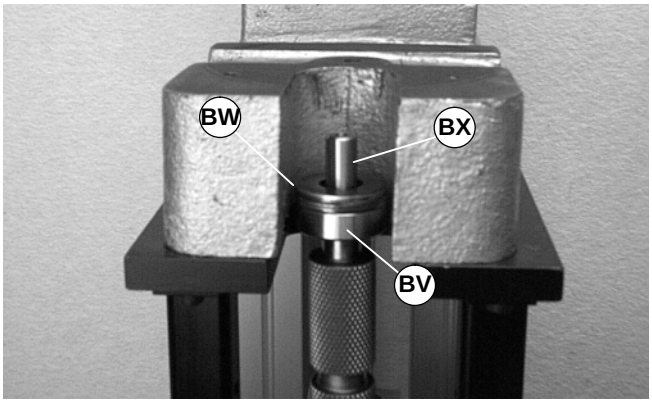


Figure 54

3. Place the shaft of tool (part # 450282) (BS of Figure 55) over pulley shaft (BX).

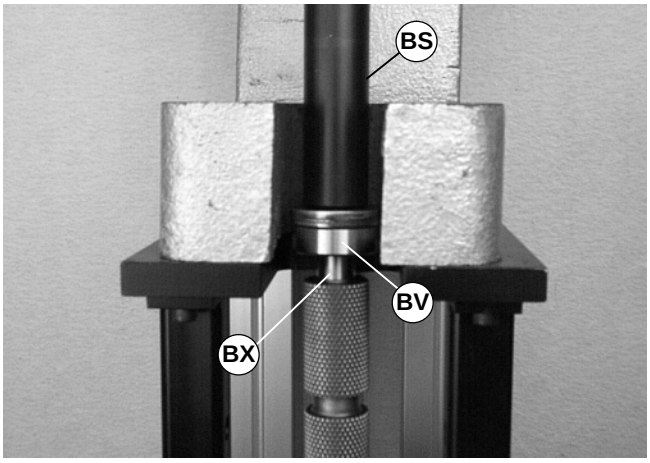


Figure 55

4. Using arbor press or similar device, press bearing onto pulley shaft as shown.

Bearing Replacement for Idler Pulleys

NOTE: Bearings can not be removed from idler pulleys. Replace entire pulley, when worn. See Service Parts section on page 18.

Pulley Replacement

Tension End Pulley

IMPORTANT: On a tension tail assembly, orient both pinion housings (BY of Figure 56) so they engage the same tooth positions on their respective racks.

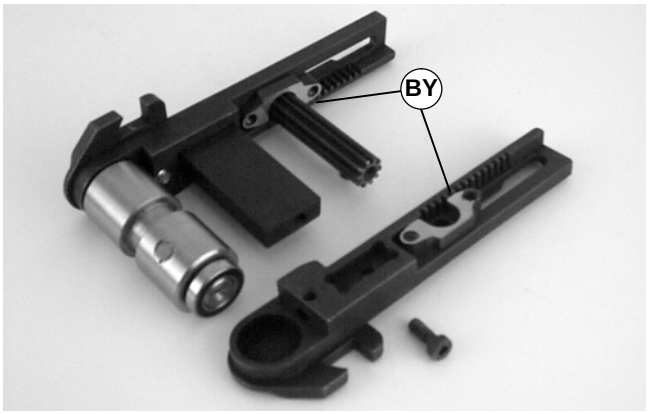


Figure 56

1. Reverse the removal procedure "A" (see page 14).

Fixed End Pulley

2. Reverse the removal procedure "B" (see page 14).

Drive Pulley

3. Reverse the removal procedure "C" (see page 15).

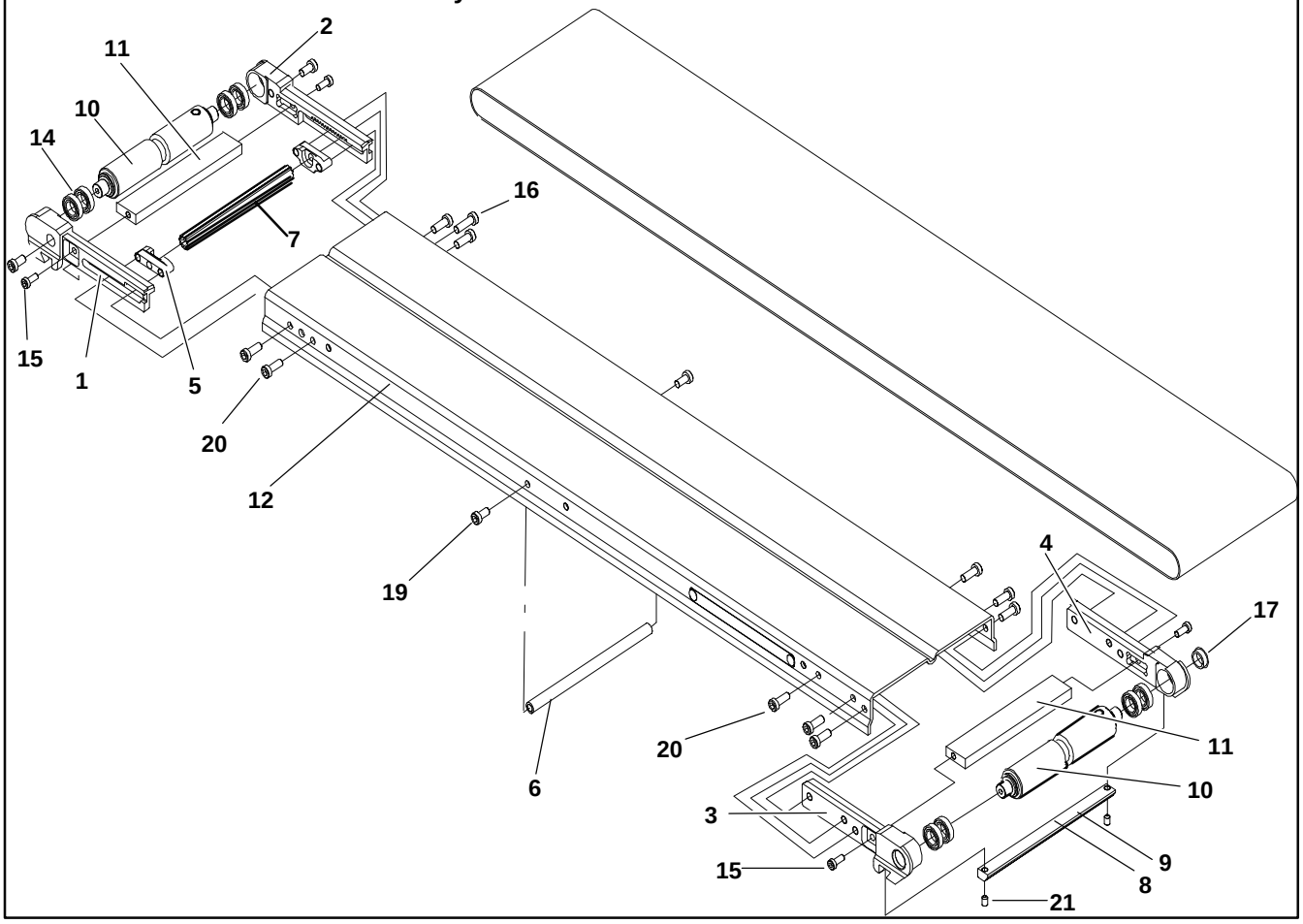
Idler Pulley

4. Reverse the removal procedure "D" (see page 15).

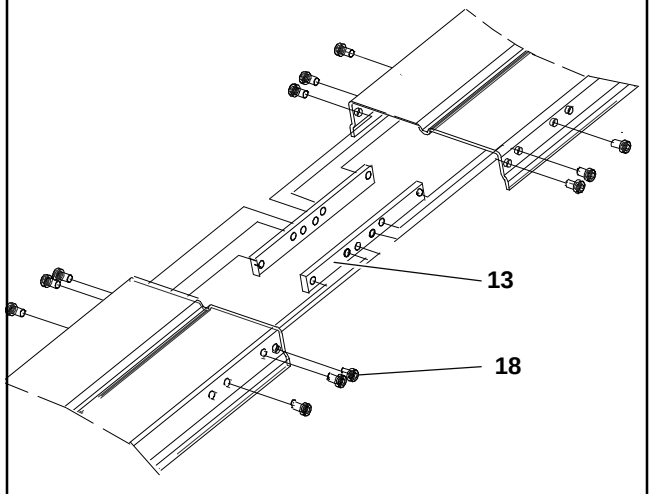
Service Parts

NOTE: For replacement parts other than those shown in this section, contact an authorized Dorner Service Center or the factory.

6100 Industrial Center Drive Conveyor



6100 Industrial Center Drive Conveyor Extension



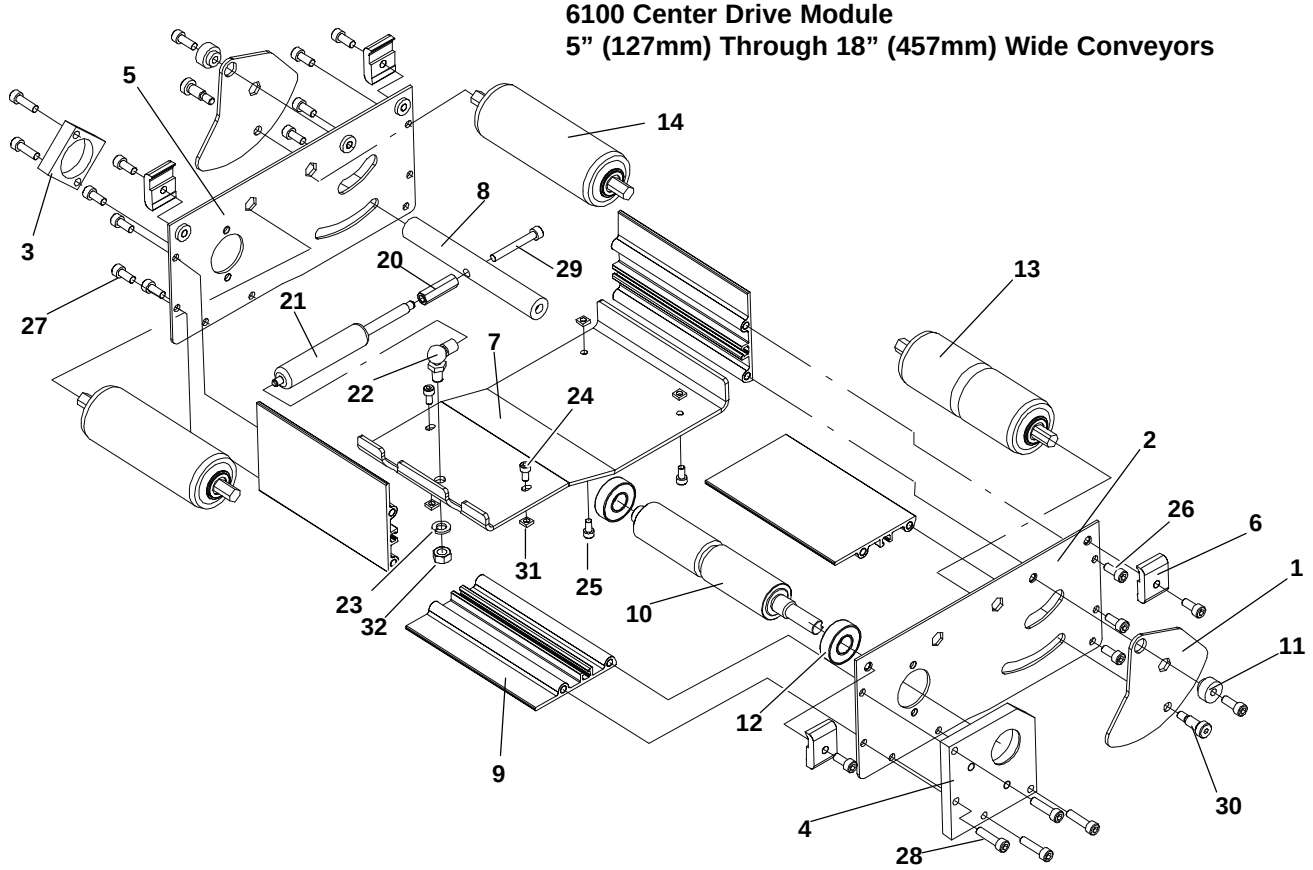
Item	Part Number	Description
1	450231M	Plate Tension RH 2–3” Wide
	450031M	Plate Tension RH 4–18” Wide
2	450232M	Plate Tension LH 2–3” Wide
	450032M	Plate Tension LH 4–18” Wide
3	450233M	Plate Fixed RH 2–3” Wide
	450355M	Plate Fixed RH 4–18” Wide
4	450234M	Plate Fixed LH 2–3” Wide
	450356M	Plate Fixed LH 4–18” Wide
5	450039M	Block Retainer Pinion
6	452502M	Post Support Frame 2” (51mm)
	452503M	Post Support Frame 3” (76mm)
	452504M	Post Support Frame 4” (102mm)
	452505M	Post Support Frame 5” (127mm)
	452506M	Post Support Frame 6” (152mm)
	452508M	Post Support Frame 8” (203mm)
	452510M	Post Support Frame 10” (254mm)

	452512M	Post Support Frame 12” (305mm)
	452518M	Post Support Frame 18” (457mm)
7	452602M	Pinion 2” (51mm)
	452603M	Pinion 3” (76mm)
	452604M	Pinion 4” (102mm)
	452605M	Pinion 5” (127mm)
	452606M	Pinion 6” (152mm)
	452608M	Pinion 8” (203mm)
	452610M	Pinion 10” (254mm)
	452612M	Pinion 12” (305mm)
	452618M	Pinion 18” (457mm)
8	452702M	Wiper Bottom 2” (51mm)
	452703M	Wiper Bottom 3” (76mm)
	452704M	Wiper Bottom 4” (102mm)
	452705M	Wiper Bottom 5” (127mm)
	452706M	Wiper Bottom 6” (152mm)
	452708M	Wiper Bottom 8” (203mm)
	452710M	Wiper Bottom10” (254mm)
	452712M	Wiper Bottom 12” (305mm)
	452718M	Wiper Bottom 18” (457mm)
9	452802M	Bar Bottom 2” (51mm)
	452803M	Bar Bottom 3” (76mm)
	452804M	Bar Bottom 4” (102mm)
	452805M	Bar Bottom 5” (127mm)
	452806M	Bar Bottom 6” (152mm)
	452808M	Bar Bottom 8” (203mm)
	452810M	Bar Bottom 10” (254mm)
	452812M	Bar Bottom 12” (305mm)
	452818M	Bar Bottom 18” (457mm)
10	453002	Spindle Assembly Idler 2” (51mm)
	453003	Spindle Assembly Idler 3” (76mm)
	453004	Spindle Assembly Idler 4” (102mm)
	453005	Spindle Assembly Idler 5” (127mm)
	453006	Spindle Assembly Idler 6” (152mm)
	453008	Spindle Assembly Idler 8” (203mm)
	453010	Spindle Assembly Idler 10” (254mm)
	453012	Spindle Assembly Idler 12” (305mm)
	453018	Spindle Assembly Idler 18” (457mm)
11	453602M	Support Tension Fixed 2” (51mm)
	453603M	Support Tension Fixed 3” (76mm)
	453604M	Support Tension Fixed 4” (102mm)
	453605M	Support Tension Fixed 5” (127mm)
	453606M	Support Tension Fixed 6” (152mm)
	453608M	Support Tension Fixed 8” (203mm)
	453610M	Support Tension Fixed 10” (254mm)
	453612M	Support Tension Fixed 12” (305mm)
	453618M	Support Tension Fixed 18” (457mm)
12	See chart below	6100 Frame Conveyor
13	450160M	Bar Connecting Frame
14	802–121	Ball Bearing 12mm (Bore) x 21mm (OD)
15	807–1022	Socket Screw (Metric) M5–.80x12mm
16	807–1031	Socket Screw (Metric) M6–1/0X20
17	807–963	Hole Plug 2” to 3” Wide
	807–1087	Hole Plug 4” To 18” Wide
18	920691M	Socket Screw (Metric) M6–1.0x10mm
19	920692M	Socket Head Cap Screw (Metric) Low M6–1.0x12mm
20	920693M	Socket Head Cap Screw (Metric) Low M6–1.0x16mm
21	970508M	Socket Head Set Screw (Metric) Cup M5– .80x8mm

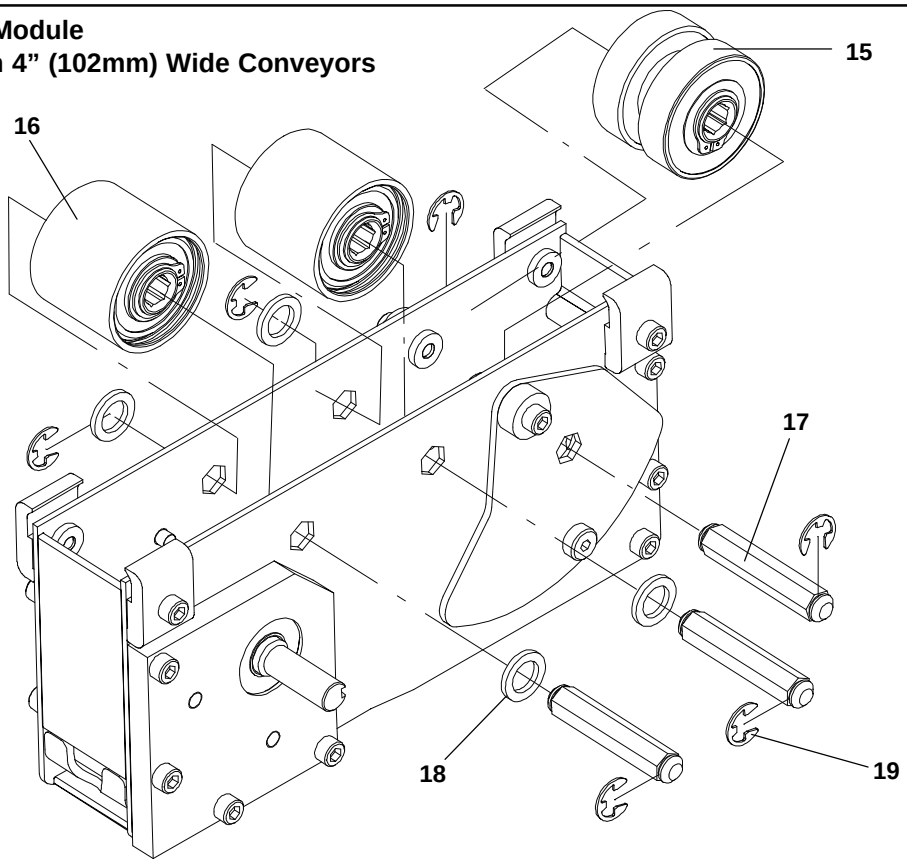
Item 12: 6100 Conveyor Frame	
Length	Part Number(s)
2’ (610mm)	47WW02M
3’ (914mm)	47WW03M
4’ (1219mm)	47WW04M
5’ (1524mm)	47WW05M
6’ (1829mm)	47WW06M
7’ (2134mm)	47WW07M
8’ (2438mm)	47WW08M
9’ (2743mm)	47WW09M
10’ (3048mm)	47WW10M
11’ (3353mm)	47WW11M
12’ (3658mm)	47WW12M
13’ (3962mm)	47WW07M 47WW13M
14’ (4267mm)	47WW08M 47WW13M
15’ (4572mm)	47WW09M 47WW13M
16’ (4877mm)	47WW09M 47WW13M
17’ (5182mm)	47WW09M 47WW13M
18’ (5486mm)	47WW09M 47WW13M
19’ (5791mm)	47WW09M 47WW13M
20’ (6096mm)	47WW09M 47WW13M
21’ (6401mm)	47WW09M 47WW13M
22’ (6706mm)	47WW09M 47WW13M
23’ (7010mm)	47WW09M 47WW13M
24’ (7315mm)	47WW09M 47WW13M
WW = frame width reference: 02, 03, 04, 05, 06, 08, 10, 12, 18	

Service Parts

6100 Center Drive Module
5” (127mm) Through 18” (457mm) Wide Conveyors



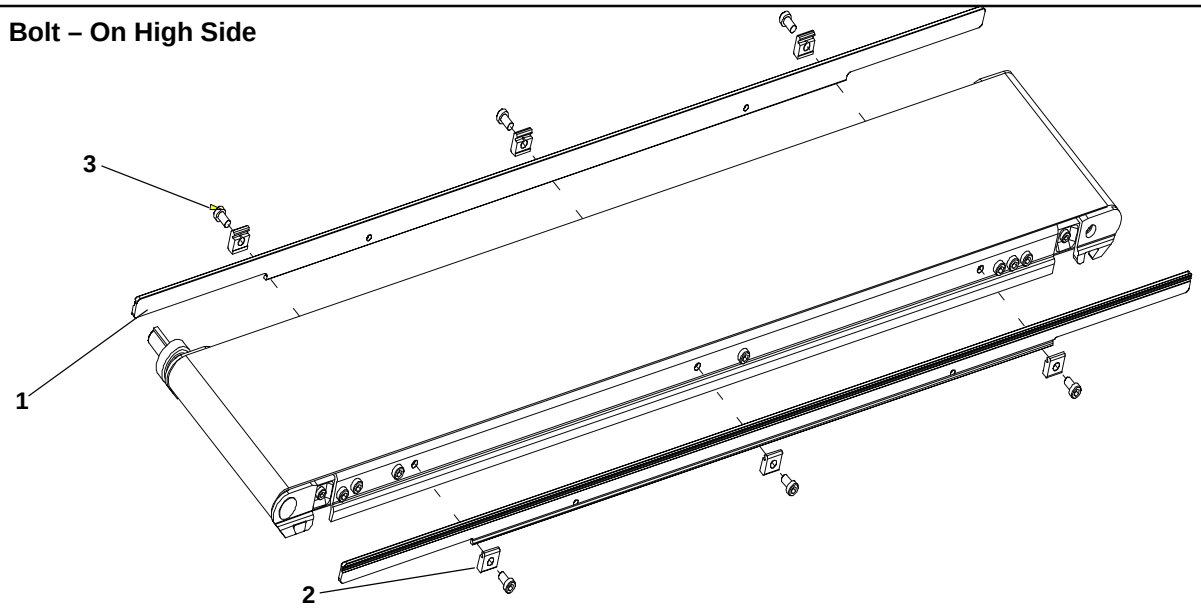
6100 Center Drive Module
2” (51mm) Through 4” (102mm) Wide Conveyors



Item	Part Number	Description
1	463026M	Tension Plate Pivot
2	463027M	Side Plate RH
3	463028M	Mounting Block Bearing
4	463029M	Mounting Plate Bearing–Drive
5	463030M	Side Plate LH
6	463031	Mounting Clip
7	463202M	Cover Bottom Center Drive 2” (51mm)
	463203M	Cover Bottom Center Drive 3” (76mm)
	463204M	Cover Bottom Center Drive 4” (102mm)
	463205M	Cover Bottom Center Drive 5” (127mm)
	463206M	Cover Bottom Center Drive 6” (152mm)
	463208M	Cover Bottom Center Drive 8” (203mm)
	463210M	Cover Bottom Center Drive 10” (254mm)
	463212M	Cover Bottom Center Drive 12” (305mm)
	463218M	Cover Bottom Center Drive 18” (457mm)
8	463302M	Rod Tensioning Center Drive 2” (51mm)
	463303M	Rod Tensioning Center Drive 3” (76mm)
	463304M	Rod Tensioning Center Drive 4” (102mm)
	463305M	Rod Tensioning Center Drive 5” (127mm)
	463306M	Rod Tensioning Center Drive 6” (152mm)
	463308M	Rod Tensioning Center Drive 8” (203mm)
	463310M	Rod Tensioning Center Drive 10” (254mm)
	463312M	Rod Tensioning Center Drive 12” (305mm)
	463318M	Rod Tensioning Center Drive 18” (457mm)
9	463502M	Rail Support Center Drive 2” (51mm)
	463503M	Rail Support Center Drive 3” (76mm)
	463504M	Rail Support Center Drive 4” (102mm)
	463505M	Rail Support Center Drive 5” (127mm)
	463506M	Rail Support Center Drive 6” (152mm)
	463508M	Rail Support Center Drive 8” (203mm)
	463510M	Rail Support Center Drive 10” (254mm)
	463512M	Rail Support Center Drive 12” (305mm)
	463518M	Rail Support Center Drive 18” (457mm)
10	463702M	Spindle Center Drive 2” (51mm)
	463703M	Spindle Center Drive 3” (76mm)
	463704M	Spindle Center Drive 4” (102mm)
	463705M	Spindle Center Drive 5” (127mm)
	463706M	Spindle Center Drive 6” (152mm)
	463708M	Spindle Center Drive 8” (203mm)
	463710M	Spindle Center Drive 10” (254mm)
	463712M	Spindle Center Drive 12” (305mm)
	463718M	Spindle Center Drive 18” (457mm)
11	801–117	Bushing Nylon FL .24(ID) .50(OD) .50
12	802–124	Ball Bearing 15mm x 35mm x 11 Seal
13	807–1001	Roller 1.9” .44 Hex C–GRV 4” (102mm) (Note: Requires Shaft, see Item 17)
	807–1002	Roller 1.9” .44 Hex C–GRV 5” (127mm)
	807–1003	Roller 1.9” .44 Hex C–GRV 6” (152mm)
	807–1004	Roller 1.9” .44 Hex C–GRV 8” (203mm)
	807–1005	Roller 1.9” .44 Hex C–GRV 10” (254mm)
	807–1006	Roller 1.9” .44 Hex C–GRV 12” (305mm)
	807–1091	Roller 1.9” .44 Hex C–GRV 18” (457mm)
14	807–1007	Roller 1.9” .44 Hex SS Flat 3” (76mm) (Note: Requires Shaft, see Item 17)
	807–1008	Roller 1.9” .44 Hex SS Flat 4” (102mm) (Note: Requires shaft, see item 17)
	807–1009	Roller 1.9” .44 Hex SS Flat 5” (127mm)
	807–1010	Roller 1.9” .44 Hex SS Flat 6” (152mm)
	807–1011	Roller 1.9” .44 Hex SS Flat 8” (203mm)
	807–1012	Roller 1.9” .44 Hex SS Flat 10” (254mm)
	807–1013	Roller 1.9” .44 Hex SS Flat 12” (305mm)
	807–1088	Roller 1.9” .44 Hex SS Flat 18” (457mm)
15	463037	Pulley Assembly Grooved 2” (51mm)
	463038	Pulley Assembly Grooved 3” (76mm)
16	463040	Pulley Assembly Flat 2” (51mm)
17	463402	Shaft Hex 2” (51mm)
	463403	Shaft Hex 3” (76mm)
	463404	Shaft Hex 4” (102mm)
18	801–115	Washer Nylon
19	915–215	Retaining Ring .44”
20	807–983	Standoff Hex 13mm x 35mm (lg)
21	807–1040	Gas Spring 2” Wide (51mm)
	807–986	Gas Spring 3” W (76mm)
	807–985	Gas Spring 4” – 6” W (102mm–152mm)
	807–984	Gas Spring 8” – 18” W (203mm–457mm)
22	807–987	Ball Joint Steel M6–1.0 x m8–1.2
23	911–120	Washer Lock Spring–SS 5/16”
24	920510M	Socket Head Cap Screw Metric M5– .80 x 10mm
25	920614M	Socket Head Cap Screw Metric M6–1.0 x 14mm
26	920616M	Socket Head Cap Screw Metric M6–1.0 x 16mm
27	920620M	Socket Head Cap Screw Metric M6–1.0 x 20mm
28	920625M	Socket Head Cap Screw Metric M6–1.0 x 25mm
29	920625M	Socket Head Cap Screw Metric M6–1.0 x 25mm
30	940812M	Socket Head Cap Screw Shld Metric 8mm (Dia) x 12mm
31	990503M	Nut Square Heavy M5–.80
32	990801M	Nut Hex Full M8–1.25

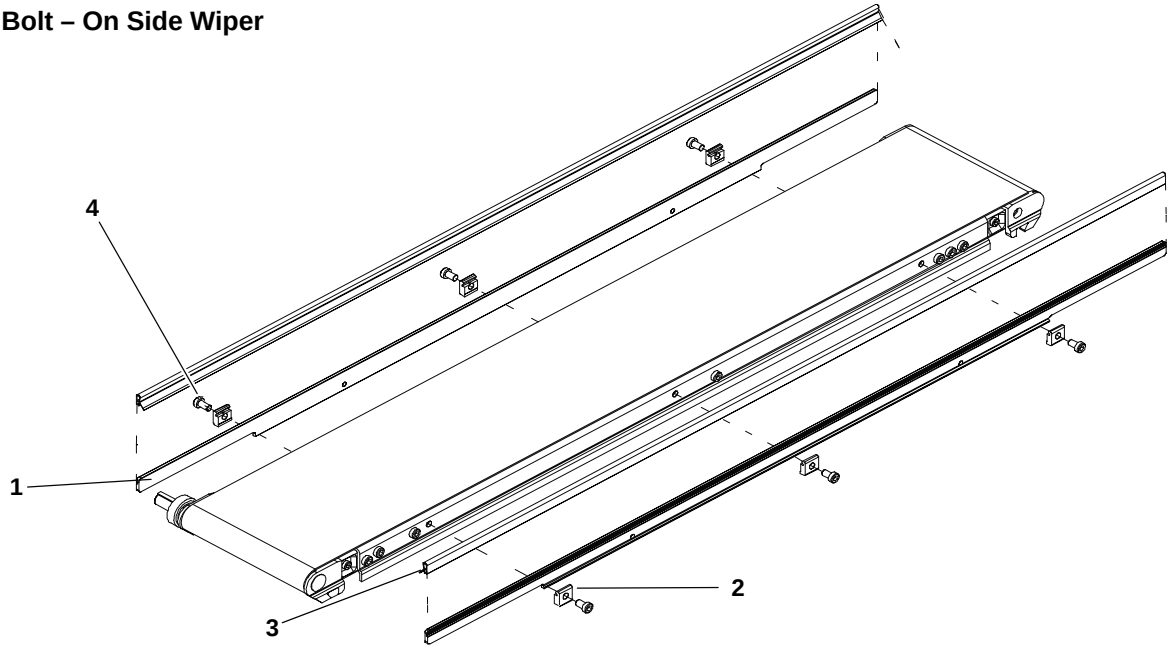
Service Parts

–02.5” Bolt – On High Side



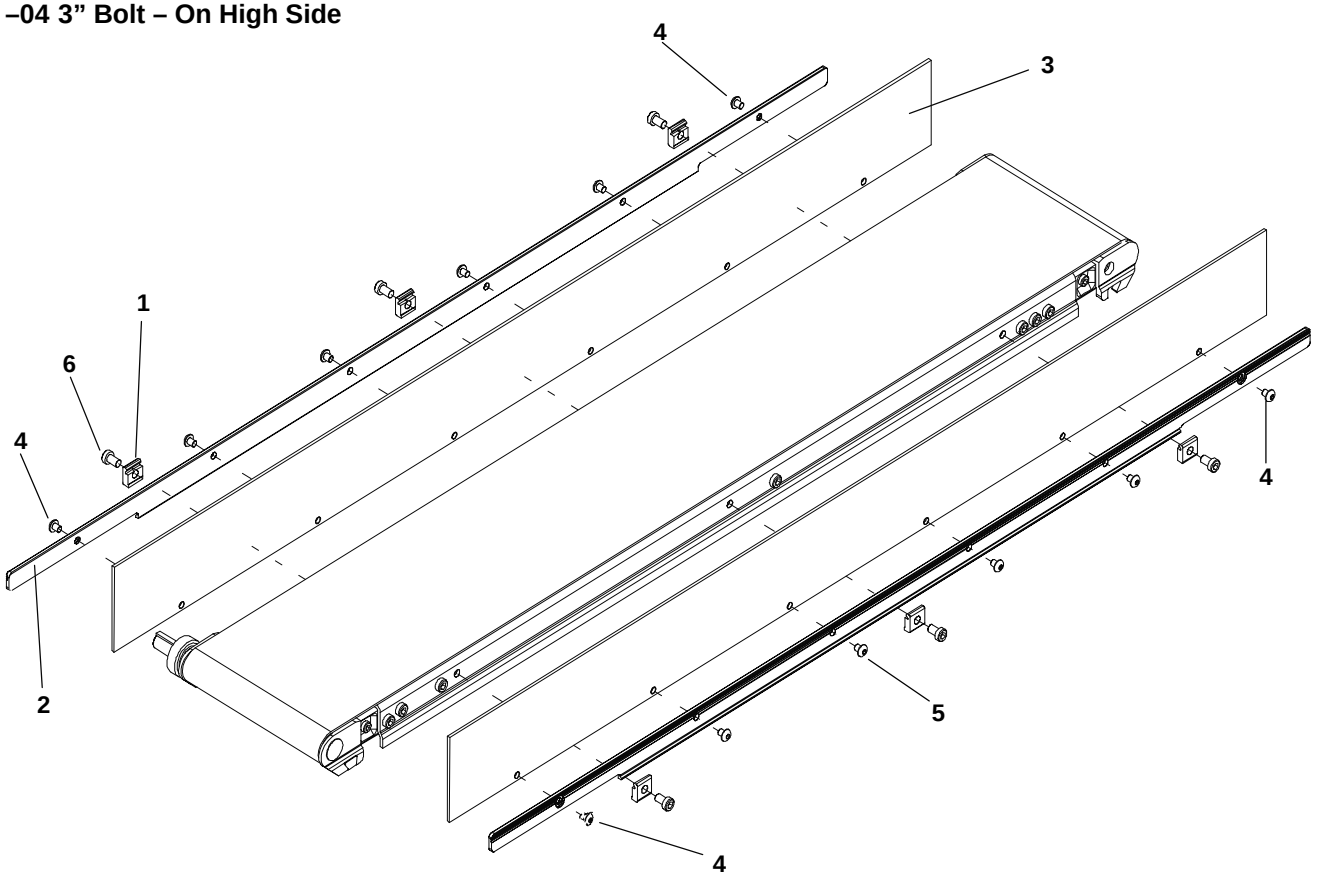
REF	P/N	Description
1	460232	Rail Guide .5” HS x 2’ (610mm)
	460233	Rail Guide .5” HS x 3’ (914mm)
	460234	Rail Guide .5” HS x 4’ (1219mm)
	460235	Rail Guide .5” HS x 5’ (1524mm)
	460236	Rail Guide .5” HS x 6’ (1829mm)
2	460250	Clip Mounting Guide
3	920691M	Socket Head Cap Screw (Metric) Low M6–1.00 x 10mm

–03Bolt – On Side Wiper



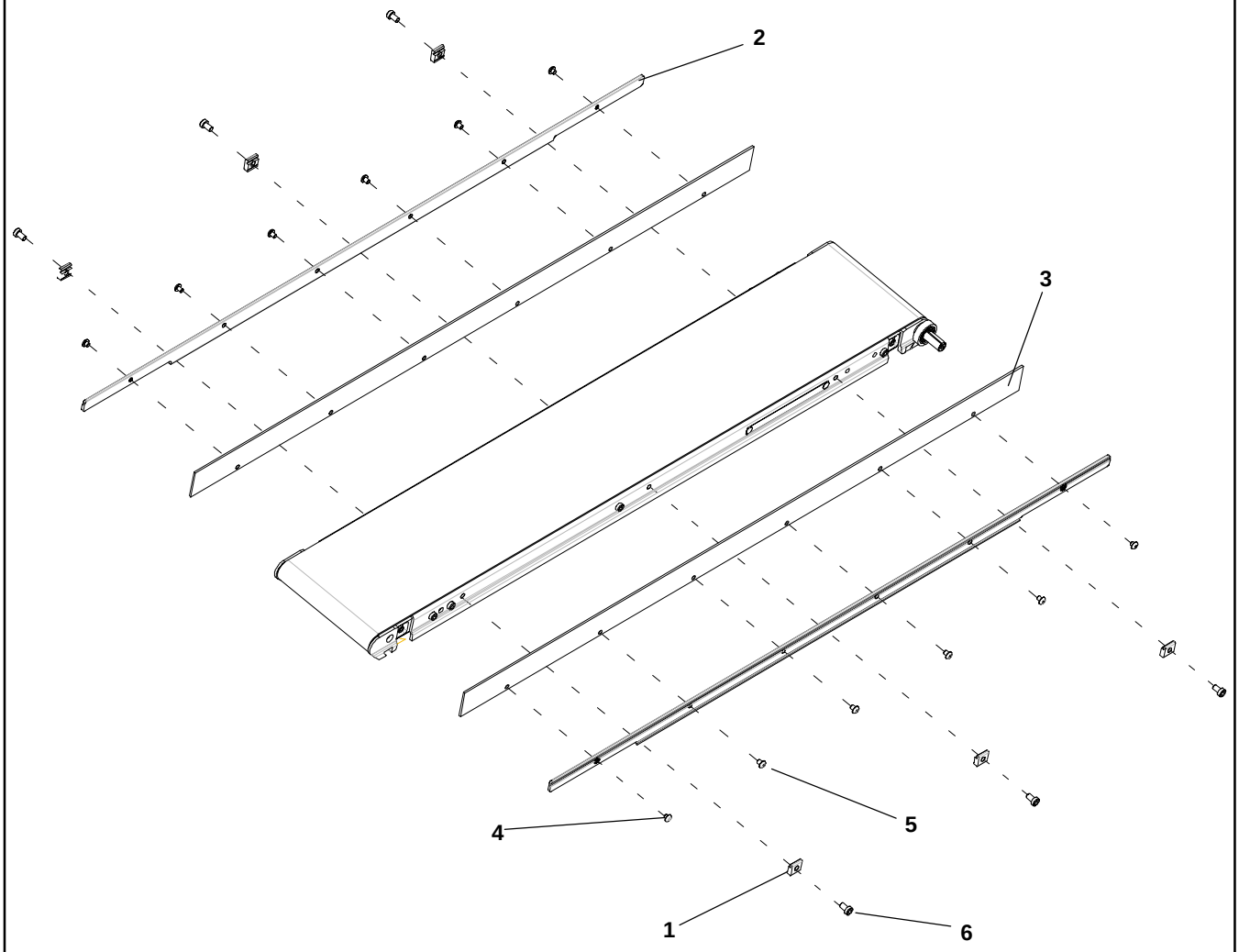
Item	Part Number	Description
1	460232	Rail Guide .5” HS x 2’ (610mm)
	460233	Rail Guide .5” HS x 3’ (914mm)
	460234	Rail Guide .5” HS x 4’ (1219mm)
	460235	Rail Guide .5” HS x 5’ (1524mm)
	460236	Rail Guide .5” HS x 6’ (1829mm)
2	460250	Clip Mounting Guide
3	41–00–24	Wiper Side Nylatron (per foot)
4	920691M	Socket Head Cap Screw (Metric) M6–1.0 x 10mm

–04 3” Bolt – On High Side



Item	Part Number	Description
1	460250	Clip Mounting Guide
2	460432	Rail guide .5” HS w/holes x 2’ (610mm)
	460433	Rail guide .5” HS w/holes x 3’ (914mm)
	460434	Rail guide .5” HS w/holes x 4’ (1219mm)
	460435	Rail guide .5” HS w/holes x 5’ (1524mm)
	460436	Rail guide .5” HS w/holes x 6’ (1829mm)
3	460452M	Guide Side #4 – 2’ (610mm)
	460453M	Guide Side #4 – 3’ (914mm)
	460454M	Guide Side #4 – 4’ (1219mm)
	460455M	Guide Side #4 – 5’ (1524mm)
	460456M	Guide Side #4 – 6’ (1829mm)
4	910504M	Socket Head Cap Screw Button (Metric) M5 – .80 x 4mm
5	910506M	Socket Head Cap Screw Button (Metric) M5–.80 x 6mm
6	920691M	Socket Head Cap Screw (Metric) M6–1.0 x 10MM

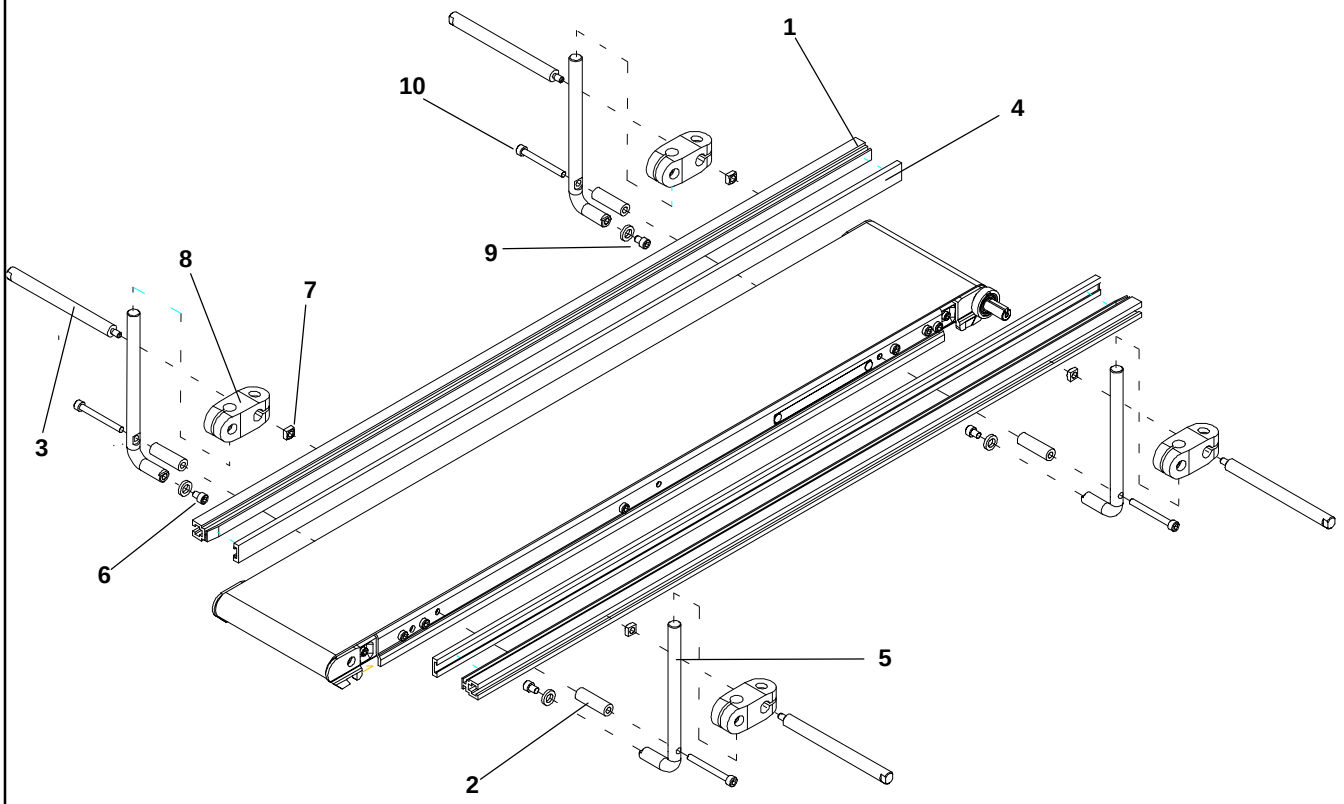
–05 1.5” Bolt – On High Side



Item	Part Number	Description
1	460250	Guide Mounting Clip
2	460432	Rail guide .5” HS w/holes x 2’ (610mm)
	460433	Rail guide .5” HS w/holes x 3’ (914mm)
	460434	Rail guide .5” HS w/holes x 4’ (1219mm)
	460435	Rail guide .5” HS w/holes x 5’ (1524mm)
	460436	Rail guide .5” HS w/holes x 6’ (1829mm)
3	460452M	Guide Side #4 – 2’ (610mm)
	460453M	Guide Side #4 – 3’ (914mm)
	460454M	Guide Side #4 – 4’ (1219mm)
	460455M	Guide Side #4 – 5’ (1524mm)
	460456M	Guide Side #4 – 6’ (1829mm)

4	910504M	Socket Head Cap Screw Button (Metric) M5–.80 x 4mm
5	910506M	Socket Head Cap Screw Button (Metric) M5–.80 x 6mm
6	920691M	Socket Head Cap Screw (Metric) Low M6–1.0 x 10mm

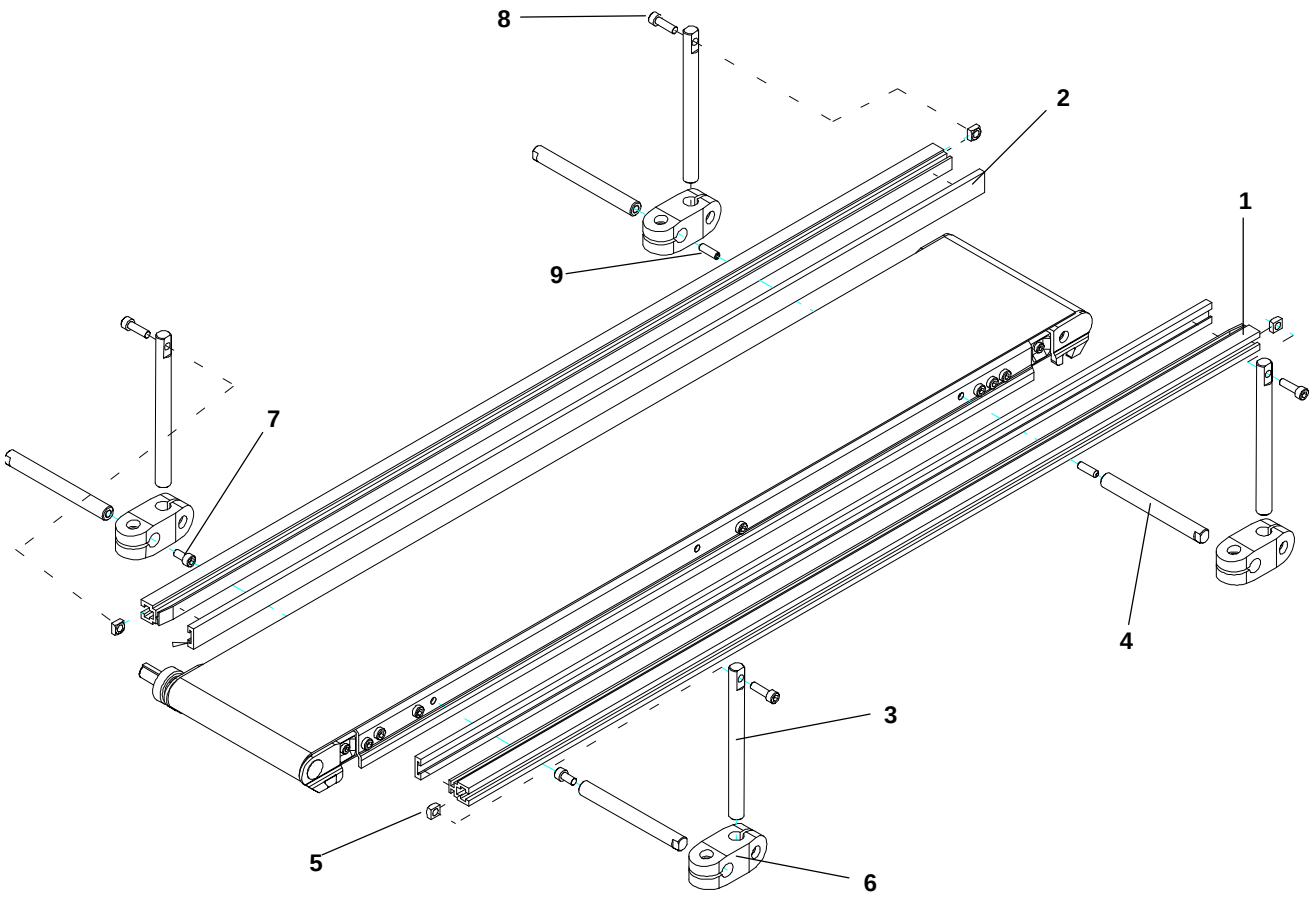
–13 Fully Adjustable UHMW Guide



Item	Part Number	Description
1	202983	Guide Mounting Rail 2’ (610mm)
	202984	Guide Mounting Rail 3’ (914mm)
	202985	Guide Mounting Rail 4’ (1219mm)
	202986	Guide Mounting Rail 5’ (1524mm)
	202987	Guide Mounting Rail 6’ (1829mm)
	202988	Guide Mounting Rail 7’ (2134mm)
	202989	Guide Mounting Rail 8’ (2438mm)
	202990	Guide Mounting Rail 9’ (2743mm)
	202991	Guide Mounting Rail 10’ (3053mm)
	202992	Guide Mounting Rail 11’ (3353mm)
	202993	Guide Mounting Rail 12’ (3658mm)
	202994	Guide Mounting Rail 13’ (3962mm)

2	461351	Shaft Brace
3	202028M	Horizontal Shaft Mounting Guide
4	614068	Guide Extruded Flat (per foot)
5	461350M	Shaft Vertical Adj Guide
6	605279M	Hard washer
7	674175MP	Square Nut M6–1.0 w/1/4–20
8	807–652	Cross Block
9	920608M	Socket Head Cap Screw (Metric) M6–1.0 x 8mm
10	920655M	Socket Head Cap Screw (Metric) M6–1.0 x 55mm

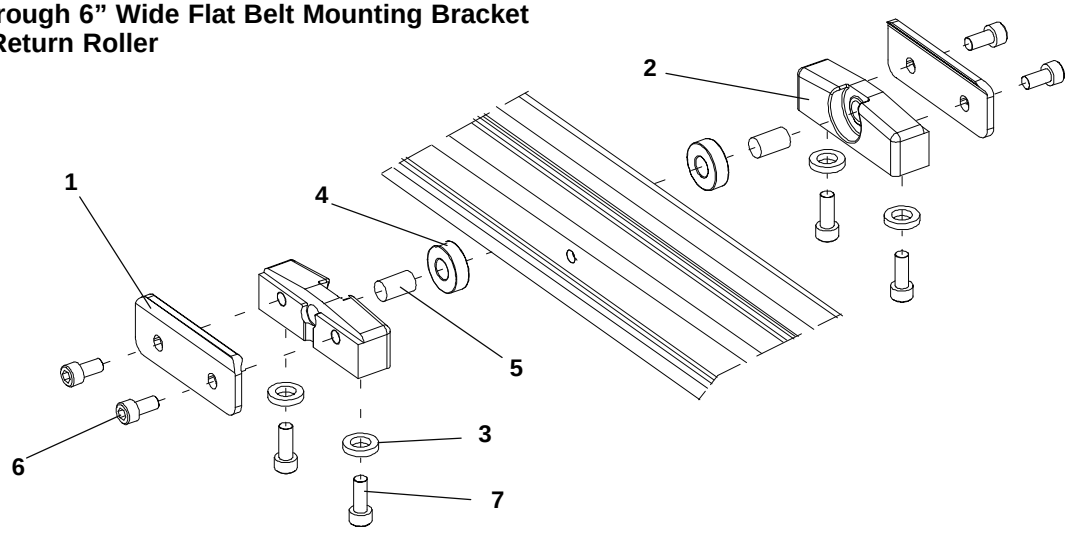
–20 Adjustable Width UHMW Guide



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

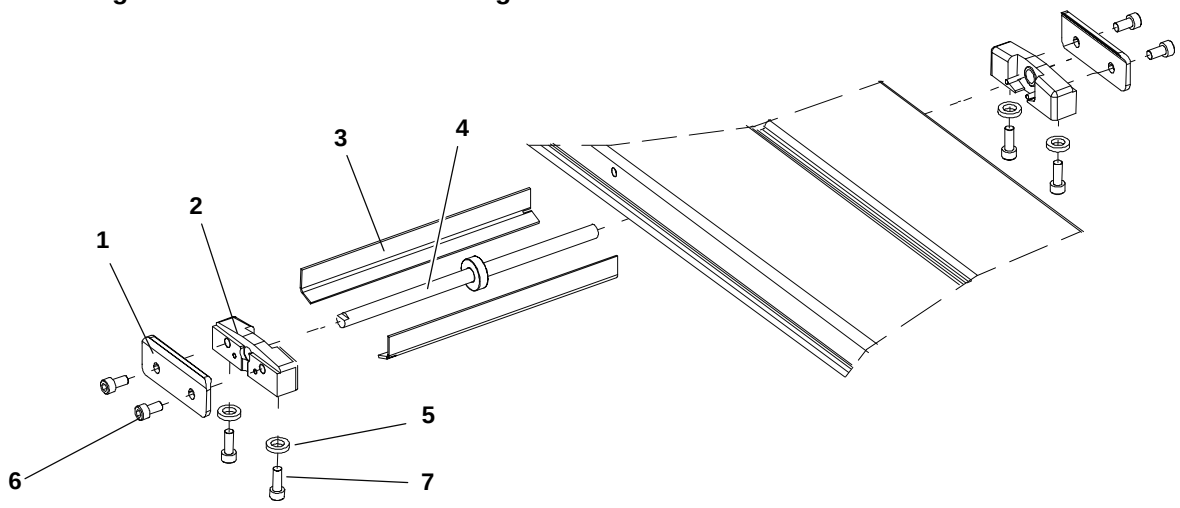
2	614068	Guide extruded flat (per foot)
3	462050M	Vertical Shaft Gullwing Guide
4	462052M	Horizontal Shaft Gullwing Guide
5	674175MP	Square Nut M6–1.0 w/1/4–20
6	807–652	Cross Block
7	920612M	Socket Head Cap Screw (Metric) M6–1.0 x 12mm
8	920620M	Socket Head Cap Screw (Metric) M6–1.0 x 20mm
9	970620M	Socket Head Set Screw (Metric) M6–1.0 x 20mm

2” Through 6” Wide Flat Belt Mounting Bracket with Return Roller



Item	Part Number	Description
1	492564M	Clamp Plate
2	493026M	Mounting Block
3	605279P	Washer
4	802–123	Bearing
5	913–103	Dowel Pin
6	920612M	Socket Head Cap Screw (Metric) M6 – 1.0 x 12mm
7	920616M	Socket Head Cap Screw (Metric) M5–.8 x 16mm

8” Through 18” Wide Flat Belt Mounting Bracket with Return Roller



Item	Part Number	Description
1	492564M	Clamp Plate
2	492571M	Mounting Block
3	493108SSP	Bottom Roller Guard 8” (203mm)
	493110SSP	Bottom Roller Guard 10” (254mm)
	493112SSP	Bottom Roller Guard 12” (305mm)
	493118SSP	Bottom Roller Guard 18” (457mm)
4	493308SS	Shaft Assembly Belt Support 8” (203mm)
	493310SS	Shaft Assembly Belt Support 10” (254mm)
	493312SS	Shaft Assembly Belt Support 12” (305mm)
	493318SS	Shaft Assembly Belt Support 18” (457mm)
5	605279P	Hard Washer
6	920612M	Socket Head Cap Screw (Metric) M6–1.0 x 12mm
7	920616M	Socket Head Cap Screw (Metric) M6–1.0 x 16mm

Configuring Conveyor Belt Part Number

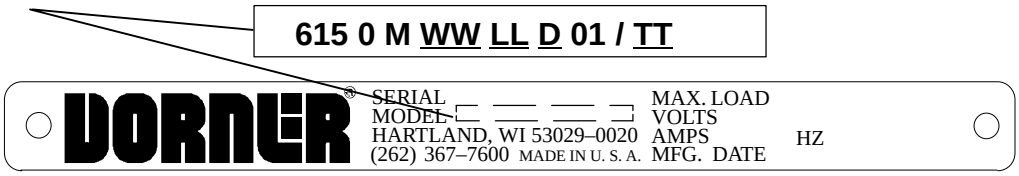
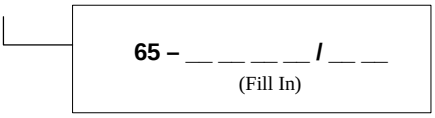


Figure 57

Conveyor Belt

Refer to the serial and model number plate (Figure 57). Determine conveyor length ("LL"), width ("WW") and belt type ("TT").

65 – WW LL / TT



Notes

Return Policy

No returns will be accepted without prior written factory authorization. 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. 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.

A representative will discuss action to be taken on the Returned items and provide a Returned Goods Authorization Number to reference.

There will be a 15% restocking charge on all new items returned for credit where Dorner was not at fault. These will not be accepted after 60 days from original invoice date. The restocking charge covers inspection, cleaning, disassembly, and reissuing 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. Feel free to contact Dorner for the name of your local representative. Our technical sales and service staff will gladly help with your questions on Dorner products.

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

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

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