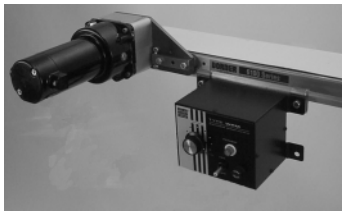
DORNER®

Installation, Maintenance & Parts Manual

6100 Series Industrial End Drive Conveyors



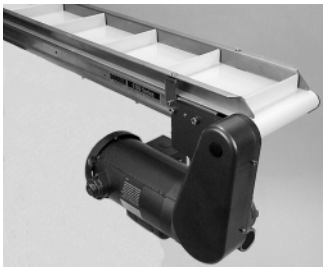


Table of Contents

CE

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

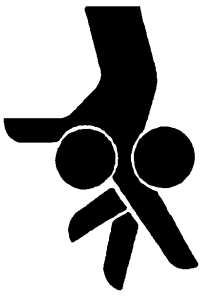
Exposed moving parts can cause severe injury.

LOCK OUT POWER before removing guards or performing maintenance.

WARNING

Gearmotors may be HOT.

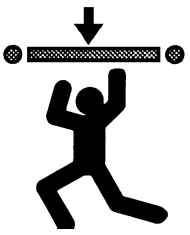
DO NOT TOUCH Gearmotors.



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, 6109247 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	Gearmotor Mounting Package
C	Gearmotor
D	Guiding & Accessories
E	Mounting Brackets with Return Rollers
F	Support Stands
G	Variable Speed Controller
H	Drive End
I	Idler/Tension End

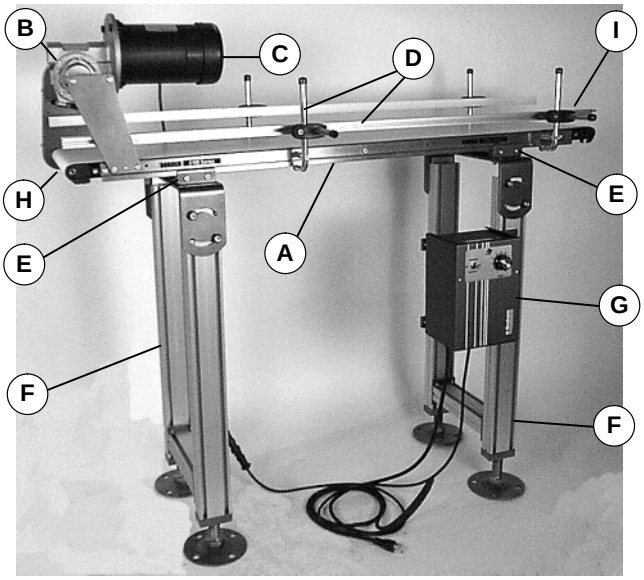


Figure 1

Specifications

Models:

Flat Belt 6100 Series Industrial Conveyor

6100 U 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
- 6100 U — 1= Standard or G=Gang Drive

Cleated Belt 6100 Series Industrial Conveyor

6140 U WW LL A A XXXX

- XXXX — Cleat Spacing
- A — Mount Position (A or D)
- A — Cleat Type*
- LL — Conveyor Length Reference
- WW — Conveyor Width Reference
- 6140 U

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

Conveyor Supports:

Maximum Distances:

J = 457 mm

K= 1829 mm**

L= 457 mm

**** For conveyors longer than 3962 mm, install support at joint.**

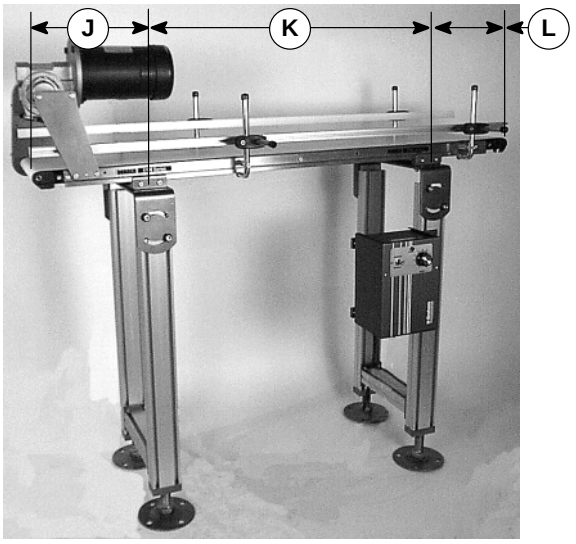


Figure 2

Specifications

Specifications:

Conveyor Width Reference (WW)	02	03	04	05	06	08	10	12	18
Conveyor Belt Width	44 mm	70 mm	95 mm	127 mm	152 mm	203 mm	254 mm	305 mm	457 mm
Maximum Conveyor Load* (See NOTE Below)	14 kg	16 kg	19 kg	23 kg	27 kg	32 kg	36 kg	36 kg	36 kg
Conveyor Start-up Torque*	0.5 Nm	0.6 Nm	0.7 Nm	0.8 Nm	0.9 Nm	1.1 Nm	1.4 Nm	1.5 Nm	1.7 Nm
Belt Travel	88 mm per revolution of pulley								
Maximum Belt Speed*	72 meters/minute								
Belt Take-up	10 mm of stroke =19 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**
Conveyor Length	610 mm	914 mm	1219 mm	1524 mm	1829 mm	2134 mm	2438 mm	2743 mm	3048 mm	3353 mm	3658 mm	3962 mm**	4267 mm**	4572 mm**	4877 mm**	5182 mm**	5486 mm**

NOTE: Maximum conveyor loads based on:

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

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

**** Lengths available only in 152 mm & wider conveyors.**

Installation

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

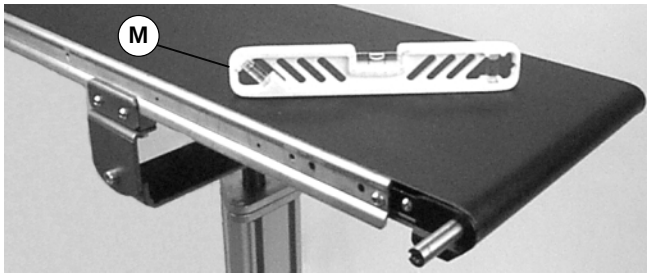


Figure 3

Illustration References

M	Level
S	Conveyor frame without belt
T	M6 x 10 mm Low Head Socket Head Screws (6x) (shipped loose)
U	Connector Strips (2x) (Attached to conveyor section)
V	Conveyor frame with belt
W	M6 x 12 mm Socket Head Screws (4x)
X	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 20 through 31)

Conveyors Up to 3962 mm

No additional assembly is required.

Conveyors Longer Than 3962 mm

1. Typical components (Figure 4)

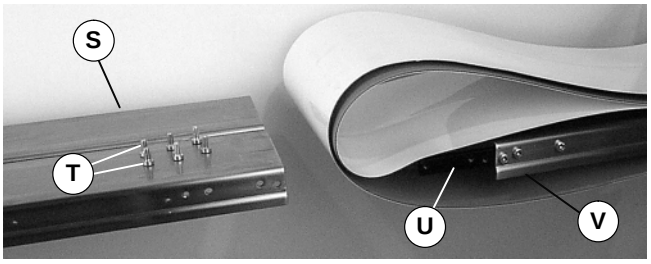


Figure 4

2. Compress tension end (Figure 5). Refer to steps 3, 4 & 5 under the “Belt Removal for Conveyor Without Gearmotor Mounting Package or Stands” on page 9.

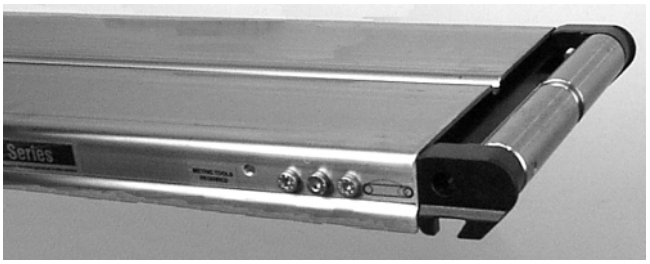


Figure 5

3. Roll out conveyor belt.

4. Place conveyor frame (S of Figure 6) into belt loop.

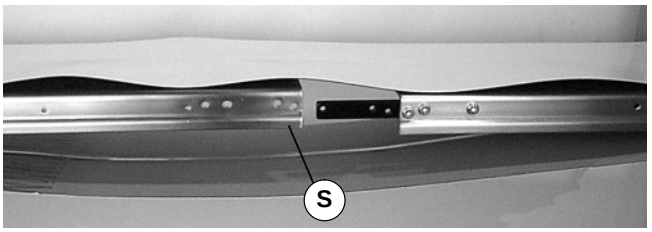


Figure 6

5. Join conveyor sections (S and V of Figure 7). Install screws (T) on both sides. Tighten to 7 Nm.

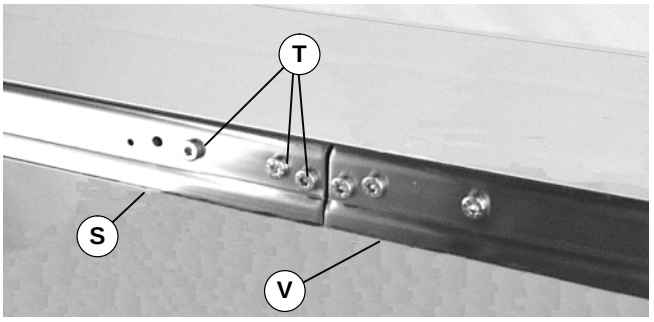


Figure 7

6. Tension conveyor belt. Refer to “Conveyor Belt Tensioning” on page 12.

Mounting Brackets with Return Rollers

Cleated Belt Conveyors

1. Typical components (Figure 8)

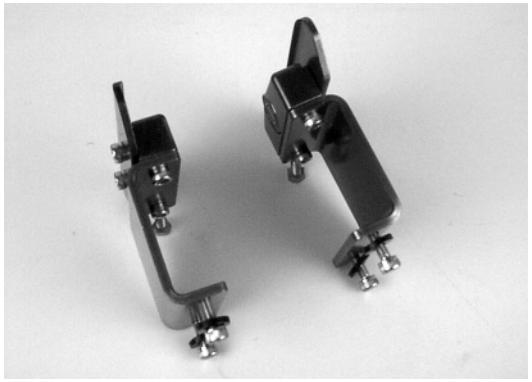


Figure 8

2. Loosen screws (W of Figure 9) and remove screws and washers (X).

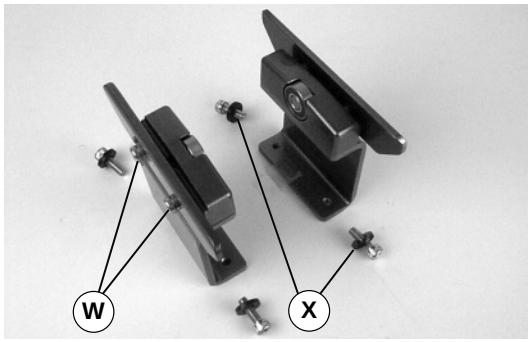


Figure 9

3. Attach clamp plates on each side of conveyor (Figure 10). Tighten the screws (W) to 9 Nm.

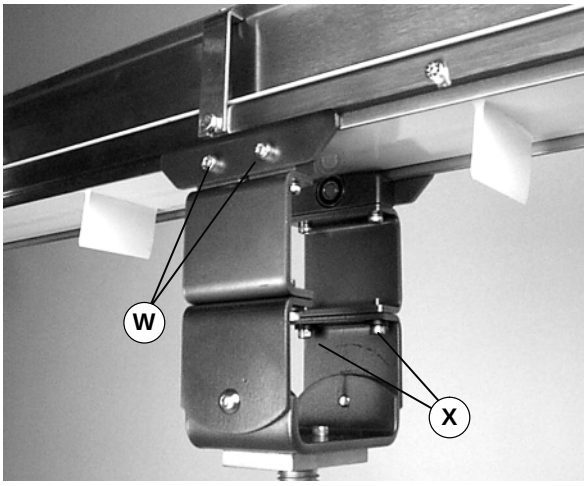


Figure 10

4. Attach to support stand. Tighten screws (X) to 9 Nm. Make sure belt is free to move.

44 mm to 152 mm Wide Flat Belt Conveyors

1. Typical components (Figure 11)

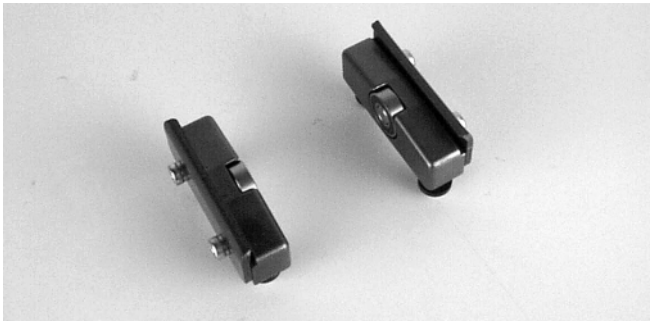


Figure 11

2. Loosen screws (W of Figure 12) and remove screws and washers (X).

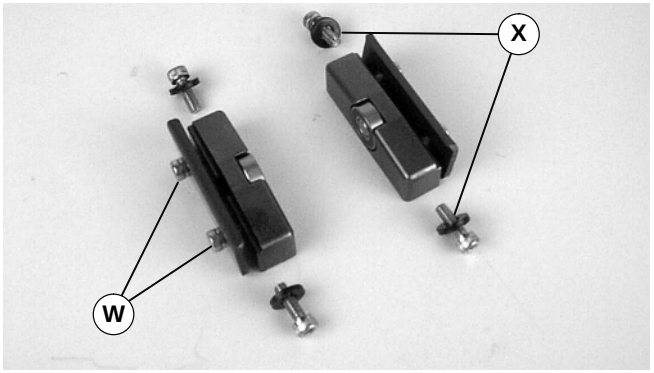


Figure 12

3. Attach clamp plates on each side of conveyor (Figure 13). Tighten the screws (W) to 9 Nm.

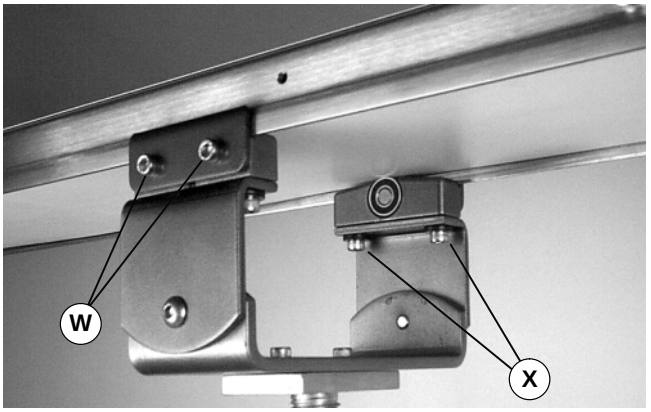


Figure 13

4. Attach to support stand. Tighten screws (X) to 9 Nm. Make sure belt is free to move.

203 mm & Wider Flat Belt Conveyors

1. Typical components (Figure 14)

Figure 14

2. Loosen screws (W of Figure 15) and remove screws and washers (X).

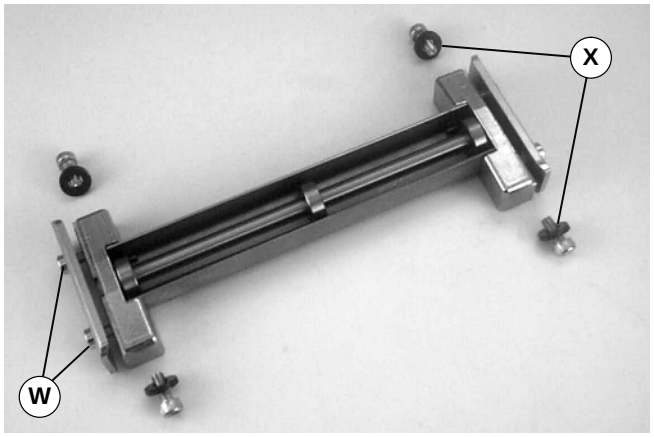


Figure 15

3. Attach clamp plates on each side of conveyor (Figure 16). Tighten the screws (W) to 9 Nm.

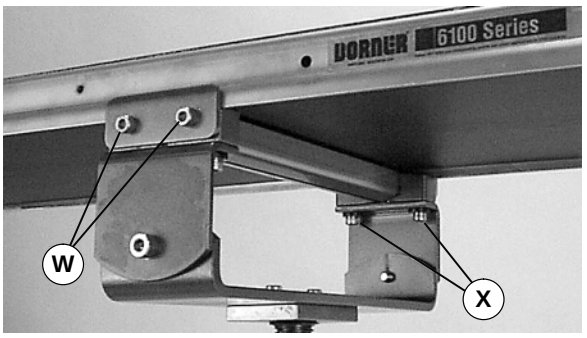


Figure 16

4. Attach to support stand. Tighten screws (X) to 9 Nm. Make sure belt is free to move.

Preventative Maintenance & Adjustment

Required Tools

Standard Tools

- Hex key wrenches

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

- Manual grease gun
- Adjustable wrench
- Arbor press

Special Tools

- 807-1043 Narrow-headed 11/16¨ Wrench (supplied with conveyor)
- 450281 Sealed Bearing Removal Tool
- 450282 Sealed Bearing Installation Tool
- 2500U Tool Kit for Gang Drive Bearings

Checklist

- Keep service parts on hand (see “Service Parts” section for recommendations)
- Keep supply of belt cleaner (part # 625619)
- For optional gang-driven conveyors, keep supply of bearing grease [for 397 gram cartridge (part # 829-002)or for 397 gram can (part # 829-003)]
- Clean entire conveyor and knurled pulley while disassembled
- Replace worn or damaged parts

Lubrication

Conveyor with Standard 12 mm Diameter Output Shaft

No lubrication is required. Replace bearings if worn.

Conveyor with Optional Gang Drive Pulley

WARNING

Exposed moving parts can cause severe injury.

LOCK OUT POWER before removing guards or performing maintenance.

- Only drive pulley bearings require lubrication. See steps that follow. All other bearings, replace if worn.

1. Disassemble the support (Y of Figure 17) and remove the hex shaft and shaft guard sections (Z).

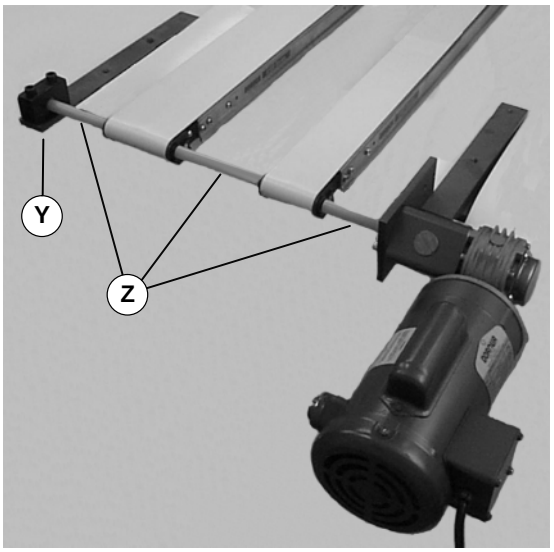


Figure 17

NOTE: Optional permanent grease fittings (part # 200398M) may be installed.

2. Install Dorner greasing adapter (part # 200046M) (AA of Figure 18). Make sure the adapter shoulder is seated against the conveyor tail plate.

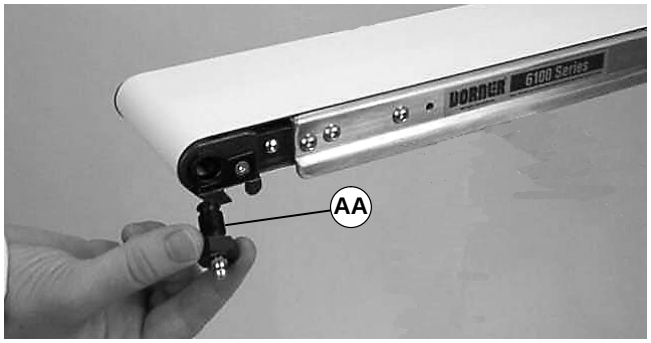


Figure 18

3. Use Dorner red grease, 397 gram cartridge (part #829-002) or 397 gram can (part # 829-003). Lubricate pulley bearing every 750 hours or more frequently, depending on operating conditions.

NOTE: Lubricate pulley bearing every 750 hours or more frequently, depending on operating conditions. When lubricating pulley bearings, use a conventional hand grease gun with a maximum of one pump per application. *Do not over-lubricate.* Do not use a power grease gun.

4. Grease bearing with one (1) pump from a manual grease gun. Do not over-lubricate.

5. Remove grease adapter and install on opposite side of pulley. Repeat steps 2 and 4.

6. Re-assemble hex shaft with guards and support (Y of Figure 17).

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(s)
- Accumulated dirt in wiper(s)
- 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
  - Conveyor with Optional Gang Drive Pulley
- Install new conveyor belt
- Tension conveyor belt

Belt Removal for Conveyor Without Gearmotor Mounting Package or Stands

1. For a flat belt conveyor, remove and retain the bottom wiper(s) (AB of Figure 19).

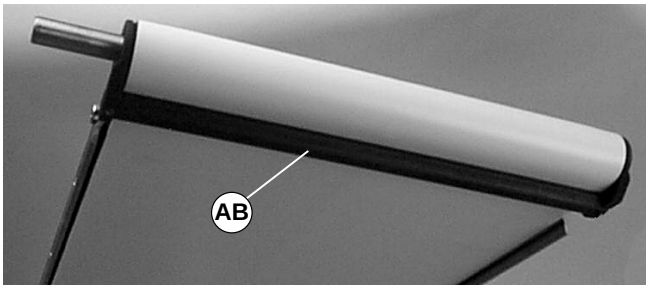


Figure 19

2. If conveyor is equipped with guiding and accessories, remove them from one side.

NOTE: If conveyor is equipped with optional Tool-less Belt Release, sequence is the same and no tools are required.

3. On tension end of the conveyor identified with a  label (AC of Figures 20 & 21), insert a 5 mm hex key wrench to engage pinion gear (AD of Figure 20).

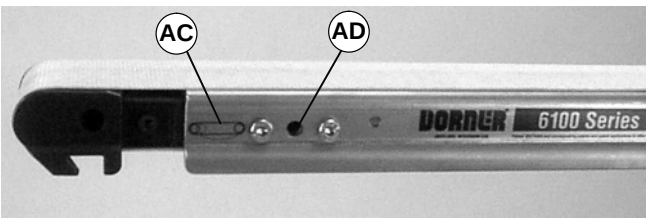


Figure 20

4. With pinion gear engaged, insert a 4 mm hex key wrench into lock screw (AE of Figure 21).

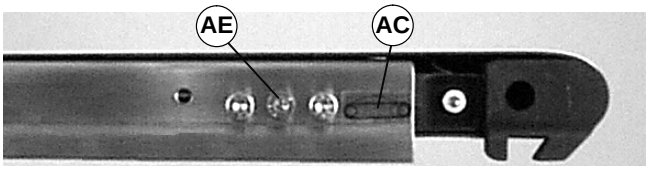


Figure 21

5. While maintaining tension on pinion gear (AD of Figure 22) loosen lock screw (AE). Rotate pinion gear (AD) clockwise to release conveyor belt tension.

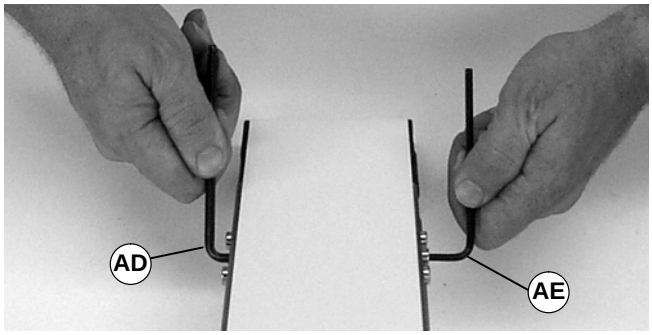


Figure 22

6. Remove conveyor belt.

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

1. For a flat belt conveyor, remove and retain the bottom wiper(s) (AB of Figure 19).
2. If conveyor is equipped with guiding and accessories, remove them from one side.

NOTE: If conveyor is equipped with optional Tool-less Belt Release, sequence is the same and no tools are required.

3. On tension end of the conveyor identified with a  label (AC of Figures 20 & 21), insert a 5 mm hex key wrench to engage pinion gear (AD of Figure 20).
4. With pinion gear engaged, insert a 4 mm hex key wrench into lock screw (AE of Figure 21).
5. While maintaining tension on pinion gear (AD of Figure 22) loosen lock screw (AE). Rotate pinion gear (AD) clockwise to release conveyor belt tension.

WARNING

The weight of the gearmotor is all on one end of the conveyor which could cause it to tip off the stands when the mounting clamp plates are loosened. Be sure to provide support (AF of Figure 23) underneath the gearmotor while changing the belt.

6. Temporarily support conveyor at gearmotor mounting package (AF of Figure 23).

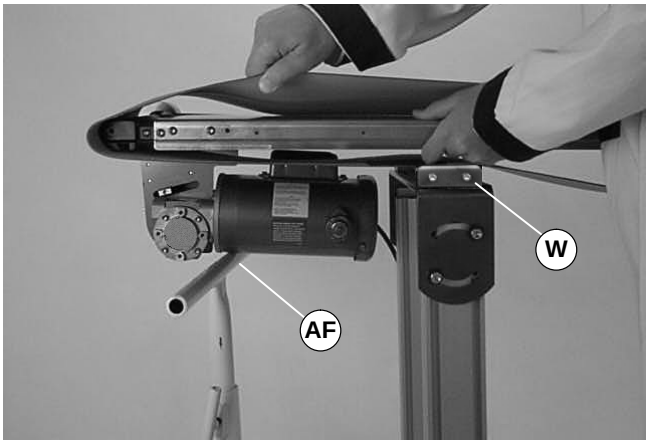


Figure 23

NOTE: To remove belt, complete steps 7 & 8, at each stand location.

WARNING

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

7. Loosen the mounting clamp plates (W of Figures 23 and 24), on both sides of the conveyor. Raise the conveyor and remove the belt.

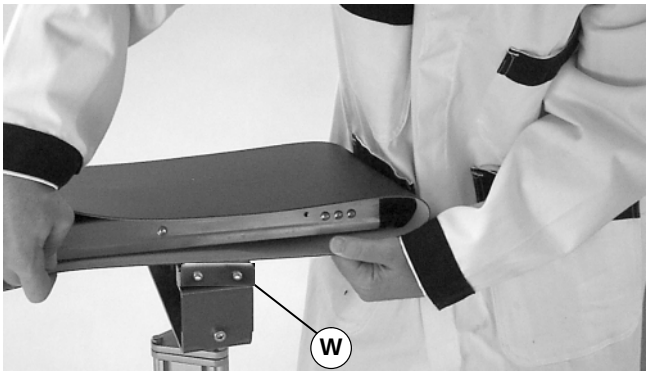


Figure 24

8. With belt removed, secure conveyor with clamp plates (W).

Belt Removal for Conveyor With Optional Gang Drive Pulley

1. Disassemble support (Y of Figure 17) and remove the hex shaft and shaft guard sections (Z).
2. Remove and retain the bottom wiper(s) (AB of Figure 19).
3. If conveyor is equipped with guiding and accessories, remove them from one side.

NOTE: If conveyor is equipped with optional Tool-less Belt Release, sequence is the same and no tools are required.

4. On tension end of the conveyor identified with a label (AC Figures 20 & 21), insert a 5 mm hex key wrench to engage pinion gear (ADof Figure 20).
5. With pinion gear engaged, insert a 4 mm hex key wrench into lock screw (AE of Figure 21).
6. While maintaining tension on pinion gear (AD of Figure 22) loosen lock screw (AE). Rotate pinion gear (AD) clockwise to release conveyor belt tension.
7. Remove conveyor belt.

Belt Installation for Conveyor without Gearmotor Mounting Package or Stands

IMPORTANT: On a flat belt conveyor, the wiper is installed on discharge end. Belt travel direction is identified by an arrow decal on the side of the conveyor (AG of Figure 25). With a reversing gearmotor, a second bottom wiper must be installed on opposite end.

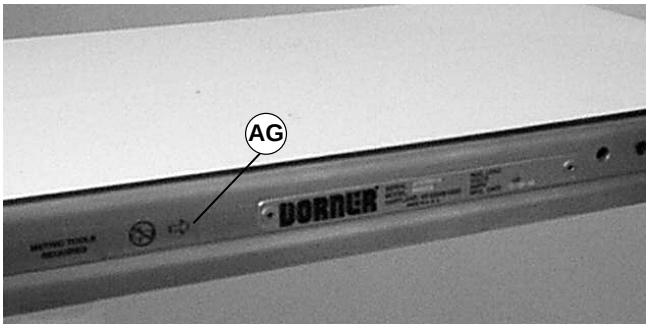


Figure 25

1. Orient the conveyor belt so that the splice leading fingers (AH of Figure 26) point in the direction of belt travel (AI) as identified by the label (AG of Figure 25).

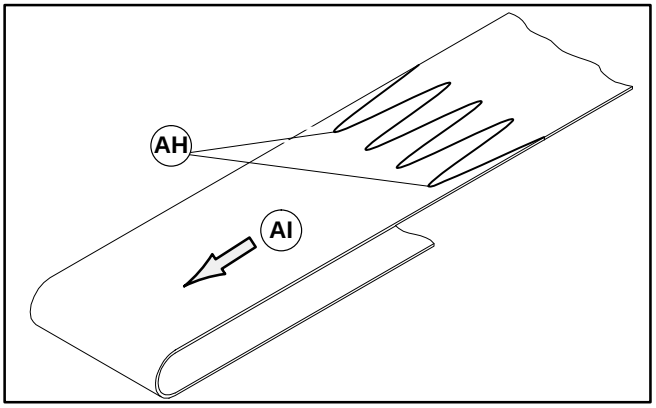


Figure 26

2. Slide belt onto the conveyor frame assembly.
3. On a flat belt conveyor, install bottom wiper(s) (AB of Figure 19). Center set screws in frame and tighten to 3.7 Nm.
4. Tension belt. Refer to "Conveyor Belt Tensioning" on page 12.
5. Where applicable, replace guiding.

Belt Installation for Conveyor with Gearmotor Mounting Package and/or Stands

1. Orient the conveyor belt so that the splice leading fingers (AH of Figure 26) point in the direction of belt travel (AI) as identified by the label (AG of Figure 25).

NOTE: To install belt, complete steps 2, 3 & 4, at each stand location.

2. Loosen the mounting clamp plates (W of Figures 23 and 24), on both sides of the conveyor. Raise the conveyor and replace the belt.
3. Lower the conveyor onto the mounting blocks being careful not to pinch belt.
4. Tighten clamp plates screws (W) to 9 Nm.
5. On a flat belt conveyor, install bottom wiper(s) (AB of Figure 19). Center set screws in frame and tighten to 3.7 Nm.
6. Tension belt. Refer to “Conveyor Belt Tensioning”.
7. Where applicable, replace guiding.

Belt Installation for Conveyor With Optional Gang Drive Pulley

1. Orient the conveyor belt so that the splice leading fingers (AH of Figure 26) point in the direction of belt travel (AI) as identified by the label (AG of Figure 25).
2. Slide belt onto the conveyor frame assembly.
3. On a flat belt conveyor, install bottom wiper(s) (AB of Figure 19). Center set screws in frame and tighten to 3.7 Nm.
4. Tension belt. Refer to “Conveyor Belt Tensioning” on page 12.
5. Where applicable, replace guiding.
6. Re-assemble hex shaft with guards sections (Z of Figure 17). Re-assemble support (Y).

Conveyor Belt Tensioning

WARNING

Exposed moving parts can cause severe injury.

LOCK OUT POWER before removing guards or performing maintenance.

NOTE: If conveyor is equipped with optional Tool-less Belt Release, sequence is the same and no tools are required.

1. On tension end of the conveyor identified with a  label (AC of Figures 20 & 21), insert a 5 mm hex key wrench to engage pinion gear (AD of Figure 20).
2. With pinion gear engaged, insert a 4 mm hex key wrench into lock screw (AE of Figure 22).

NOTE: On pinion gear (ADof Figure 20), do not exceed a torque of 2.8 Nm for 44 mm to 305 mm wide conveyors and 4.5 Nm for a 457 mm wide conveyor. Over-tensioning the conveyor belt could cause excessive pulley bearing load and early failure.

3. Loosen lock screw (AE of Figure 22).

4a. For existing belt:
With V-guide seated in pulley, rotate the pinion gear (AD) counter-clockwise to sufficiently tension the belt to handle the conveyor load.

NOTE: If the maximum take-up stroke is achieved, replace the conveyor belt.

4b. For a new belt:
With V-guide seated in pulley, rotate the pinion gear (AD) counter-clockwise to a distance of 25 mm (AJ of Figure 27).

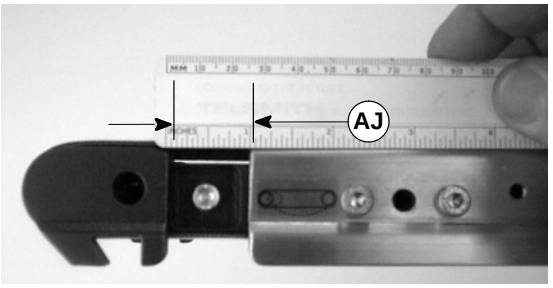


Figure 27

5. Secure lock screw (AE of Figure 22) to 4.5 Nm.

Pulley Removal

WARNING

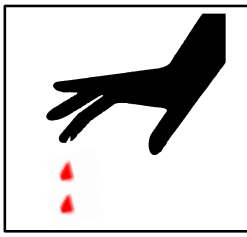
Exposed moving parts can cause severe injury.

LOCK OUT POWER before removing guards or performing maintenance.

Remove conveyor belt to access pulley(s). See "Conveyor Belt Replacement" on page 9. Remove the desired pulley following instructions:

- A – Drive Pulley with Standard 12 mm Diameter Output Shaft
- B – Idler Pulley
- C – Idler Pulley with Tool-less Belt Release
- D – Gang Drive Pulley

A – Removal of Drive Pulley with Standard 12 mm Diameter Output Shaft



WARNING

Drive shaft keyway may be sharp.

HANDLE WITH CARE.

1. Remove the gearmotor mounting package. See accessory instructions.
2. For 254 mm, 305 mm or 457 mm wide conveyors, use the narrow-headed 11/16¨ wrench (part # 808-1043) (AL of Figure 28) to remove the outboard bearing (AM).
3. Remove screw (AK).

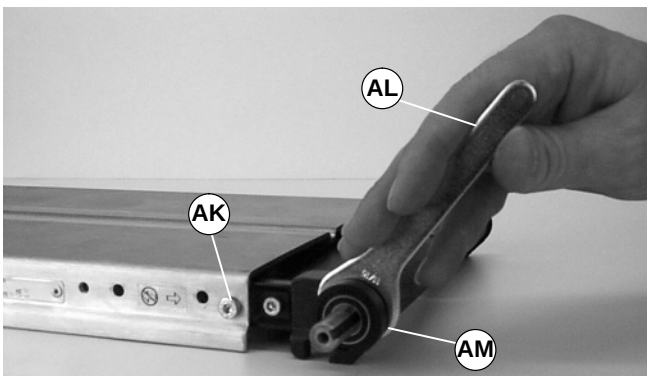


Figure 28

4. Remove three (3) screws (AN of Figure 29) on the side opposite the drive shaft.

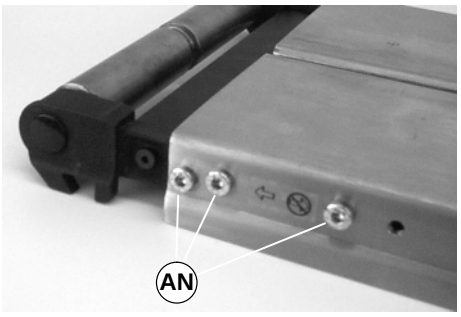


Figure 29

5. Remove the drive tail assembly.
6. Remove screw (AO of Figure 30).
7. Remove headplate (AP).
8. Remove pulley (AQ).

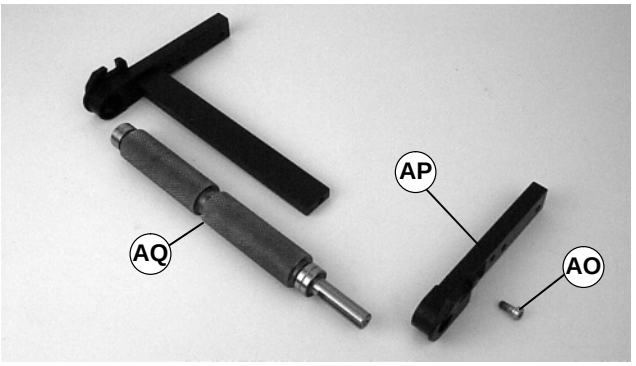


Figure 30

B – Idler Pulley Removal

1. Remove screw (AE of Figure 31).
2. Remove four (4) tail plate mounting screws (AR of Figures 31 & 32).

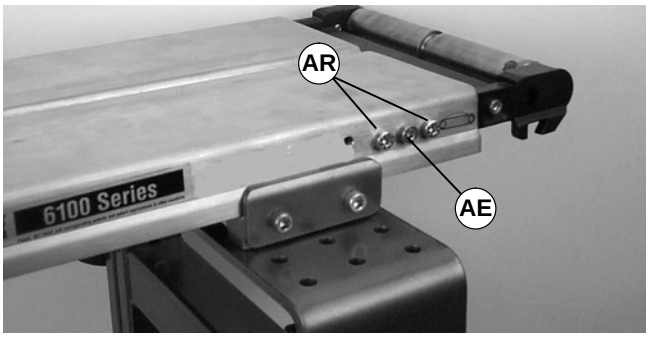


Figure 31

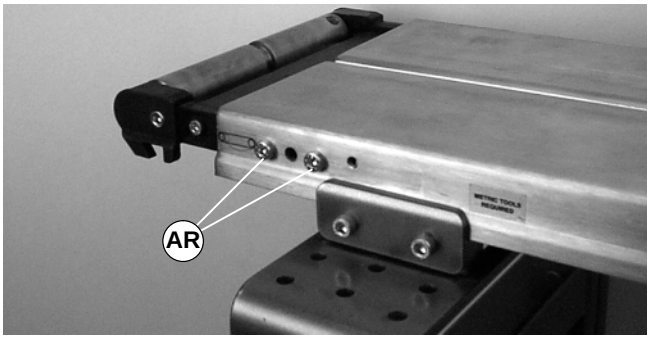


Figure 32

3. Remove tail assembly (AS of Figure 33).

Figure 33

4. Locate magnet (AT of Figure 34). Remove screw (AO).

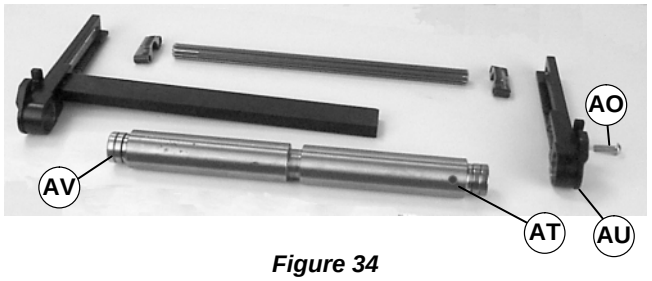


Figure 34

5. Remove headplate (AU).

6. Remove pulley (AV).

C – Removal of Idler Pulley with Tool-less Belt Release

1. Remove handle(AW of Figure 35).

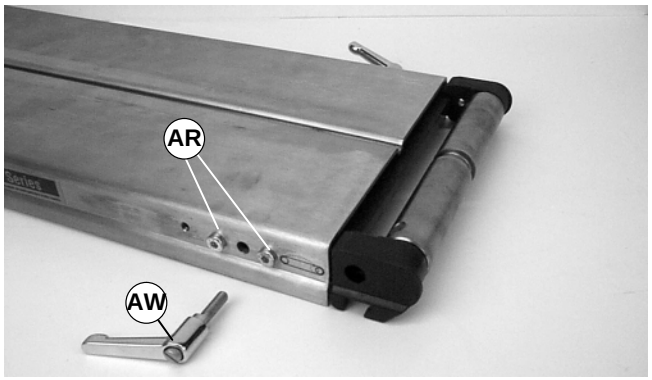


Figure 35

2. Remove two (2) screws (AR of Figure 35).

3. Remove two (2) screws (AR of Figure 36). Remove handle assembly (AX).

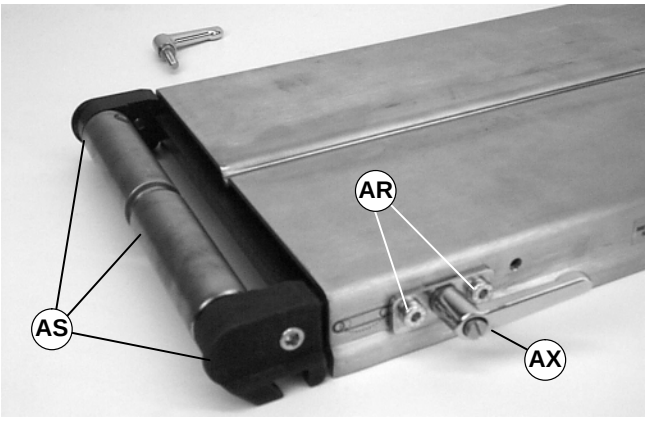


Figure 36

4. Remove tail assembly (AS).

5. Locate magnet (AT of Figure 34). Remove screw (AO).

6. Remove headplate (AU).

7. Remove pulley (AV).

D – Gang Drive Pulley Removal

1. Remove the two (2) screws (AY of Figure 37).

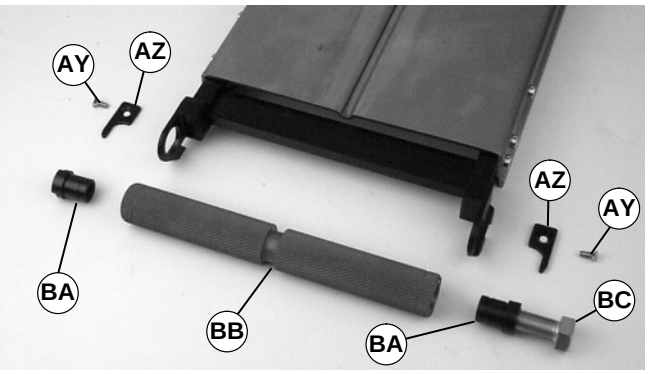


Figure 37

2. Remove two clips (AZ).

3. Install bolt (part # 906-278☆) (BC of Figure 37) into bearing sleeve(s) (BA). Remove bearing sleeve(s) (BA).

NOTE: If retaining sleeve (BA of Figure 37) does not slide out:

- **Remove tail following steps 3, 4 & 5 of Removal of Drive Pulley with Standard 12 mm Diameter Output Shaft on page 13**
- **Assemble pulley (BB of Figure 38), removal tool (part # 25-09☆) (BD), and bolt (part # 906-278☆) (BC), as shown**
- **Tighten bolt (BC) to remove bearing sleeve (BA)**

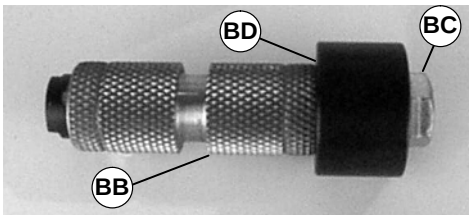


Figure 38

Bearing Replacement for Drive Pulley with Standard 12 mm Diameter Output Shaft or Idler Pulley

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

Bearing Removal

1. Place bearing removal tool (part # 450281) over bearing(s) with lip (BF of Figure 39) located in Bearing gap (BG) as shown.

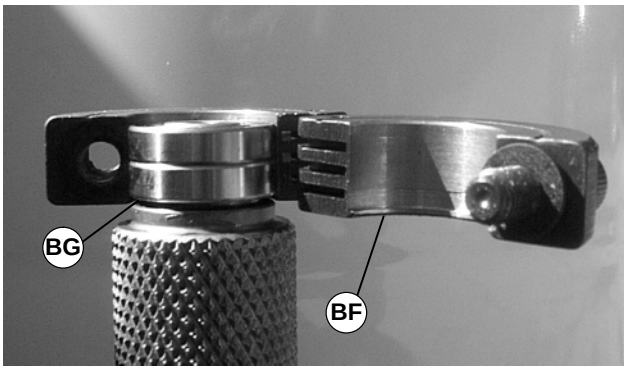


Figure 39

2. Using 3/16¨ hex key wrench (BE of Figure 40), tighten tool.

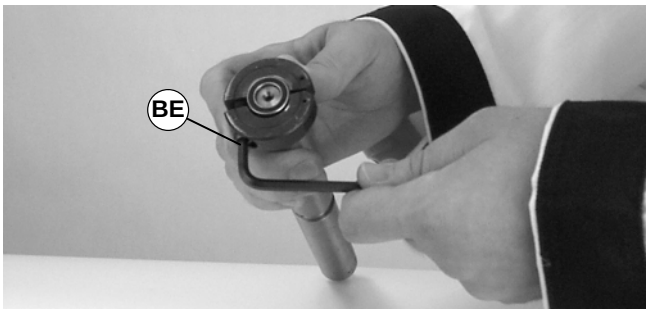


Figure 40

3. Using a puller (BH of Figure 41), remove and discard bearing(s).

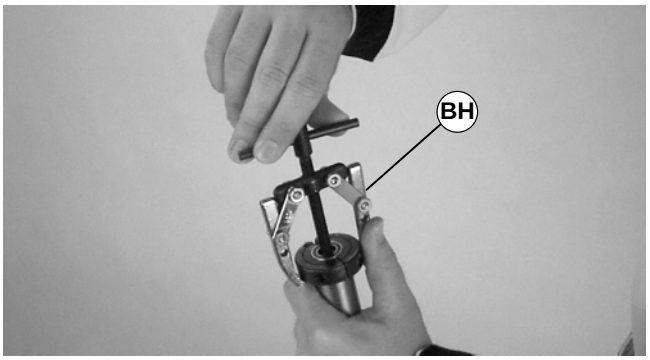


Figure 41

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) (BI of Figure 42) onto pulley shaft.

Figure 42

☆ - Part of Tool Kit, part # 2500U.

3. Slide the sleeve of tool (part # 450282) (BJ of Figure 43) over bearing.

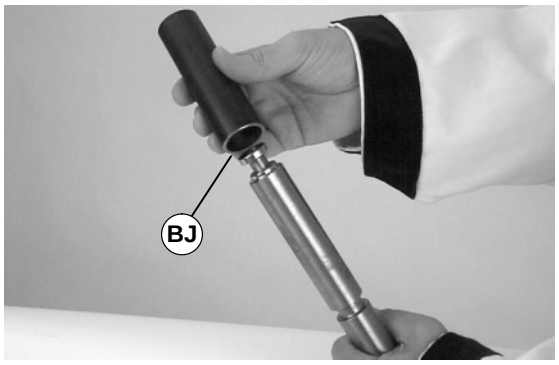


Figure 43

4. Place open end of shaft (BK of Figure 44) into sleeve.

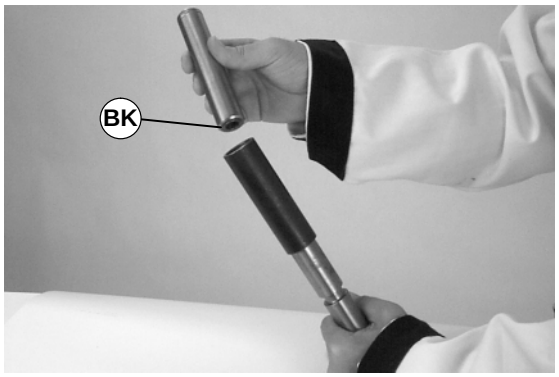


Figure 44

5. Using arbor press or similar device, press bearing onto pulley shaft (see Figure 45).

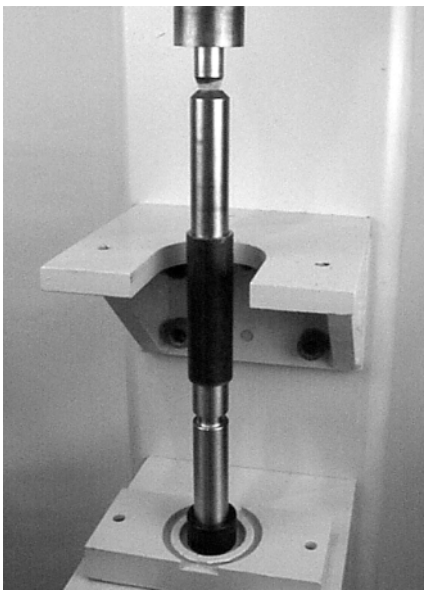


Figure 45

6. Repeat steps 1 through 5 for each bearing.

Bearing Replacement for Gang Drive Pulley

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

Bearing Removal

NOTE: The bearings of a 44 mm wide gang drive pulley cannot be replaced. Order pulley assembly (part # 454702).

1. Insert bearing removal tool (part # 25-05☆) (BM of Figure 46) into the pulley (BP) until shoulder (BL) seats against bottom of bearing (BQ).

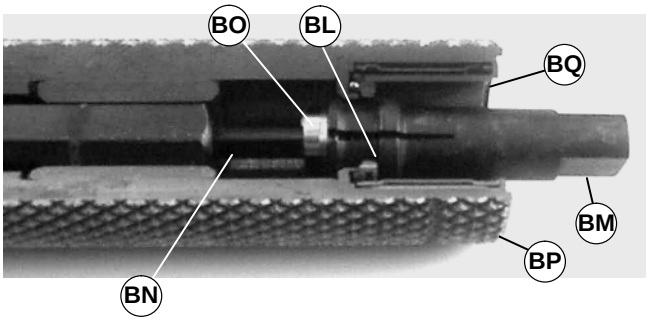


Figure 46

2. While holding bearing removal tool (BM) in position, insert extension tool (part # 25-08☆) (BN) into opposite end of pulley (BP). Rotate bearing removal tool (BM) to engage hex tip of extension tool (BN) into screw (BO).

3. While maintaining extension tool (BN) position, use a wrench to rotate bearing removal tool (BM) to expand flare.

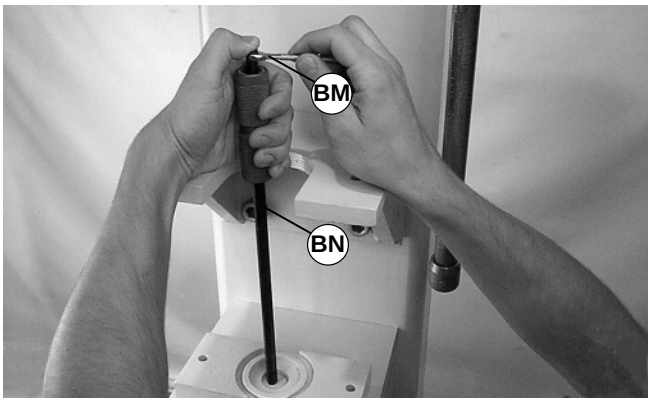


Figure 47

4. Orient bearing anvil/sleeve removal tool (part # 25-09☆) (BR of Figure 48) with cavity facing up and place pulley onto tool.

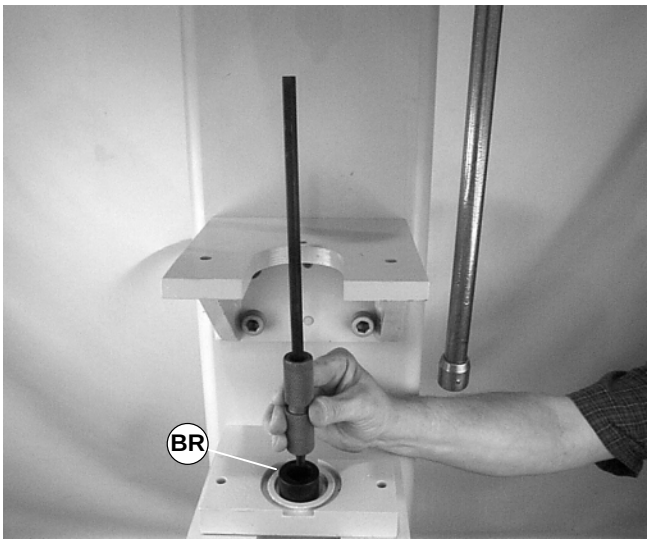


Figure 48

NOTE: If a severely worn bearing breaks apart during removal, pulley must be replaced.

5. Press bearing out of pulley.

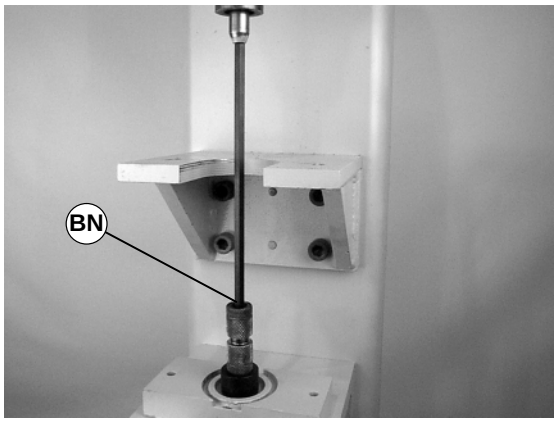


Figure 49

Bearing Installation

1. Orient bearing anvil/sleeve removal tool (part # 25-09☆) (BR of Figure 50) with cavity facing up and place pulley (BP) onto tool.

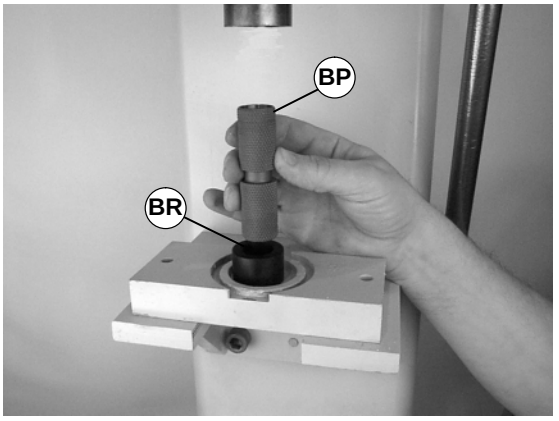


Figure 50

2. Install bearing insertion tool (part # 25-10☆) (BS of Figure 51) into arbor press or similar device.

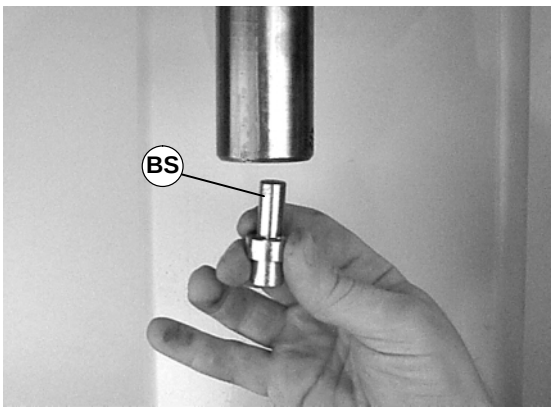


Figure 51

3. Place and hold bearing (part # 21-33) (BQ) onto tool (BS).

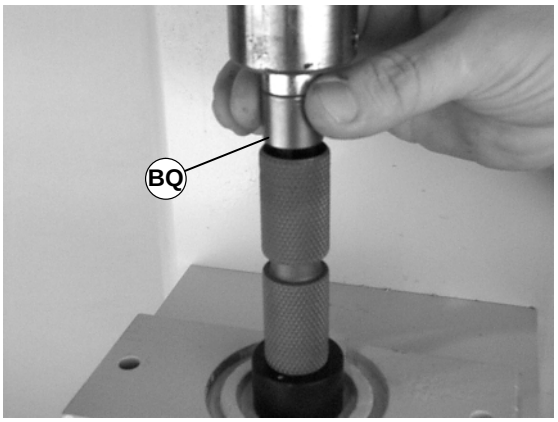


Figure 52

☆ - Part of Tool Kit, part # 2500U.

IMPORTANT: Bearing and pulley alignment is critical.

4. Press bearing (BQ of Figure 53) into pulley (BP) until seated.

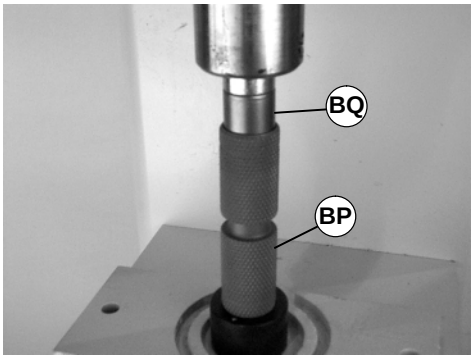


Figure 53

Pulley Replacement

Drive Pulley with Standard 12 mm Diameter Output Shaft Replacement

1. Reverse the removal procedure "A" (see page 13).

Idler Pulley Replacement

IMPORTANT: On a tension tail assembly, orient both pinion housings (BT of Figure 54) so they engage the same tooth positions on their respective racks.

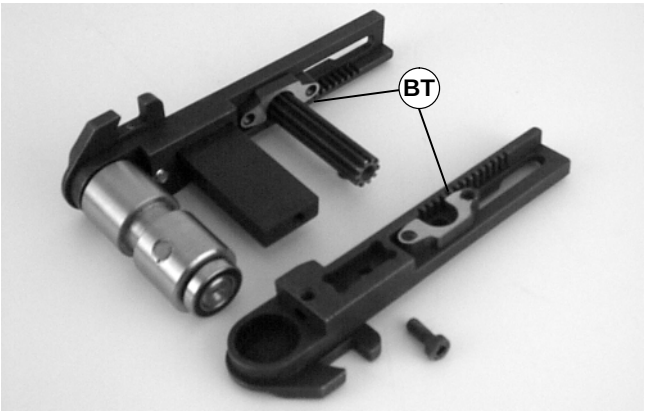


Figure 54

1. Reverse the removal procedure "B" (see page 13).

Idler Pulley with Tool-less Belt Release Replacement

IMPORTANT: On a tension tail assembly, orient both pinion housings (BT of Figure 54) so they engage the same tooth positions on their respective racks.

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

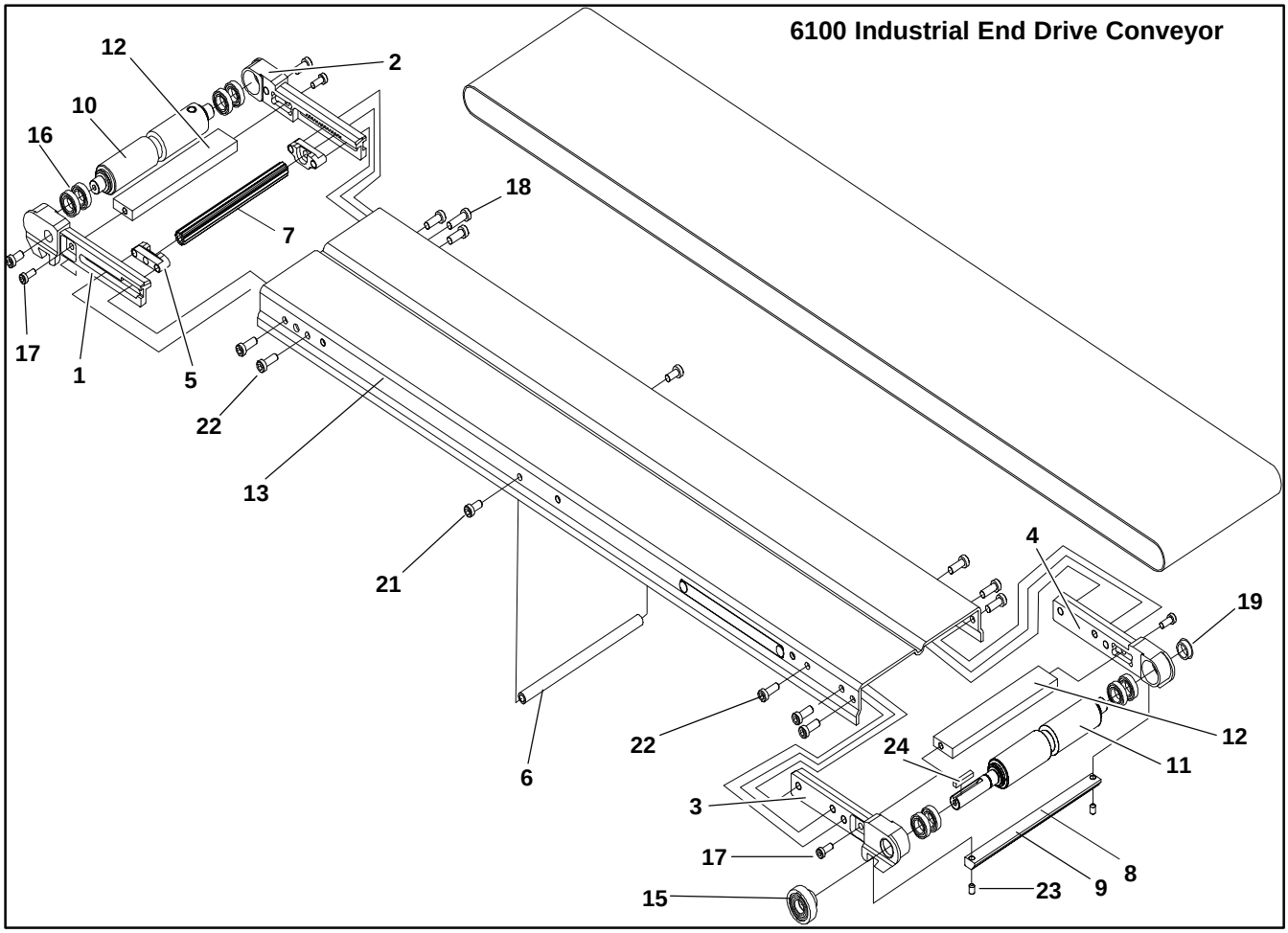
Gang Drive Pulley Replacement

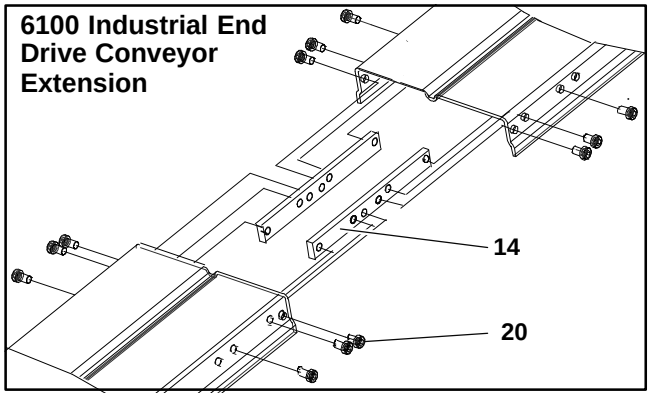
1. Reverse the removal procedure "D" (see page 14).

Notes

Service Parts

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





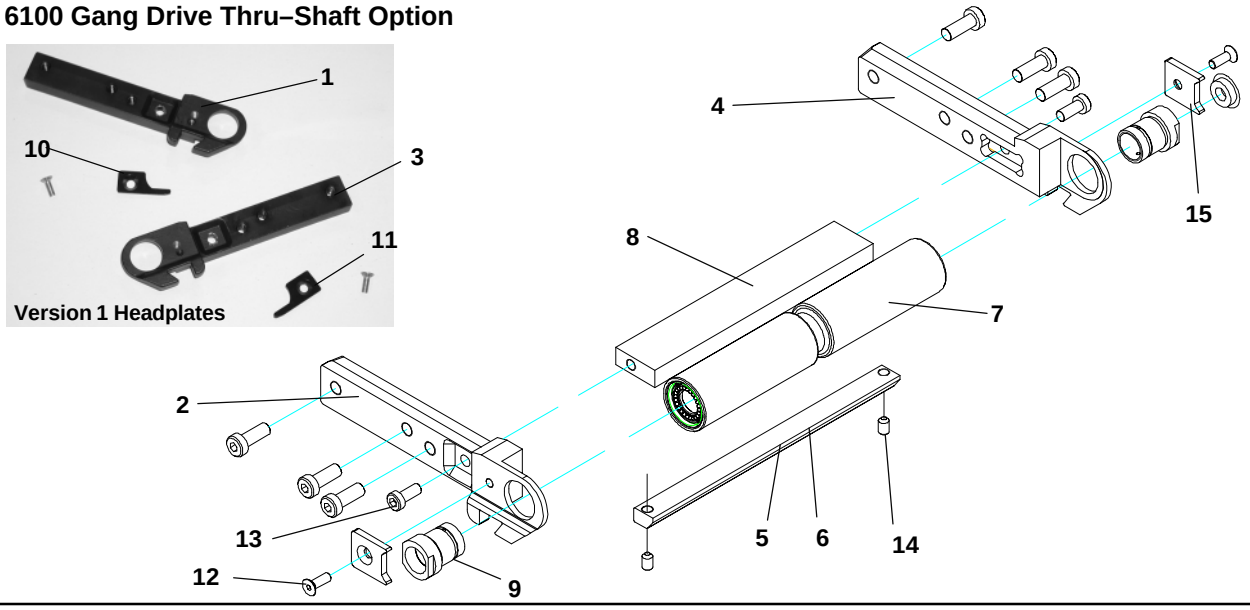
Item	Part Number	Description
1	450231M	Plate Tension RH 51–76mm Wide
	450031M	Plate Tension RH 102–457mm Wide
2	450232M	Plate Tension LH 51–76mm Wide
	450032M	Plate Tension LH 102–457mm Wide
3	450233M	Plate Fixed RH 51–76mm Wide
	450355M	Plate Fixed RH 102–457mm Wide
4	450234M	Plate Fixed LH 51–76mm Wide
	450356M	Plate Fixed LH 102–457mm Wide
5	450039M	Block Retainer Pinion
6	452502M	Post Support Frame 51mm
	452503M	Post Support Frame 76mm
	452504M	Post Support Frame 102mm
	452505M	Post Support Frame 127mm
	452506M	Post Support Frame 152mm
	452508M	Post Support Frame 203mm
	452510M	Post Support Frame 254mm
	452512M	Post Support Frame 305mm
	452518M	Post Support Frame 457mm
7	452602M	Pinion 51mm
	452603M	Pinion 76mm
	452604M	Pinion 102mm
	452605M	Pinion 127mm
	452606M	Pinion 152mm
	452608M	Pinion 203mm
	452610M	Pinion 254mm
	452612M	Pinion 305mm
	452618M	Pinion 457mm
8	452702M	Wiper Bottom 51mm
	452703M	Wiper Bottom 76mm

	452704M	Wiper Bottom 102mm
	452705M	Wiper Bottom 127mm
	452706M	Wiper Bottom 152mm
	452708M	Wiper Bottom 203mm
	452710M	Wiper Bottom 254mm
	452712M	Wiper Bottom 305mm
	452718M	Wiper Bottom 457mm
9	452802M	Bar Bottom 51mm
	452803M	Bar Bottom 76mm
	452804M	Bar Bottom 102mm
	452805M	Bar Bottom 127mm
	452806M	Bar Bottom 152mm
	452808M	Bar Bottom 203mm
	452810M	Bar Bottom 254mm
	452812M	Bar Bottom 305mm
	452818M	Bar Bottom 457mm
10	453002	Spindle Assembly Idler 51mm
	453003	Spindle Assembly Idler 76mm
	453004	Spindle Assembly Idler 102mm
	453005	Spindle Assembly Idler 127mm
	453006	Spindle Assembly Idler 152mm
	453008	Spindle Assembly Idler 203mm
	453010	Spindle Assembly Idler 254mm
	453012	Spindle Assembly Idler 305mm
	453018	Spindle Assembly Idler 457mm
11	453102M	Drive Spindle 51mm
	453103M	Drive Spindle 76mm
	453104M	Drive Spindle 102mm
	453105M	Drive Spindle 127mm
	453106M	Drive Spindle 152mm
	453108M	Drive Spindle 203mm
	453110M	Drive Spindle 254mm
	453112M	Drive Spindle 305mm
	453118M	Drive Spindle 457mm
12	453602M	Support Tension Fixed 51mm
	453603M	Support Tension Fixed 76mm
	453604M	Support Tension Fixed 102mm
	453605M	Support Tension Fixed 127mm
	453606M	Support Tension Fixed 152mm
	453608M	Support Tension Fixed 203mm
	453610M	Support Tension Fixed 254mm
	453612M	Support Tension Fixed 305mm
	453618M	Support Tension Fixed 457mm
13	See chart below	6100 Conveyor Frame
14	450160M	Bar Connecting Frame
15	450359	Bearing Assembly Outboard (254–457mm Only)
16	802–121	Ball Bearing 12mm (Bore) x 21mm (OD)
17	807–1022	Socket Head Cap Screw Metric Low M5–.80x12mm
18	807–1031	Socket Head Cap Screw Metric Low M6–1.0x20
19	807–963	Hole Plug 51 to 76mm Wide
	807–1087	Hole Plug 102mm to 457mm Wide
20	920691M	Socket Head Cap Screw Metric Low M6–1.0x10mm
21	920692M	Socket Head Cap Screw Metric Low M6–1.0x12mm
22	920693M	Socket Head Cap Screw Metric Low M6–1.0x16mm
23	970508M	Socket Head Set Screw Metric Cup M5– .80x8mm
24	980422M	Key Square 4mm x 22mm

Item 13: 6100 Conveyor Frame	
Length	Part Number(s)
610mm	47WW02M
914mm	47WW03M
1219mm	47WW04M
1524mm	47WW05M
1829mm	47WW06M
2134mm	47WW07M
2438mm	47WW08M
2743mm	47WW09M
3048mm	47WW10M
3353mm	47WW11M
3658mm	47WW12M
3962mm	47WW07M 47WW13M
4267mm	47WW08M 47WW13M
4572mm	47WW09M 47WW13M
4877mm	47WW09M 47WW13M
5182mm	47WW09M 47WW13M
5486mm	47WW09M 47WW13M
5791mm	47WW09M 47WW13M
6096mm	47WW09M 47WW13M
6401mm	47WW09M 47WW13M
6706mm	47WW09M 47WW13M
7010mm	47WW09M 47WW13M
7315mm	47WW09M 47WW13M
WW = frame width reference: 02, 03, 04, 05, 06, 08, 10, 12, 18	

Service Parts

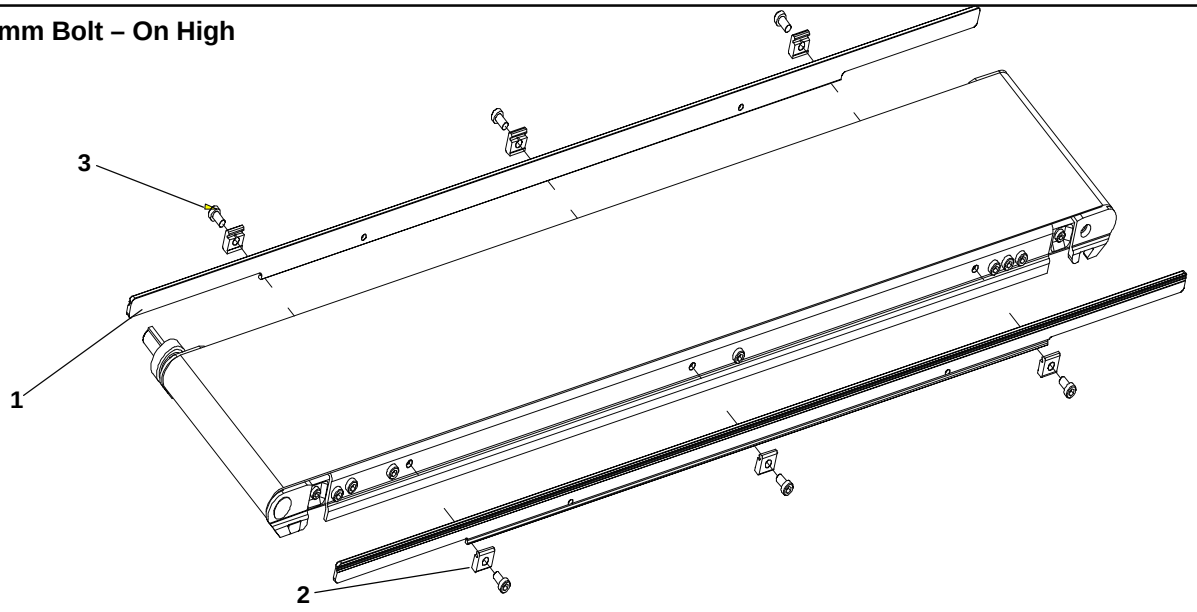
6100 Gang Drive Thru–Shaft Option



Item	Part Number	Description
1	450228M	Fixed Plate RH (Version 1)
2	450528M	Fixed Plate RH (Version 2)
3	450229M	Fixed Plate LH (Version 1)
4	450529M	Fixed Plate LH (Version 2)
5	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 Bottom 10” (254mm)
	452712M	Wiper Bottom 12” (305mm)
	452718M	Wiper Bottom 18” (457mm)
6	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)
7	See chart below	Drive Spindle
8	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)
9	200035	Retaining Sleeve (3”–18”)
	677330	Retaining Sleeve (2”)
10	450235	Retainer Clip RH
11	450236	Retainer Clip LH
12	930412M	Socket Head Cap Screw (Metric) Flat M4 x 22mm
13	807–1022	Socket Head Cap Screw (Metric) Low Pilot M5–.80 x 12mm
14	970508M	Socket Head Cap Screw (Metric) M5–.80 x 8mm
15	450381	Retaining Clip

Item 5: Drive Spindle			
Spindle Width	Spindle assembly with bearings	Spindle without bearings	Bearings
2” (51mm)	454702	N/A	N/A
3” (76mm)	454703	454503	41–33
4” (102mm)	454704	454504	41–33
5” (127mm)	454705	454505	41–33
6” (152mm)	454706	454506	41–33
8” (203mm)	454708	454508	41–33
10” (254mm)	454710	454510	41–33
12” (305mm)	454712	454512	41–33
18” (457mm)	454718	454518	41–33

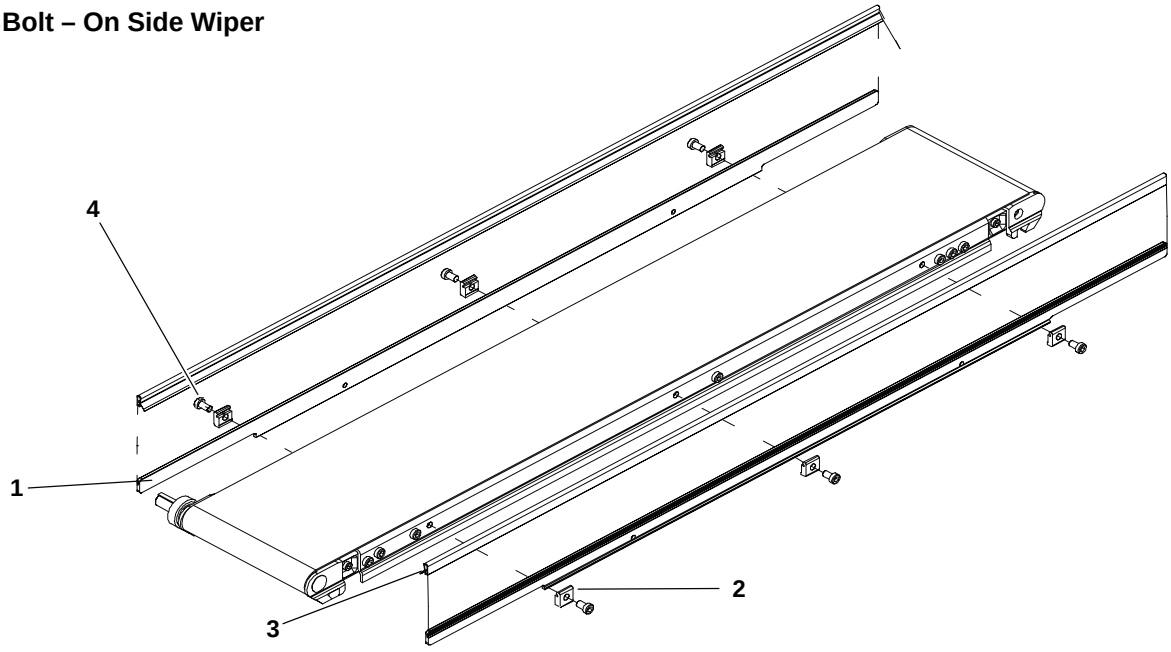
–02 13mm Bolt – On High Side



REF	P/N	Description
1	460232	Rail Guide 13 x 610mm
	460233	Rail Guide 13 x 914mm
	460234	Rail Guide 13 x 1219mm
	460235	Rail Guide 13 x 1524mm
	460236	Rail Guide 13 x 1829mm

2	460250	Clip Mounting Guide
3	920691M	Socket Head Cap Screw Metric Low M6–1.00 x 10mm

–03Bolt – On Side Wiper

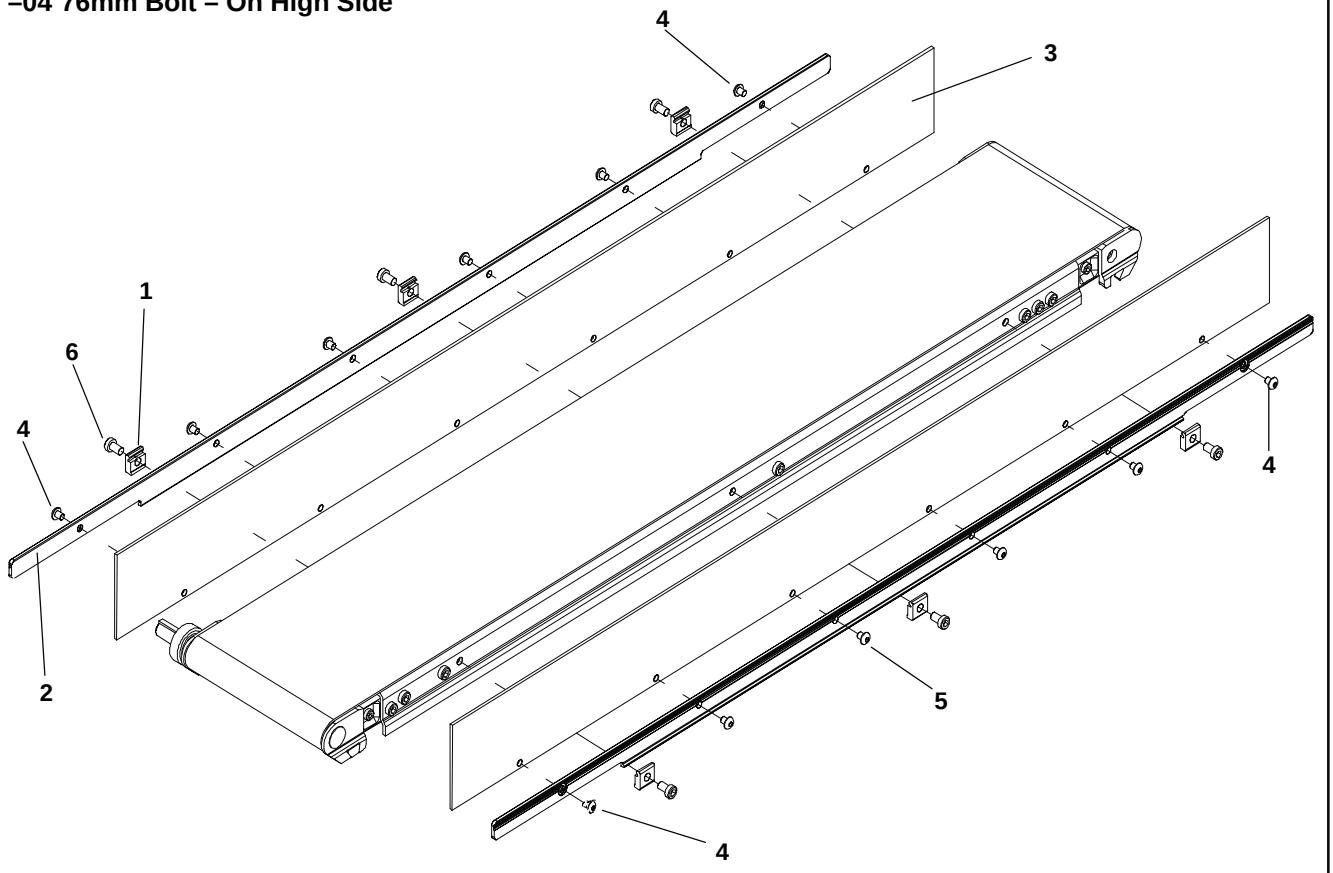


Item	Part Number	Description
1	460232	Rail Guide 13 x 610mm
	460233	Rail Guide 13 x 914mm
	460234	Rail Guide 13 x 1219mm
	460235	Rail Guide 13 x 1524mm
	460236	Rail Guide 13 x 1829mm

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

Service Parts

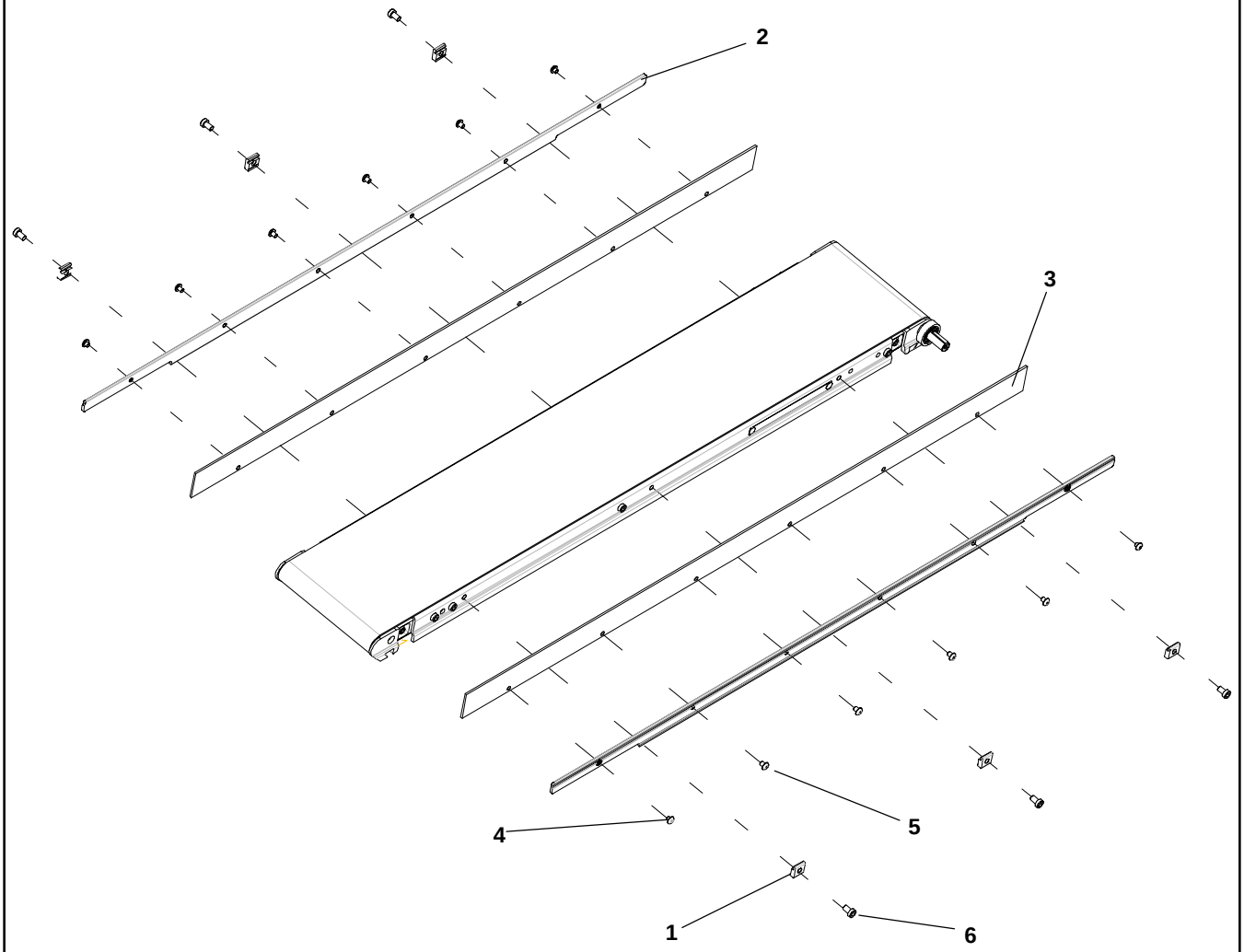
–04 76mm Bolt – On High Side



Item	Part Number	Description
1	460250	Clip Mounting Guide
2	460432	Rail guide 13mm w/holes x 610mm
	460433	Rail guide 13mm w/holes x 914mm
	460434	Rail guide 13mm w/holes x 1219mm
	460435	Rail guide 13mm w/holes x 1524mm
	460436	Rail guide 13mm w/holes x 1829mm
3	460452M	Guide Side #4 – 610mm
	460453M	Guide Side #4 – 914mm
	460454M	Guide Side #4 – 1219mm
	460455M	Guide Side #4 – 1524mm
	460456M	Guide Side #4 – 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

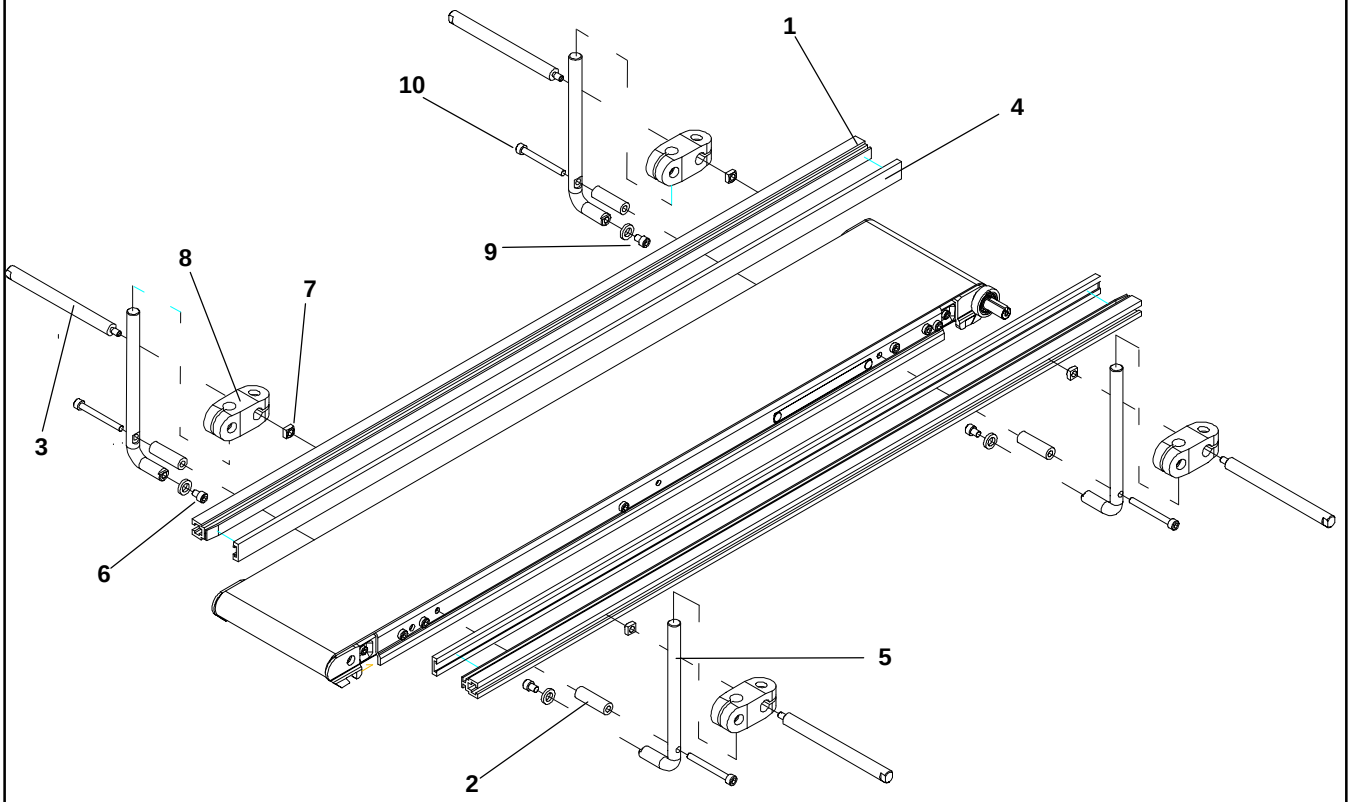
–05 38mm Bolt – On High Side



Item	Part Number	Description
1	460250	Guide Mounting Clip
2	460432	Rail guide 13mm w/holes x 610mm
	460433	Rail guide 13mm w/holes x 914mm
	460434	Rail guide 13mm w/holes x 1219mm
	460435	Rail guide 13mm w/holes x 1524mm
	460436	Rail guide 13mm w/holes x 1829mm
3	460452M	Guide Side #4 – 610mm
	460453M	Guide Side #4 – 914mm
	460454M	Guide Side #4 – 1219mm
	460455M	Guide Side #4 – 1524mm
	460456M	Guide Side #4 – 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

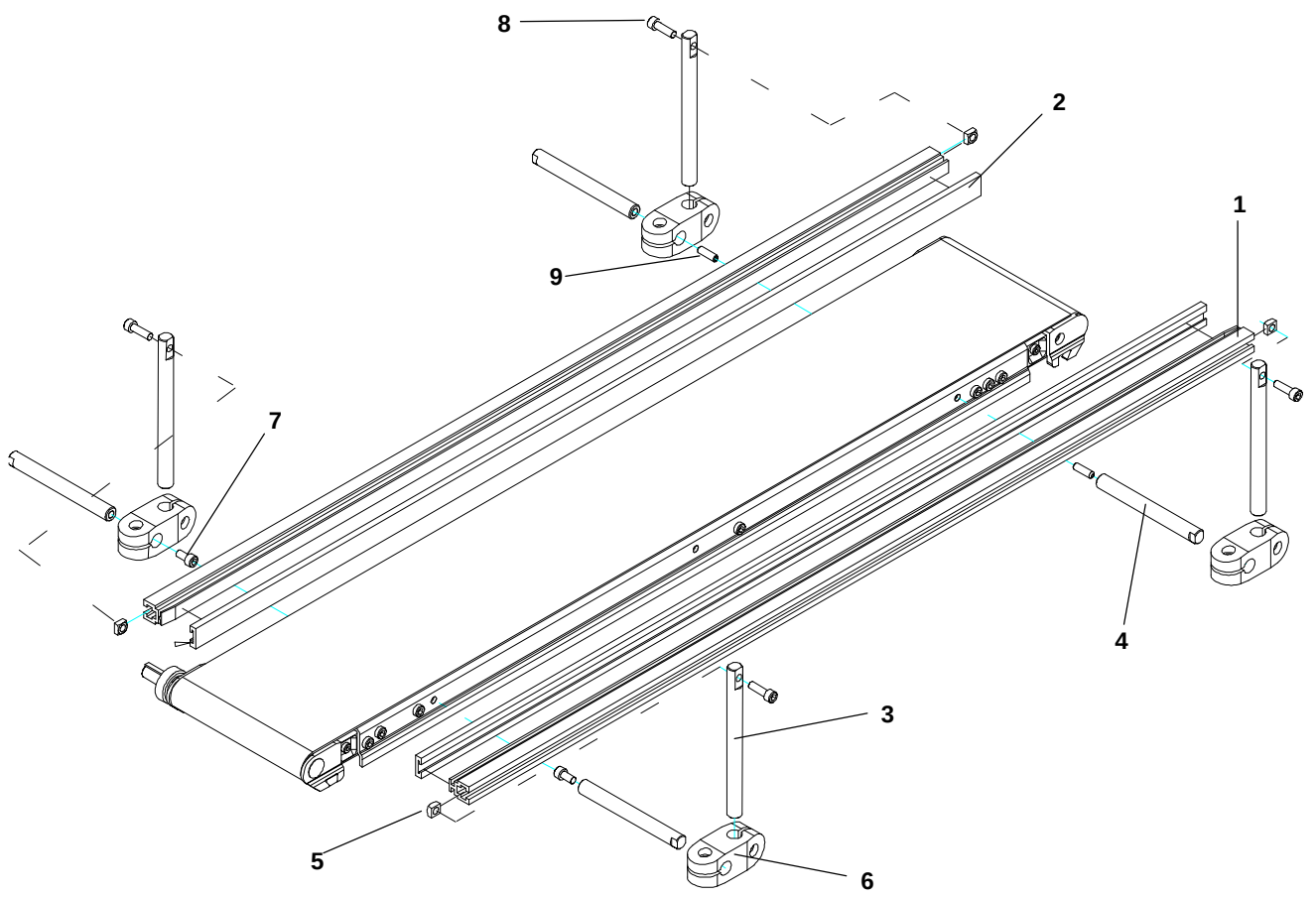
–13 Fully Adjustable UHMW Guide



Item	Part Number	Description
1	202983	Guide Mounting Rail 610mm
	202984	Guide Mounting Rail 914mm
	202985	Guide Mounting Rail 1219mm
	202986	Guide Mounting Rail 1524mm
	202987	Guide Mounting Rail 1829mm
	202988	Guide Mounting Rail 2134mm
	202989	Guide Mounting Rail 2438mm
	202990	Guide Mounting Rail 2743mm
	202991	Guide Mounting Rail 3053mm
	202992	Guide Mounting Rail 3353mm
	202993	Guide Mounting Rail 3658mm
	202994	Guide Mounting Rail 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

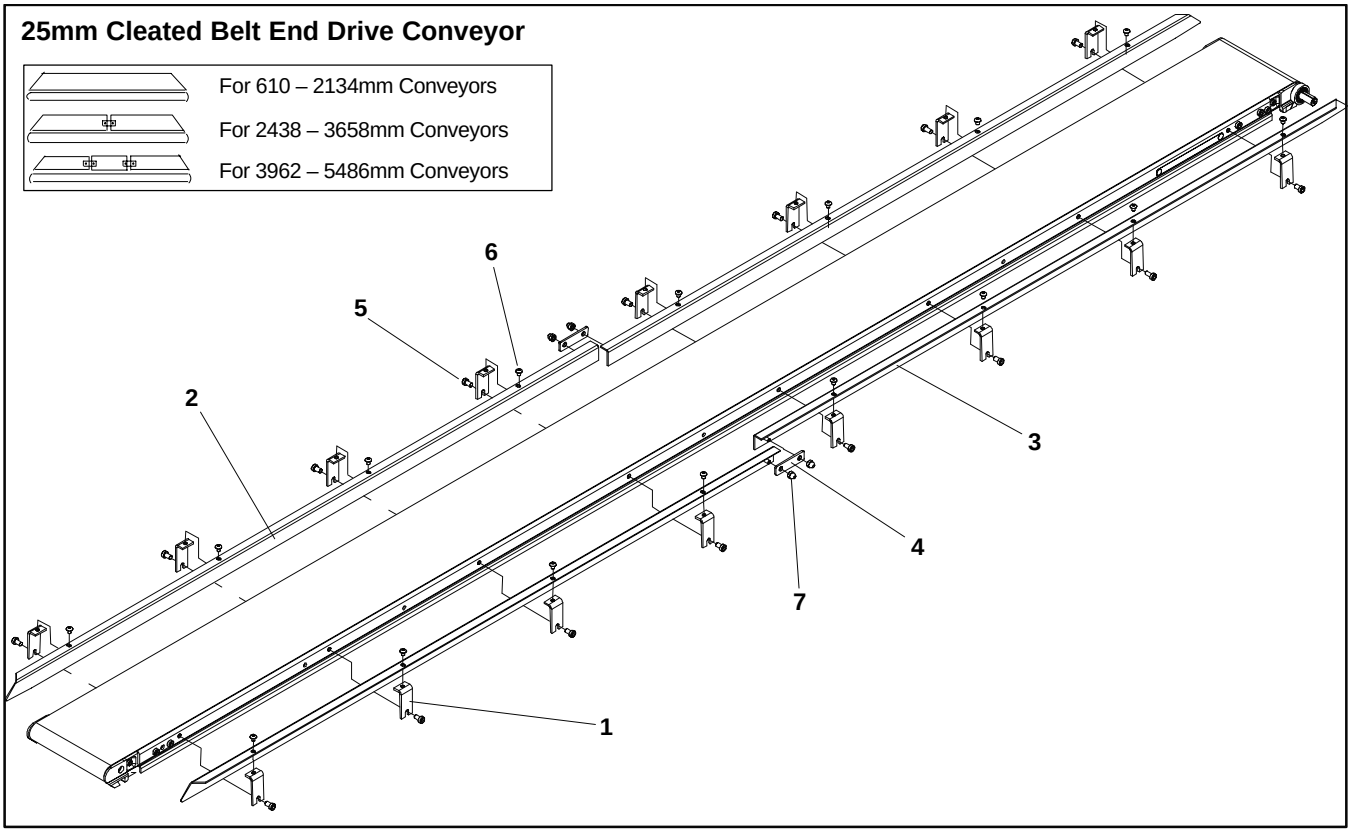


Item	Part Number	Description
1	202983	Guide Mounting Rail 610mm
	202984	Guide Mounting Rail 914mm
	202985	Guide Mounting Rail 1219mm
	202986	Guide Mounting Rail 1524mm
	202987	Guide Mounting Rail 1829mm
	202988	Guide Mounting Rail 2134mm
	202989	Guide Mounting Rail 2438mm
	202990	Guide Mounting Rail 2743mm
	202991	Guide Mounting Rail 3048mm
	202992	Guide Mounting Rail 3353mm
	202993	Guide Mounting Rail 3658mm
	202994	Guide Mounting Rail 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

Service Parts

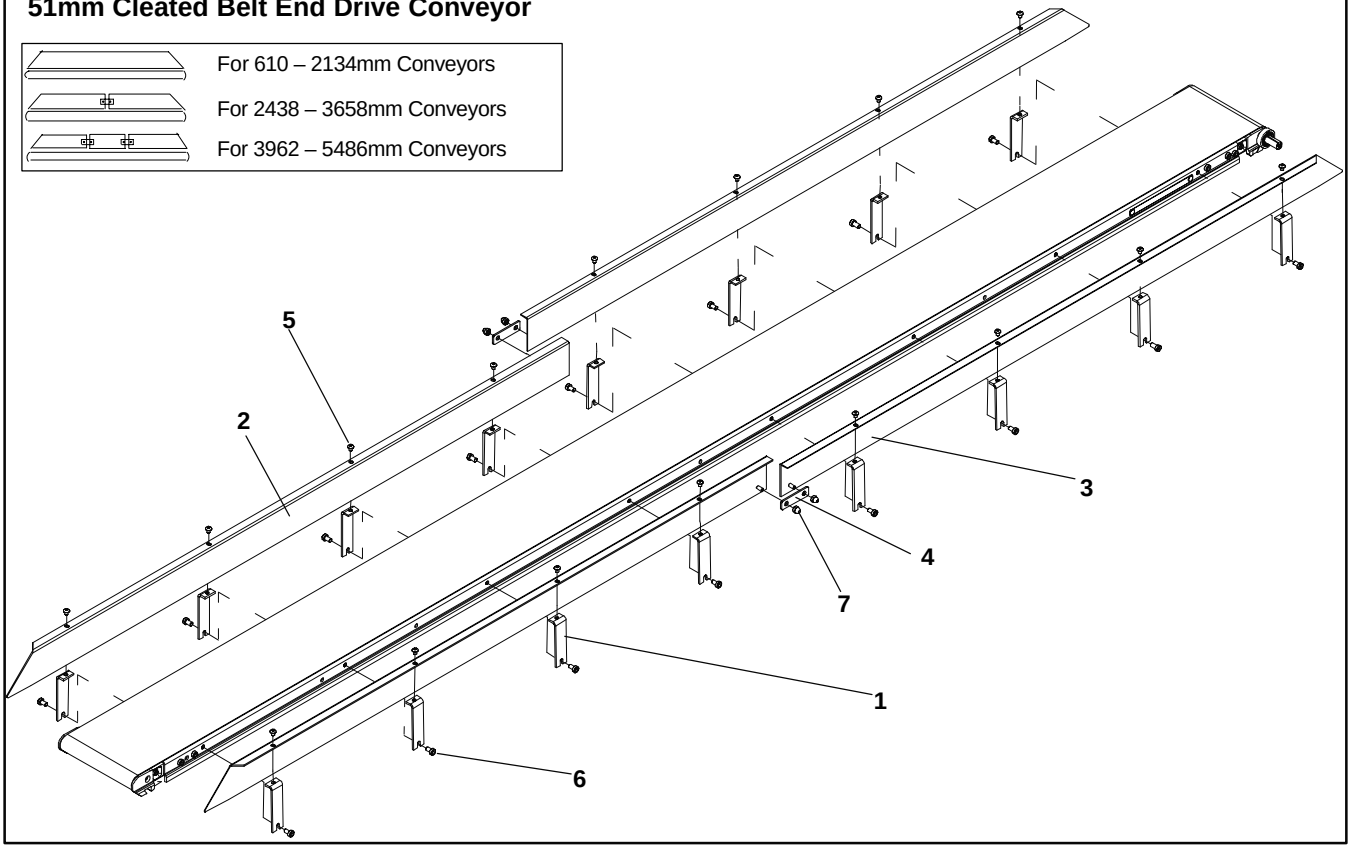
25mm Cleated Belt End Drive Conveyor



Item	Part Number	Description
1	462150MSS	25mm Guide Mounting Bracket
2	See chart below	25mm Guide RH
3	See chart below	25mm Guide LH
4	450188SS	Guide Tie Plate
5	920691M	M6–1.0 x 10mm Low Head Screw
6	910506M	M5–0.8 x 6mm Button Head Screw
7	990508MSS	M5 Acorn Nut

Conveyor Length		End Guide	Center Guide	End Guide
610mm	Right Hand	462132SSP	N/A	N/A
	Left Hand	462132SSP	N/A	N/A
914mm	Right Hand	462133SSP	N/A	N/A
	Left Hand	462133SSP	N/A	N/A
1219mm	Right Hand	462134SSP	N/A	N/A
	Left Hand	462134SSP	N/A	N/A
1524mm	Right Hand	462135SSP	N/A	N/A
	Left Hand	462135SSP	N/A	N/A
1829mm	Right Hand	462136SSP	N/A	N/A
	Left Hand	462136SSP	N/A	N/A
2134mm	Right Hand	462137SSP	N/A	N/A
	Left Hand	462137SSP	N/A	N/A
2438mm	Right Hand	462144SSP	N/A	462154SSP
	Left Hand	462154SSP	N/A	462144SSP
2743mm	Right Hand	462144SSP	N/A	462154SSP
	Left Hand	462145SSP	N/A	462155SSP
3048mm	Right Hand	462155SSP	N/A	462145SSP
	Left Hand	462145SSP	N/A	462155SSP
3353mm	Right Hand	462146SSP	N/A	462156SSP
	Left Hand	462145SSP	N/A	462155SSP
3658mm	Right Hand	462146SSP	N/A	462156SSP
	Left Hand	462156SSP	N/A	462146SSP
3962mm	Right Hand	462146SSP	462163SSP	462156SSP
	Left Hand	462144SSP	462163SSP	462154SSP
4267mm	Right Hand	462146SSP	462163SSP	462156SSP
	Left Hand	462145SSP	462163SSP	462155SSP
4572mm	Right Hand	462146SSP	462163SSP	462156SSP
	Left Hand	462156SSP	462163SSP	462146SSP
4877mm	Right Hand	462146SSP	462166SSP	462156SSP
	Left Hand	462144SSP	462166SSP	462154SSP
5182mm	Right Hand	462146SSP	462166SSP	462156SSP
	Left Hand	462145SSP	462166SSP	462155SSP
5486mm	Right Hand	462146SSP	462166SSP	462156SSP
	Left Hand	462156SSP	462166SSP	462146SSP

51mm Cleated Belt End Drive Conveyor

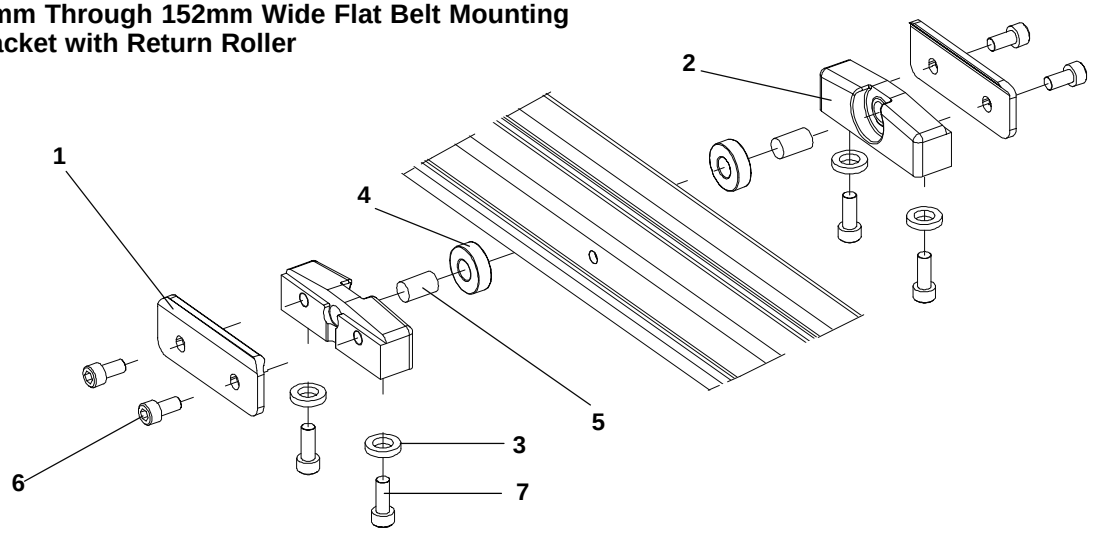


Item	Part Number	Description
1	462250MSS	51mm Guide Mounting Bracket
2	See chart below	51mm Guide RH
3	See chart below	51mm Guide LH
4	450188SS	Guide Tie Plate
5	920691M	M6–1.0 x 10mm LowHead Screw
6	910506M	M5–0.8 x 6mm Button Head Screw
7	990508MSS	M5 Acorn Nut

Conveyor Length		End Guide	Center Guide	End Guide
610mm	Right Hand	462232SSP	N/A	N/A
	Left Hand	462232SSP	N/A	N/A
914mm	Right Hand	462233SSP	N/A	N/A
	Left Hand	462233SSP	N/A	N/A
1219mm	Right Hand	462234SSP	N/A	N/A
	Left Hand	462234SSP	N/A	N/A
1524mm	Right Hand	462235SSP	N/A	N/A
	Left Hand	462235SSP	N/A	N/A
1829mm	Right Hand	462236SSP	N/A	N/A
	Left Hand	462236SSP	N/A	N/A
2134mm	Right Hand	462237SSP	N/A	N/A
	Left Hand	462237SSP	N/A	N/A
2438mm	Right Hand	462244SSP	N/A	462254SSP
	Left Hand	462254SSP	N/A	462244SSP
2743mm	Right Hand	462244SSP	N/A	462254SSP
	Left Hand	462245SSP	N/A	462255SSP
3048mm	Right Hand	462255SSP	N/A	462245SSP
	Left Hand	462245SSP	N/A	462255SSP
3353mm	Right Hand	462246SSP	N/A	462256SSP
	Left Hand	462245SSP	N/A	462255SSP
3658mm	Right Hand	462246SSP	N/A	462256SSP
	Left Hand	462256SSP	N/A	462246SSP
3962mm	Right Hand	462246SSP	462263SSP	462256SSP
	Left Hand	462244SSP	462263SSP	462254SSP
4267mm	Right Hand	462246SSP	462263SSP	462256SSP
	Left Hand	462245SSP	462263SSP	462255SSP
4572mm	Right Hand	462246SSP	462263SSP	462256SSP
	Left Hand	462256SSP	462263SSP	462246SSP
4877mm	Right Hand	462246SSP	462266SSP	462256SSP
	Left Hand	462244SSP	462266SSP	462254SSP
5182mm	Right Hand	462246SSP	462266SSP	462256SSP
	Left Hand	462245SSP	462266SSP	462255SSP
5486mm	Right Hand	462246SSP	462266SSP	462256SSP
	Left Hand	462256SSP	462266SSP	462246SSP

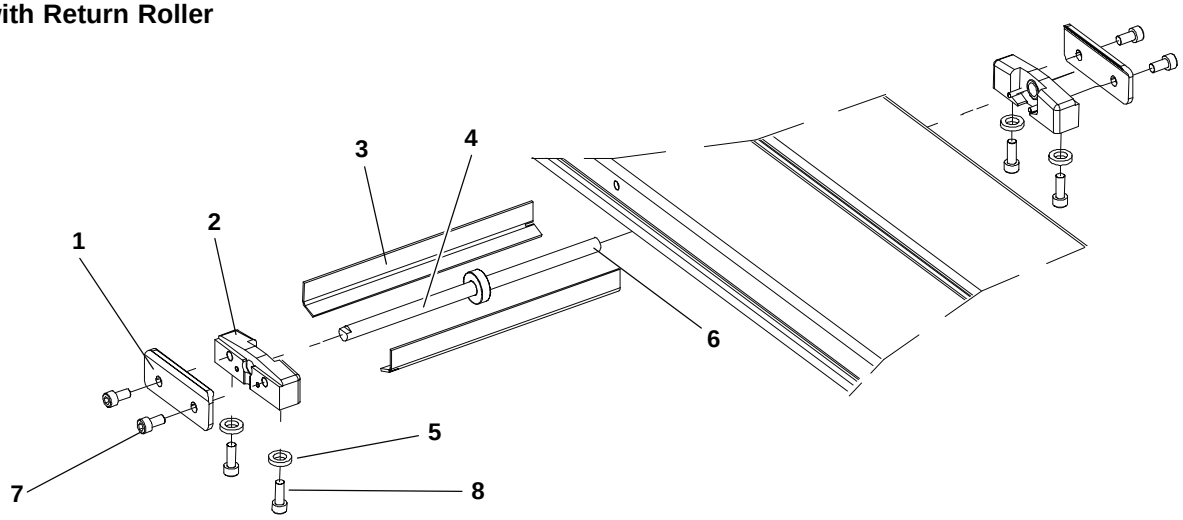
Service Parts

51mm Through 152mm Wide Flat Belt Mounting Bracket with Return Roller



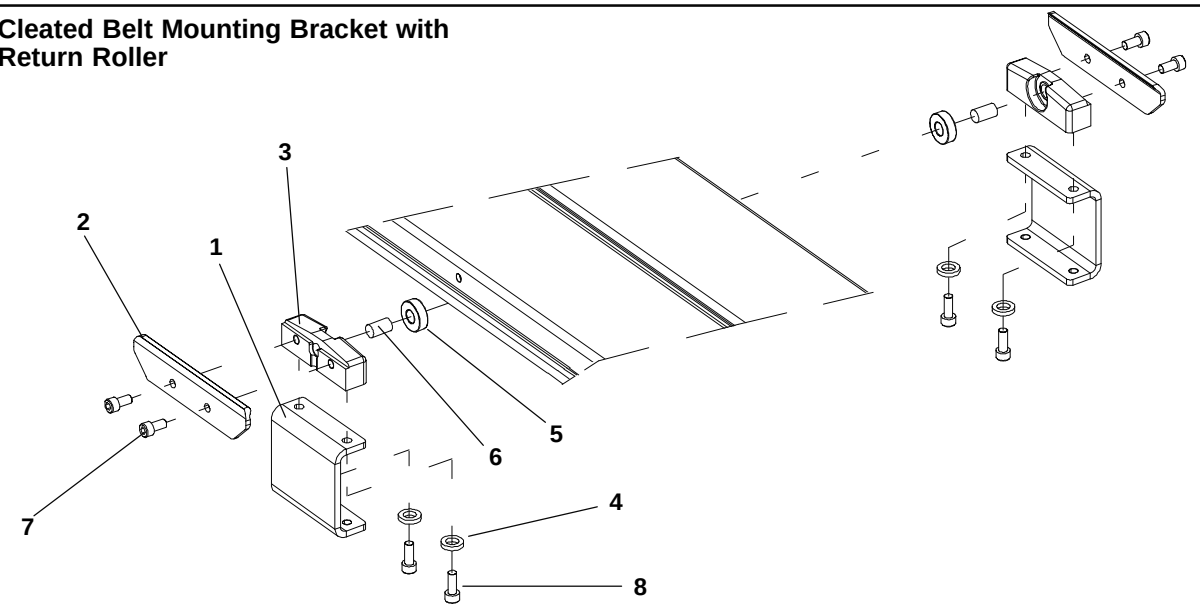
Item	Part Number	Description
1	492564M	Clamp Plate
2	493026M	Mounting Block
3	605279P	Washer
4	802–123	Bearing
5	913–103	Dowel Pin
6	920612M	Socket Head Cap Screw Metric M6 – 1.0 x 12mm
7	920616M	Socket Head Cap Screw Metric M5–.8 x 16mm

203mm Through 457mm 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 203mm
	493110SSP	Bottom Roller Guard 254mm
	493112SSP	Bottom Roller Guard 305mm
	493118SSP	Bottom Roller Guard 457mm
4	493308SS	Shaft Assembly Belt Support 203mm
	493310SS	Shaft Assembly Belt Support 254mm
	493312SS	Shaft Assembly Belt Support 305mm
	493318SS	Shaft Assembly Belt Support 457mm
5	605279P	Hard Washer
6	807–1019	Groove Pin
7	920612M	Socket Head Cap Screw Metric M6–1.0 x 12mm
8	920616M	Socket Head Cap Screw Metric M6–1.0 x 16mm

Cleated Belt Mounting Bracket with Return Roller



Item	Part Number	Description
1	492565M	Bracket Riser Cleated Stand
2	492566M	Clamp Plate
3	493026M	Mounting Block
4	605279P	Washer
5	802–123	Bearing
6	913–103	Dowel Pin
7	920612M	Socket Head Cap Screw Metric M6–1.0 x 12mm
8	920616M	Socket Head Cap Screw Metric M6–1.0 x 16mm

Configuring Conveyor Belt Part Number

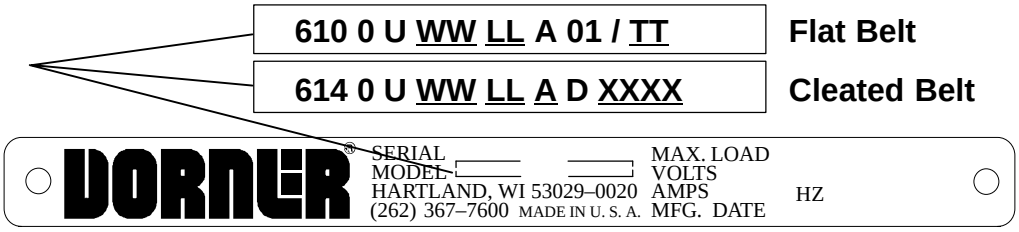


Figure 55

Flat Belt Conveyor

Refer to your serial and model number plate (Figure 55). Determine conveyor length ("LL"), width ("WW") and belt type ("TT").

61 – WW LL / TT

61- __ __ __ __ / __ __
(Fill In)

Cleated Belt Conveyor

Refer to your serial and model number plate (Figure 55). Determine conveyor length ("LL"), width ("WW"), cleat type ("AA") and cleat spacing ("XXXX").

64 – WW LL AA XXXX

64 - __ __ __ __ __ __ __ __ __ __
(Fill In)

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

DORNER MFG. CORP.
975 Cottonwood Drive, PO Box 20
Hartland, WI 53029-0020 USA
USA
TEL 1-800-397-8664 (USA)
FAX 1-800-369-2440 (USA)
Outside the USA:
TEL 1-262-367-7600, FAX 1-262-367-5827
Internet: www.dorner.com