DORNER®

Installation, Maintenance & Parts Manual

6100 Series Industrial Center Drive Conveyors



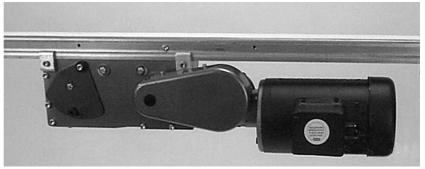


Table of Contents

Warnings – General Safety	Conveyor Belt Tensioning	13
Introduction	Pulley Removal	
Product Description	A – Tension End Pulley Removal	14
Specifications	B – Fixed End Pulley Removal	
Installation	C – Drive Pulley Removal	
Required Tools 5	D – Idler Pulley Removal	15
Standard Tools 5	Bearing Replacement for Tension End	
Recommended Installation Sequence 5	and Fixed End Pulleys	15
Conveyors Up to 3962 mm	Bearing Removal	
Conveyors Longer Than 3962 mm 5	Bearing Installation	
Mounting Brackets with Return Rollers 6	Bearing Replacement for Drive Pulley	
44 mm to 152 mm Wide Flat Belt Conveyors 6	Bearing Removal	
203 mm & Wider Flat Belt Conveyors 6	Bearing Installation	
Preventative Maintenance & Adjustment 7	Bearing Replacement for Idler Pulleys	
Required Tools	Pulley Replacement	
Standard Tools	Service Parts	
Special Tools	6100 Industrial Center Drive Conveyor	
Checklist	6100 Industrial Center Drive Conveyor Extension	18
Lubrication	6100 Center Drive Module	
Conveyors	127mm Through 457mm Wide Conveyors	20
Mounting Brackets with Return Rollers 7	6100 Center Drive Module	_
Maintaining Conveyor Belt 7	51mm Through 102mm Wide Conveyors	
Troubleshooting 7	-02 13mm Bolt on High Side	
Cleaning 7	-03 Bolt on Side Wiper	
Conveyor Belt Replacement	-04 76mm Bolt on High Side-05 38mm Bolt on High Side	22
Conveyor Belt Replacement Sequence 7	-13 Fully Adjustable UHMW Guide	
Belt Removal for Conveyor Without	-20 Adjustable Width UHMW Guide	
Gearmotor Mounting Package or Stands 8	51mm Through 152mm Wide Flat Belt Mounting	
Belt Removal for Conveyor With Stands	Bracket with Return Roller	27
and/or Gearmotor Mounting Package 9	203mm Through 457mm Wide Flat Belt Mounting	
Center Drive Module Removal 10	Bracket with Return Roller	
Belt Removal from Center Drive Module 10	Configuring Conveyor Belt Part Number	
Installing a New Conveyor Belt	Return Policy	30

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Warnings – General Safety



WARNING



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



A D

DANGER

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





DANGER

DO NOT OPERATE CONVEYORS IN AN EXPLOSIVE ENVIRONMENT.



A

WARNING

Exposed moving parts can cause severe injury.

LOCK OUT POWER before removing guards or performing maintenance.



A

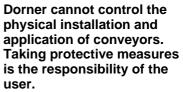
WARNING

Gearmotors may be HOT.

DO NOT TOUCH Gearmotors.



WARNING



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

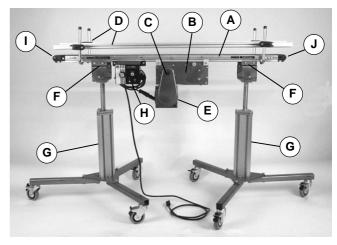
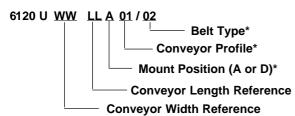


Figure 1

Specifications

Models:

6100 Series Industrial Center Drive Conveyor



* See "Ordering and Specifications" Catalog for details.

Conveyor Supports:

Maximum Distances:

K = 457 mm

L = 1829 mm**

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

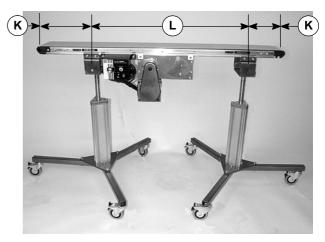


Figure 2

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	457mm
Maximum Conveyor Load* (See NOTE Below)	18 kg	23 kg	27 kg	34 kg	41 kg	47 kg	54 kg	54 kg	54kg
Conveyor Start-up Torque*	1.0 Nm	1.1 Nm	1.2 Nm	1.4 Nm	1.7 Nm	2.3 Nm	2.6 Nm	2.8 Nm	8.4Nm
Belt Travel	88 mm per revolution of pulley								
Maximum Belt Speed*	72 meters/minute								
Belt Take-up		25 mm of stroke = 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	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	5791 mm	6096 mm	6401 mm	6706 mm	7010 mm	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.

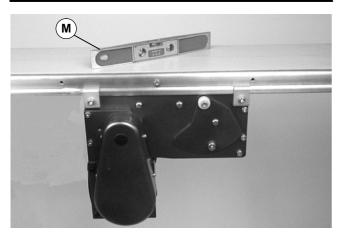


Figure 3

	Illustration References
M	Level
Ν	Conveyor frame without belt
0	M6 x 10 mm Low Head Socket Head Screws (6x) (shipped loose)
Р	Connector Strips (2x) (Attached to conveyor sec-
tion)	
Q	Conveyor frame with belt
R	Label
S	Screw
Т	Pinion Gear
U	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 3962 mm

No additional assembly is required.

Conveyors Longer Than 3962 mm

1. Typical components (Figure 4)

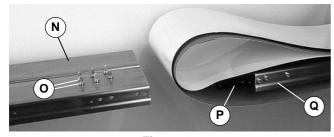


Figure 4

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.

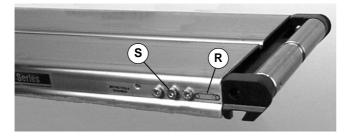


Figure 5

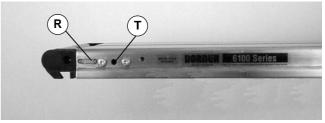


Figure 6

- **3.** Roll out conveyor belt.
- **4.** Place conveyor frame (N of Figure 7) into belt loop.

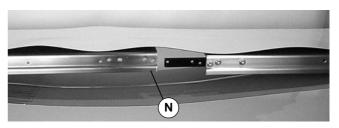


Figure 7

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

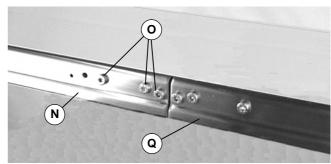


Figure 8

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

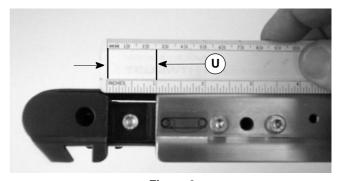


Figure 9

7. Tighten lock screw (S of Figure 5) to 4.5 Nm.

Installation

Mounting Brackets with Return Rollers 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).

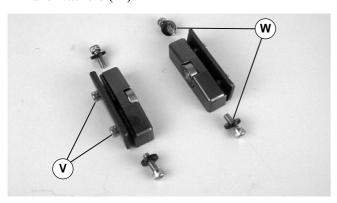


Figure 11

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

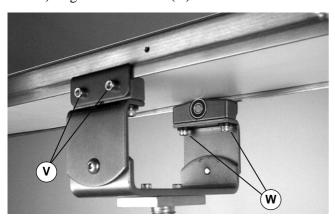


Figure 12

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

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).

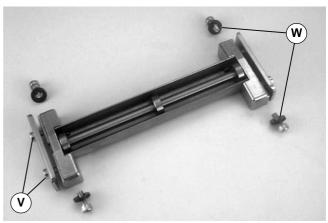


Figure 14

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

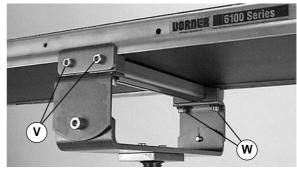


Figure 15

4. Attach to support stand. Tighten screws (W) to 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 <u>www.dorner.com</u> for complete list of troubleshooting solutions.

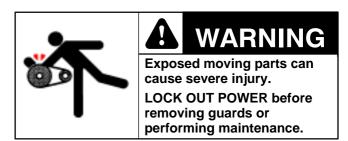
Cleaning

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



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).

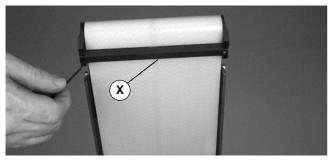


Figure 16

- **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).

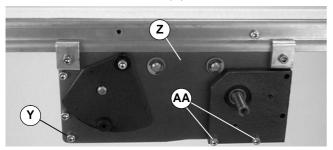


Figure 17

- **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.

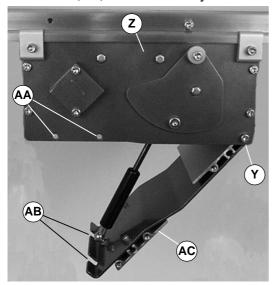


Figure 18

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.

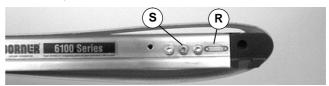


Figure 19



Figure 20

NOTE: On 1219 mm and shorter by 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. Horizontal mount and/or D1 position are similar.

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

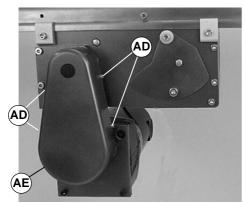


Figure 21

4. Loosen tensioner (AF of Figure 22).

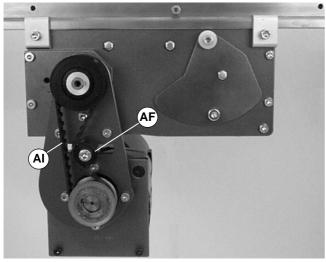


Figure 22

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).

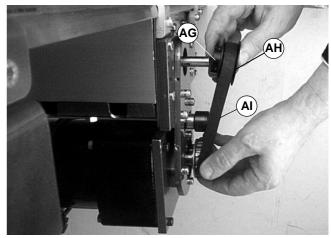


Figure 23

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

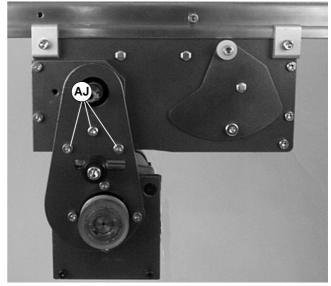


Figure 24

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 1219 mm and shorter by 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.

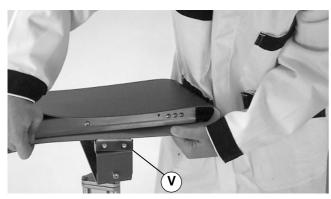


Figure 25

- **12.** With belt removed, secure conveyor with clamp plates (V).
- 13. Proceed to "Center Drive Module Removal".

Center Drive Module Removal



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.

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

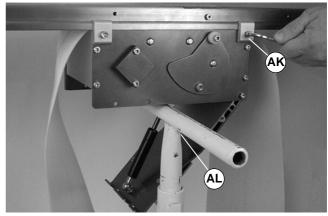


Figure 26

2. Remove module.

Belt Removal from Center Drive Module

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

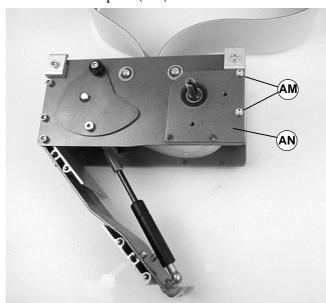


Figure 27

2. Remove drive pulley [AO of Figure 28, 44 mm, 70 mm or 95 mm wide conveyor] or [AO of Figure 29, 127 mm or wider conveyor].

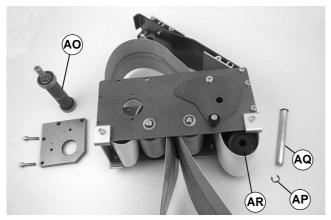


Figure 28

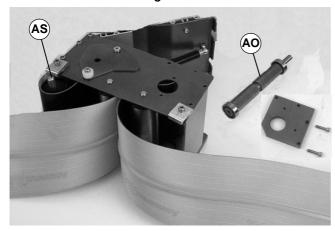


Figure 29

- **3.** Remove grooved idler pulley:
- For 44 mm, 70 mm or 95 mm wide conveyor, detach E-ring clip (AP of Figure 28). Remove pulley shaft (AQ) and remove pulley (AR).
- For 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).

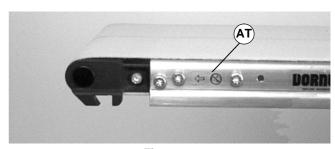


Figure 30

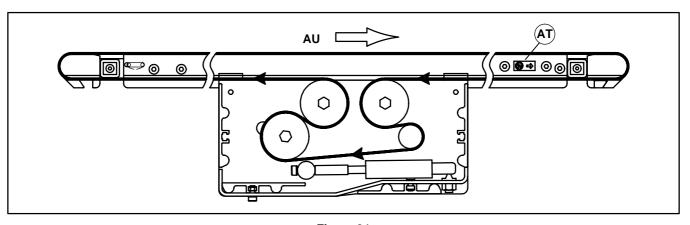


Figure 31

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).

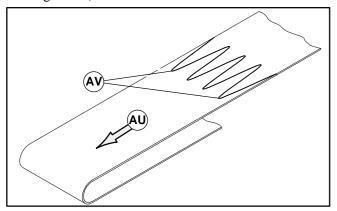


Figure 32

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

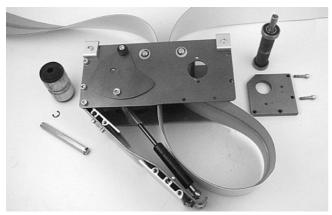


Figure 33

- **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 9 Nm.

NOTE: On 1219 mm and shorter by 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 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 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 25 mm (U of Figure 34).

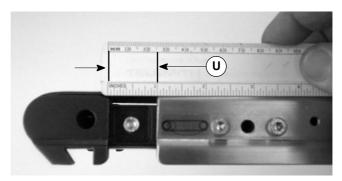


Figure 34

10. Tighten lock screw (S of Figure 19) to 4.5 Nm.



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

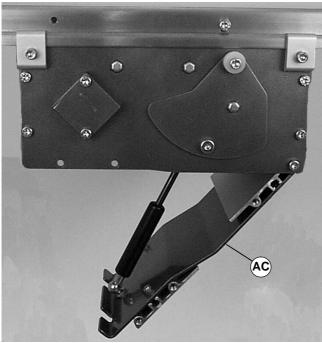


Figure 35

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

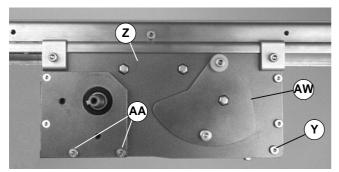


Figure 36

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



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).

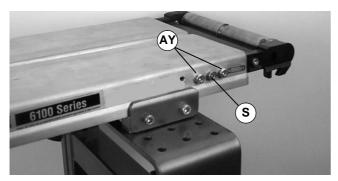


Figure 38

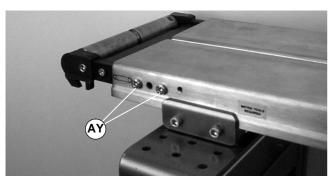


Figure 39

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.

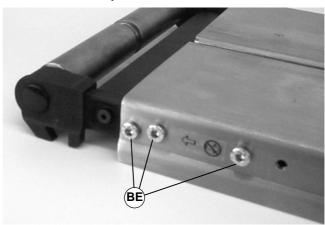


Figure 42

- 2. Remove fixed end tail assembly.
- **3.** Remove screw (BB of Figure 43).

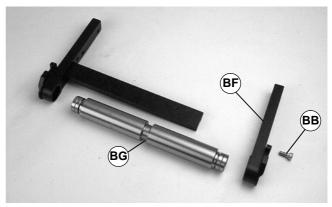


Figure 43

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

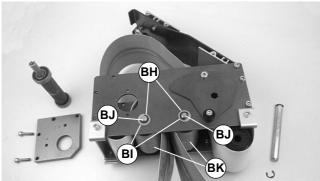


Figure 44

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

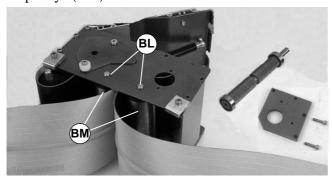


Figure 45

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.

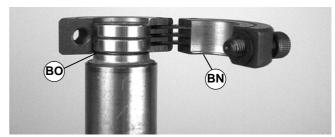


Figure 46

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).

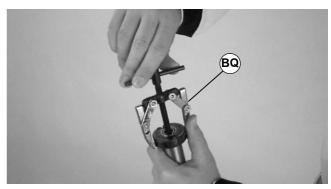


Figure 48

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.

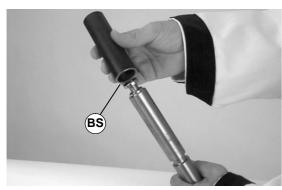


Figure 50

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

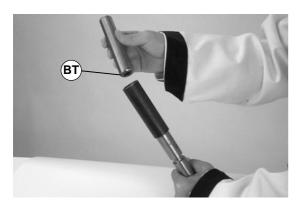


Figure 51

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.

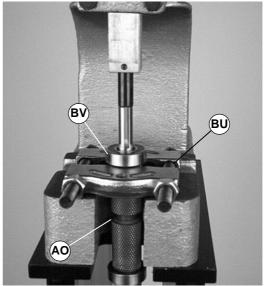


Figure 53

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).

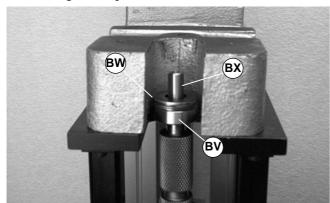


Figure 54

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

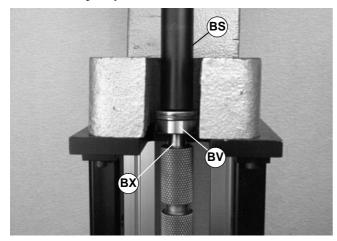


Figure 55

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 NO TAG.

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.

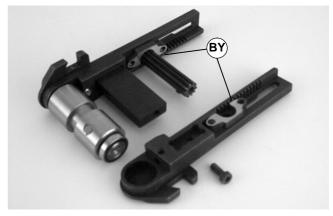


Figure 56

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

Fixed End Pulley

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

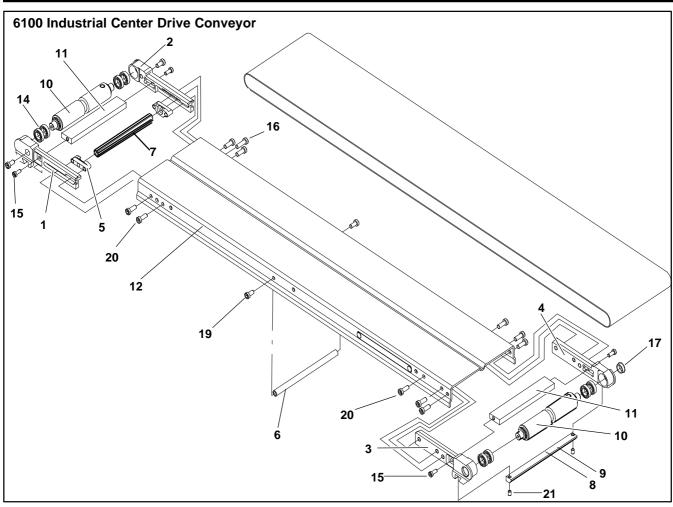
Drive Pulley

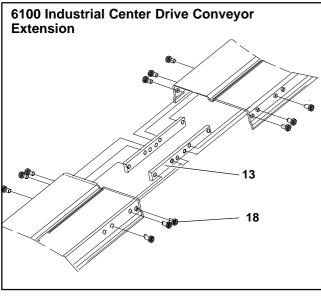
3. Reverse the removal procedure "C" (see page 15).

Idler Pulley

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

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





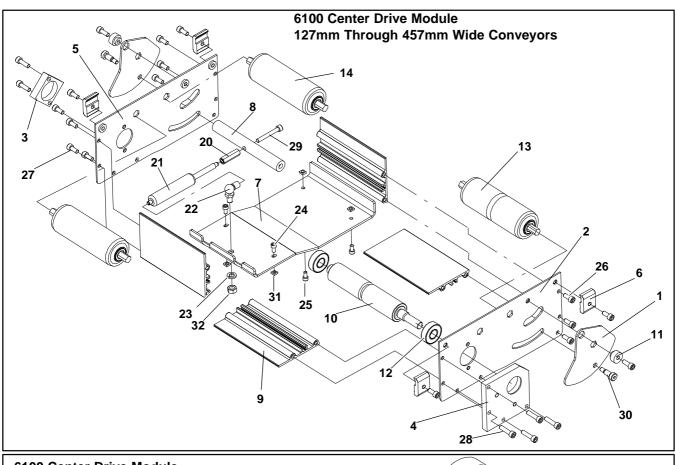
Item	Part Number	Description
1	450231M	Plate Tension RH 51–76mm Wide
	450031M	Plate Tension RH 102–457mm Wide

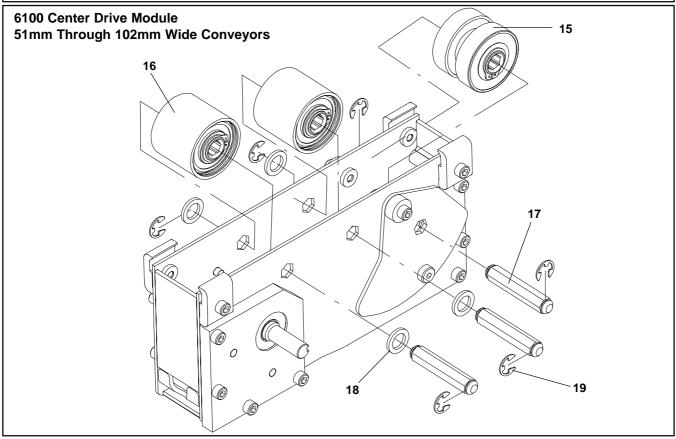
2	450232M	Plate Tension LH 51–76mm Wide
	450032M	Plate Tension LH 102–457mm Wide
3	450233M	Plate Fixed RH 51–76mm Wide
	450355M	Plate Fixed RH 102–457mm Wide
4	450234M	Plate Fixed LH 51–76mm Wide
	450356M	Plate Fixed LH 102–457mm Wide
5	450039M	Block Retainer Pinion
6	452502M	Post Support Frame 51mm
	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

	1	1
	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	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
		!

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 M580x12mm
16	807-1031	Socket Screw Metric M6–1/0X20
17	807–963	Hole Plug 51–76mm Wide
	807–1087	Hole Plug 102–457mm 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)			
610mm	47 <u>WW</u> 02M			
914mm	47 <u>WW</u> 03M			
1219mm	47 <u>WW</u> 04M			
1524mm	47 <u>WW</u> 05M			
1829mm	47 <u>WW</u> 06M			
2134mm	47 <u>WW</u> 07M			
2438mm	47 <u>WW</u> 08M			
2743mm	47 <u>WW</u> 09M			
3048mm	47 <u>WW</u> 10M			
3353mm	47 <u>WW</u> 11M			
3658mm	47 <u>WW</u> 12M			
3962mm	47 <u>WW</u> 07M 47 <u>WW</u> 13M			
4267mm	47 <u>WW</u> 08M 47 <u>WW</u> 13M			
4572mm	47 <u>WW</u> 09M 47 <u>WW</u> 13M			
4877mm	47 <u>WW</u> 09M 47 <u>WW</u> 13M			
5182mm	47 <u>WW</u> 09M 47 <u>WW</u> 13M			
5486mm	47 <u>WW</u> 09M 47 <u>WW</u> 13M			
5791mm	47 <u>WW</u> 09M 47 <u>WW</u> 13M			
6096mm	47 <u>WW</u> 09M 47 <u>WW</u> 13M			
6401mm	47 <u>WW</u> 09M 47 <u>WW</u> 13M			
6706mm	47 <u>WW</u> 09M 47 <u>WW</u> 13M			
7010mm	47 <u>WW</u> 09M 47 <u>WW</u> 13M			
7315mm	47 <u>WW</u> 09M 47 <u>WW</u> 13M			
<u>WW</u> = frame wid	th reference: 02, 03, 04, 05, 06, 08, 10, 12, 18			

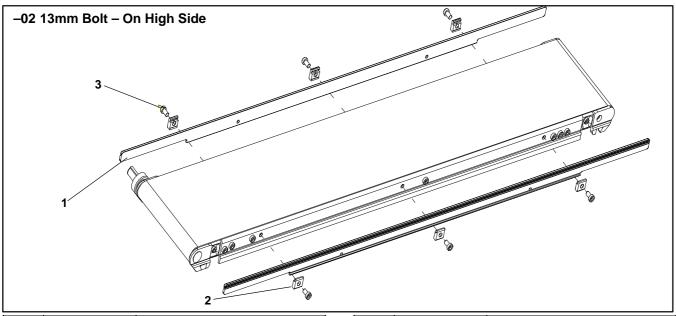




851-301 Rev. B

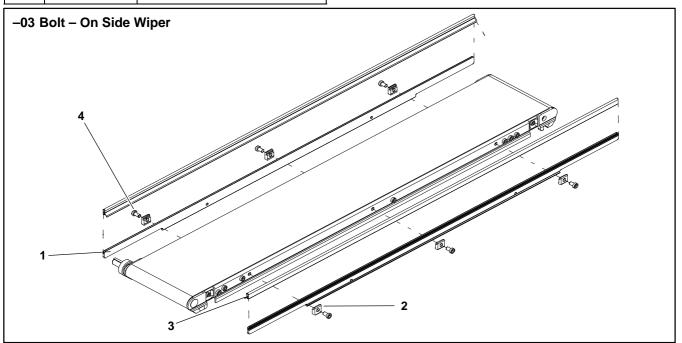
Item	Part Number	Description
1	463026M	Tension Plate Pivot
2	463027M	Side Plate RH
3	463028M	Mounting Block Bearing
4	463029M	Mounting Plate Bearing-Drive
5	463030M	Side Plate LH
6	463031	Mounting Clip
7	463202M	Cover Bottom Center Drive 51mm
	463203M	Cover Bottom Center Drive 76mm
	463204M	Cover Bottom Center Drive 102mm
	463205M	Cover Bottom Center Drive 127mm
	463206M	Cover Bottom Center Drive 152mm
	463208M	Cover Bottom Center Drive 203mm
	463210M	Cover Bottom Center Drive 254mm
	463212M	Cover Bottom Center Drive 305mm
	463218M	Cover Bottom Center Drive 457mm
8	463302M	Rod Tensioning Center Drive 51mm
	463303M	Rod Tensioning Center Drive 76mm
	463304M	Rod Tensioning Center Drive 102mm
	463305M	Rod Tensioning Center Drive 127mm
	463306M	Rod Tensioning Center Drive 152mm
	463308M	Rod Tensioning Center Drive 203mm
	463310M	Rod Tensioning Center Drive 254mm
	463312M	Rod Tensioning Center Drive 305mm
	463318M	Rod Tensioning Center Drive 457mm
9	463502M	Rail Support Center Drive 51mm
	463503M	Rail Support Center Drive 76mm
	463504M	Rail Support Center Drive 102mm
	463505M	Rail Support Center Drive 127mm
	463506M	Rail Support Center Drive 152mm
	463508M	Rail Support Center Drive 203mm
	463510M	Rail Support Center Drive 254mm
	463512M	Rail Support Center Drive 305mm
	463518M	Rail Support Center Drive 457mm
10	463702M	Spindle Center Drive 51mm
	463703M	Spindle Center Drive 76mm
	463704M	Spindle Center Drive 102mm
	463705M	Spindle Center Drive 127mm
	463706M	Spindle Center Drive 152mm
	463708M	Spindle Center Drive 203mm
	463710M	Spindle Center Drive 254mm
	463712M	Spindle Center Drive 305mm
	463718M	Spindle Center Drive 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 102mm (Note: Requires Shaft, see Item 17)
	807–1002	Roller 1.9" .44 Hex C-GRV 127mm
	807–1003	Roller 1.9" .44 Hex C-GRV 152mm
	807–1004	Roller 1.9" .44 Hex C-GRV 203mm
	807–1005	Roller 1.9" .44 Hex C-GRV 254mm
	807–1006	Roller 1.9" .44 Hex C-GRV 305mm
	807–1091	Roller 1.9" .44 Hex C-GRV 457mm
14	807–1007	Roller 1.9" .44 Hex SS Flat 76mm (Note: Requires Shaft, see Item 17)
	807–1008	Roller 1.9" .44 Hex SS Flat 102mm (Note: Requires shaft, see item 17)
	807–1009	Roller 1.9" .44 Hex SS Flat 127mm
	807–1010	Roller 1.9" .44 Hex SS Flat 152mm
	807–1011	Roller 1.9" .44 Hex SS Flat 203mm
	807–1012	Roller 1.9" .44 Hex SS Flat 254mm
	807–1013	Roller 1.9" .44 Hex SS Flat 305mm
	807–1088	Roller 1.9" .44 Hex SS Flat 457mm
15	463037	Pulley Assembly Grooved 51mm
	463038	Pulley Assembly Grooved 76mm
16	463040	Pulley Assembly Flat 51mm
17	463402	Shaft Hex 51mm
	463403	Shaft Hex 76mm
	463404	Shaft Hex 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 51mm Wide
	807–986	Gas Spring 76mm Wide
	807–985	Gas Spring 102mm-152mm Wide
	807–984	Gas Spring 203mm–457mm Wide
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	920645M	Socket Head Cap Screw Metric M6–1.0 x 45mm
30	940812M	Socket Head Cap Screw Shld Metric 8mm (Dia) x 12mm
31	990503M	Nut Square Heavy M580



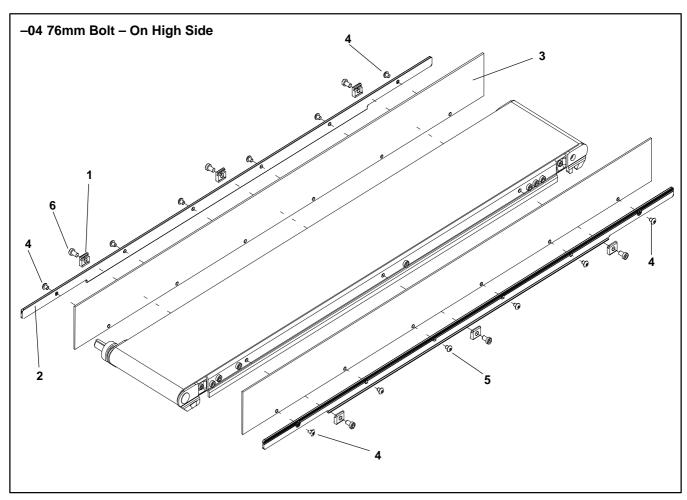
REF	P/N	Description
1	460232	Rail Guide 13mm HS x 610mm
	460233	Rail Guide 13mm HS x 914mm
	460234	Rail Guide 13mm HS x 1219mm
	460235	Rail Guide 13mm HS x 1524mm
	460236	Rail Guide 13mm HS x 1829mm

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



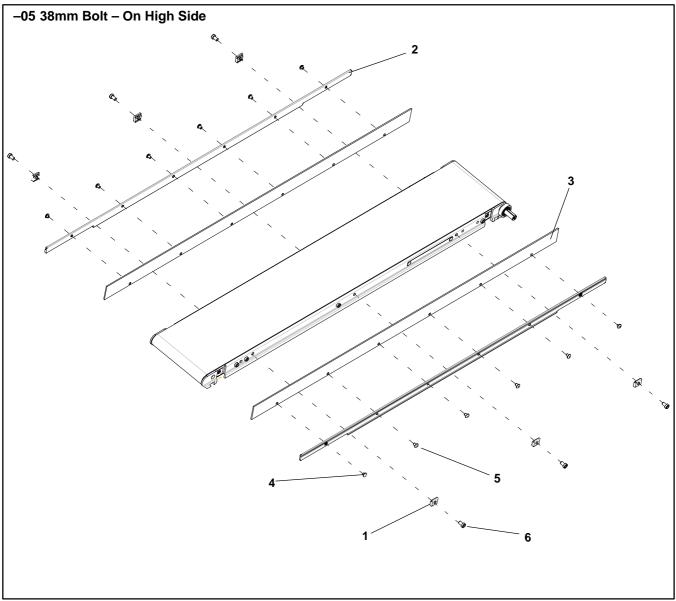
Item	Part Number	Description
1	460232	Rail Guide 13mm HS x 610mm
	460233	Rail Guide 13mm HS x 914mm
	460234	Rail Guide 13mm HS x 1219mm
	460235	Rail Guide 13mm HS x 1524mm
	460236	Rail Guide 13mm HS x 1829mm

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



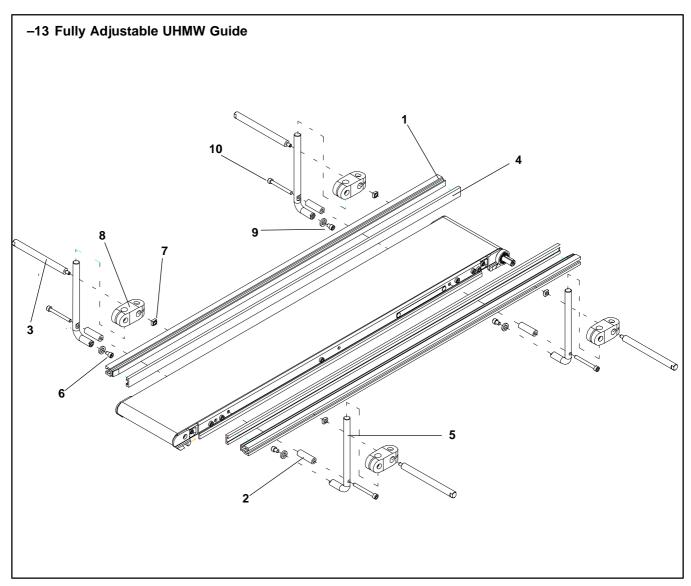
Item	Part Number	Description
1	460250	Clip Mounting Guide
2	460432	Rail guide 13mm HS w/holes x 610mm
	460433	Rail guide 13mm HS w/holes x 914mm
	460434	Rail guide 13mm HS w/holes x 1219mm
	460435	Rail guide 13mm HS w/holes x 1524mm
	460436	Rail guide 13mm HS w/holes x 1829mm
3	460452M	Guide Side #4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



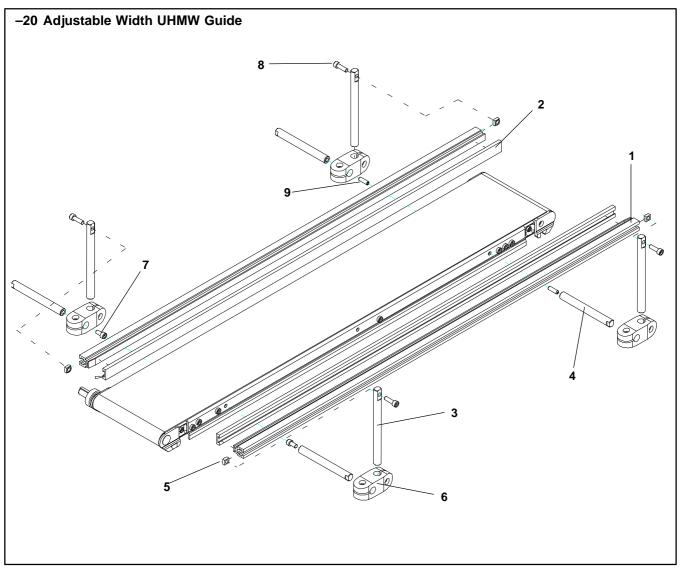
Item	Part Number	Description
1	460250	Guide Mounting Clip
2	460432	Rail guide 13mm HS w/holes x 610mm
	460433	Rail guide 13mm HS w/holes x 914mm
	460434	Rail guide 13mm HS w/holes x 1219mm
	460435	Rail guide 13mm HS w/holes x 1524mm
	460436	Rail guide 13mm HS w/holes x 1829mm
3	460452M	Guide Side #4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



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

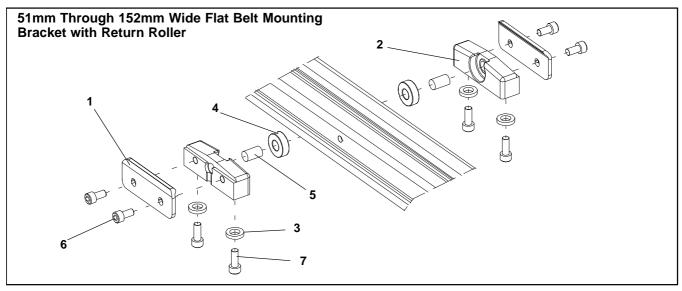
2	461351	Shaft Brace
3	202028M	Horizontal Shaft Mounting Guide
4	614068	Guide Extruded Flat (per foot)
5	461350M	Shaft Vertical Adj Guide
6	605279M	Hard washer
7	674175MP	Square Nut M6-1.0 w/1/4-20
8	807–652	Cross Block
9	920608M	Socket Head Cap Screw Metric M6–1.0 x 8mm
10	920655M	Socket Head Cap Screw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



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

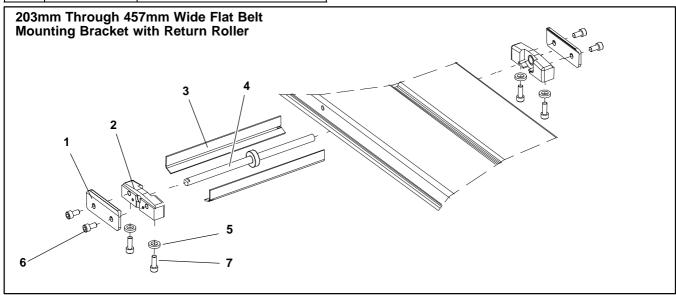
2	614068	Guide extruded flat (per foot)
3	462050M	Vertical Shaft Gullwing Guide
4	462052M	Horizontal Shaft Gullwing Guide
5	674175MP	Square Nut M6-1.0 w/1/4-20
6	807–652	Cross Block
7	920612M	Socket Head Cap Screw Metric M6–1.0 x 12mm
8	920620M	Socket Head Cap Screw Metric M6–1.0 x 20mm
9	970620M	Socket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

851-301 Rev. B



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



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	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

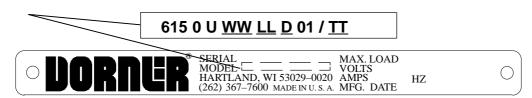


Figure 57

Conveyor Belt

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

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. reserves the right to change or discontinue products without notice. All products and services are covered in accordance with our standard warranty. All rights reserved. ©Dorner Mfg. Corp. 2000

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