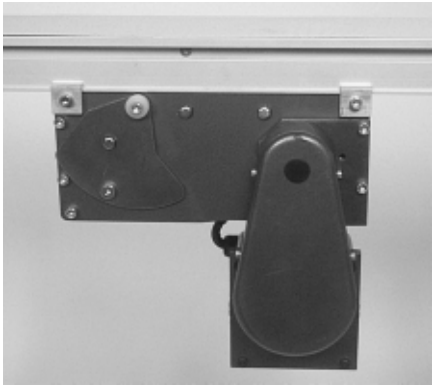
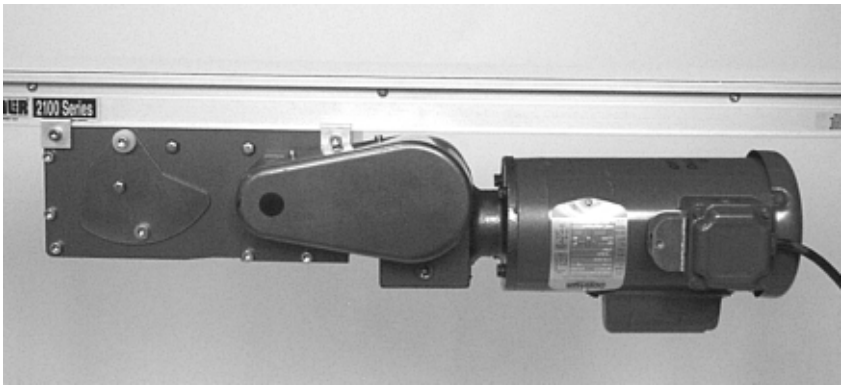
DORNER®

Set-up, Operation & Maintenance Manual

2100 Series Center Drive Conveyors





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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.

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

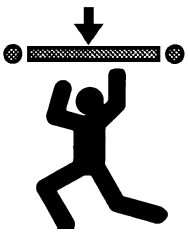
Gearmotors may be HOT.

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 2100 Series conveyors are covered by Patent No. 5,174,435, 5,131,529 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

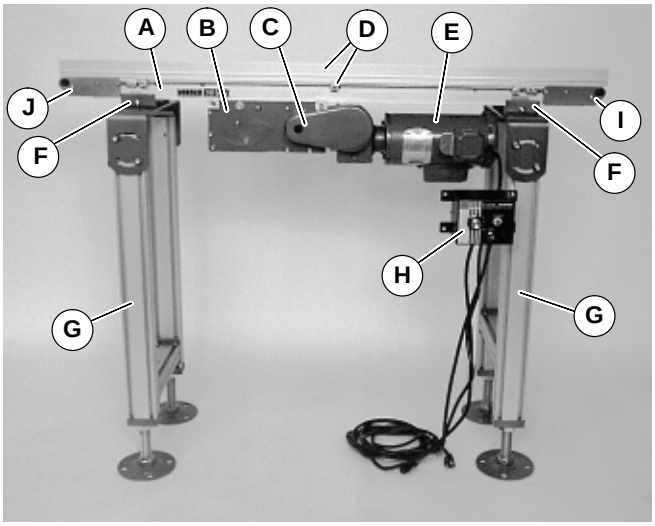


Figure 1

Specifications

Models:

2100 Series Center Drive Conveyor

2150 M WW LL A 01 / 02

- **Belt Type***
- **Conveyor Profile***
- **Mount Position (A or D)***
- **Conveyor Length Reference**
- **Conveyor Width Reference**

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

Conveyor Supports:

Maximum Distances:

K = 18.. (457 mm)

L = 6 ft (1829 mm)**

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

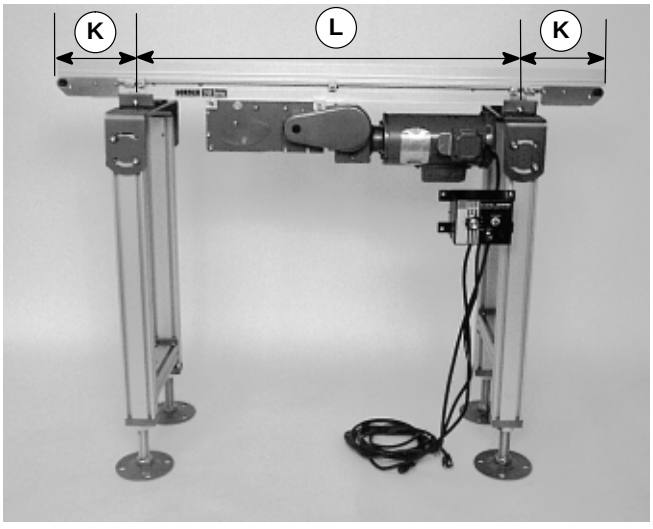


Figure 2

Specifications

Specifications:

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

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

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

NOTE: Maximum conveyor loads based on:

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

Installation

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

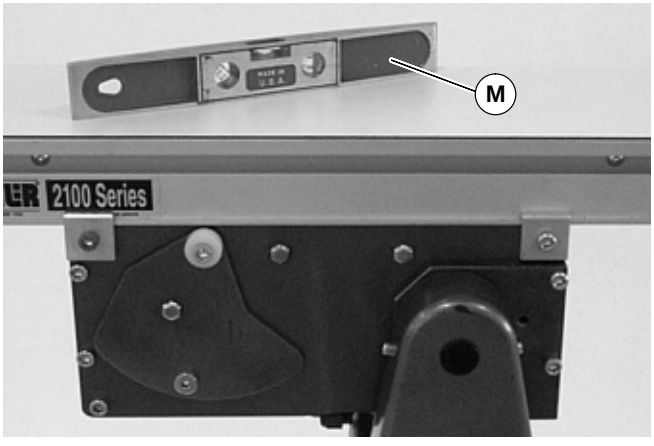


Figure 3

Installation Component List

N	Conveyor frame without belt
O	Conveyor frame with belt
P	Connector Strips (2x) (Attached to conveyor section)
Q	Mounting bracket with return roller
Z	Roller guards (2x)
AA	Mounting bracket end block (2x)

Required Tools

Standard Tools

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

Recommended Installation Sequence

NOTE: See Table of Contents for beginning page numbers of following procedures.

- Assemble conveyor (if required)
- Attach mounting bracket(s) with return roller to conveyor
- Install stands (see accessory instructions)
- Attach conveyor to stands
- Mount gearmotor mounting package (see accessory instructions)
- Attach guides/accessories (see accessory instructions)

Conveyors Up to 13 ft (3962 mm)

No additional assembly is required.

Conveyors Longer Than 13 ft (3962 mm)

1. Typical components (Figure 4)

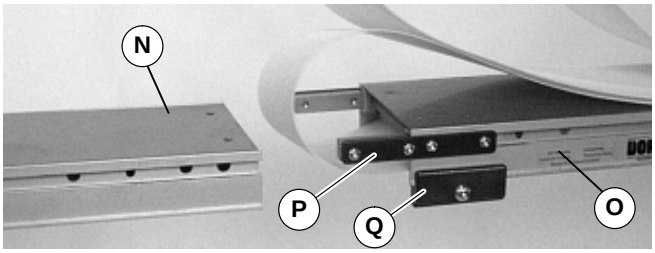


Figure 4

2. On tension end of the conveyor, identified with label (R of Figure 5), loosen tracking cam assemblies (S) and cover plate screws (T) on both sides of the conveyor.

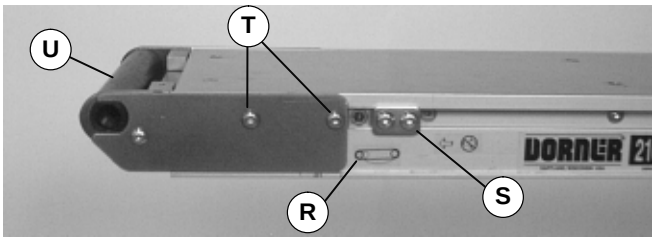


Figure 5

3. Slide the cam assemblies toward the center of the conveyor and push the end (U of Figure 5) into the conveyor frame.
4. Roll out conveyor belt.
5. Place conveyor frame (N of Figure 6) into belt loop.

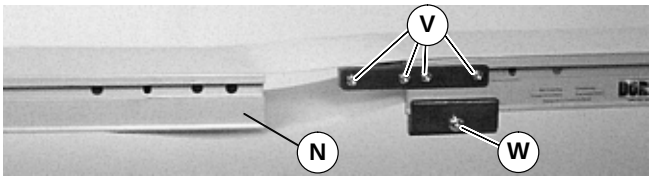


Figure 6

6. Loosen connector strip screws (V) and mounting bracket screws (W) on both sides of the conveyor.
7. Join conveyor sections (N and O of Figure 7). Position mounting bracket (P and Q) across conveyor sections.

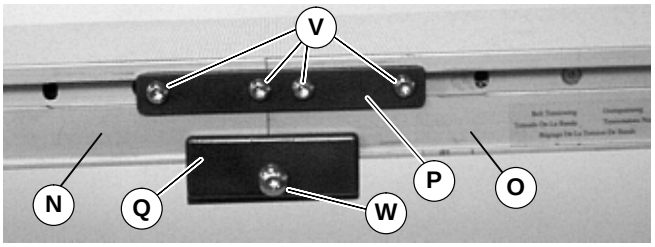


Figure 7

8. Tighten connector strip screws (V) to 18 in–lb (2 Nm). Tighten bracket screws (W) to 80 in–lb (9 Nm).
9. Insert a 5 mm hex key wrench into either end of the pinion gear (X of Figure 8). Rotate the pinion gear to extend the tensioning end gap (Y) to 1.19" (30 mm).

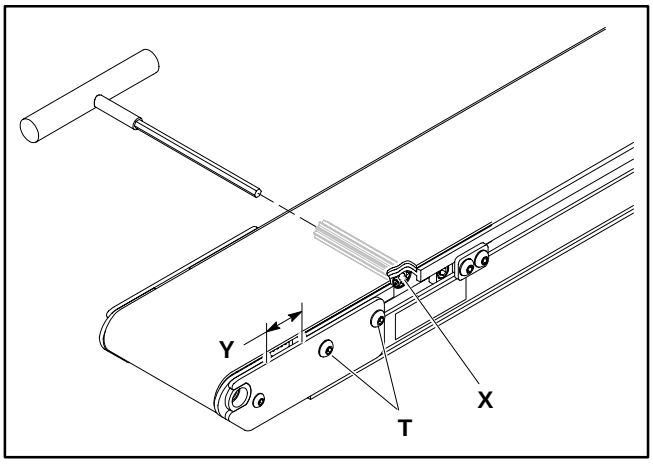


Figure 8

10. While holding the pinion gear (X), tighten cover plate screws (T) to 18 in-lb (2 Nm).

Mounting Brackets with Return Rollers

2¨ to12¨ (44 mm to 305 mm) Wide Flat Belt Conveyors

1. Typical components (Figure 9). Roller guards (Z) are shipped fastened to one end block (AA). Do NOT fasten to other block.

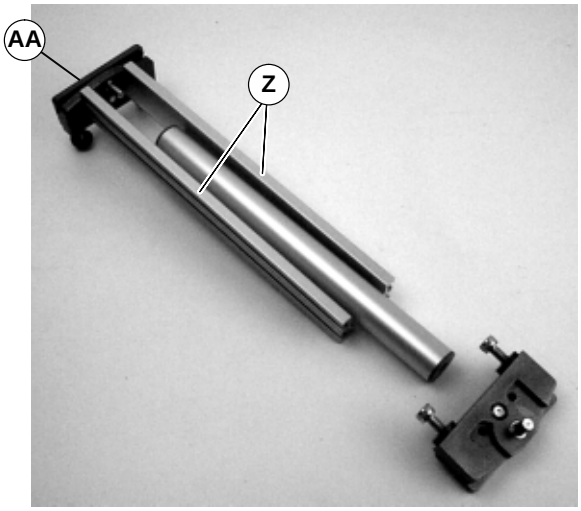


Figure 9

2. Loosen screws (AC of Figure 10) and remove screws and washers (AD).

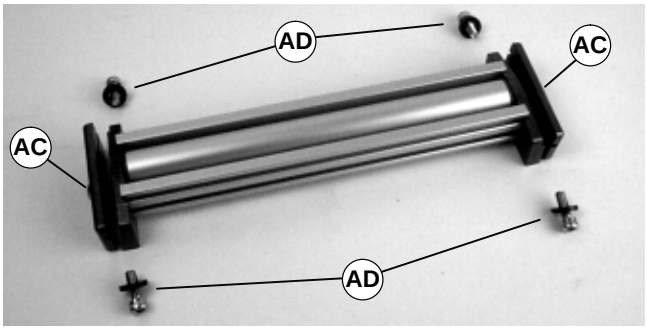


Figure 10

3. Attach clamp plates on each side of conveyor (Figure 11). Tighten the screws (AC) to 80 in-lb (9 Nm).

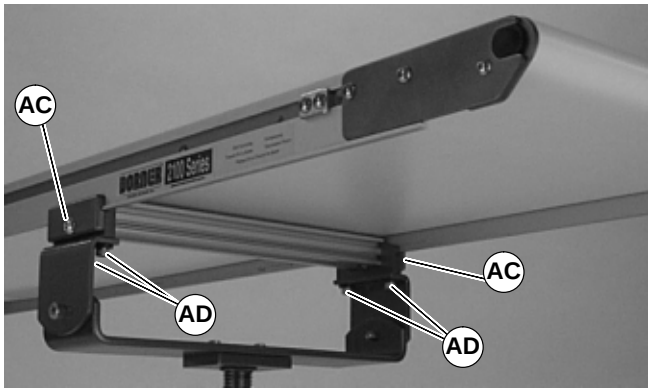


Figure 11

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

Required Tools

Standard Tools

- Hex key wrenches

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

- Small flat blade screwdriver
- Adjustable wrench
- Arbor press

Special Tools

- 2500M–ENG, 2100 Tool Kit
- 450282, Sealed Bearing Installation Tool

Checklist

- Keep service parts on hand. (See “Service Parts” for recommendations.)
- Keep supply of belt cleaner (part number 625619)
- Clean entire conveyor and knurled pulley while disassembled
- Replace worn or damaged parts

Lubrication

WARNING

Exposed moving parts can cause severe injury.

LOCK OUT POWER before removing guards or performing maintenance.

Pulley Bearings

NOTE:

Optional permanent grease fittings (part number 200398M) may be installed.

NOTE:

2″ (44 mm) wide conveyors use shielded ball bearings and do not require lubrication.

1. With a small flat-bladed screwdriver, remove plug (AE of Figure 12) from retainer (AF).

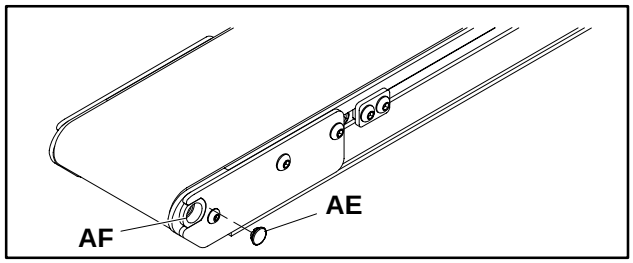


Figure 12

2. Install Dorner greasing adapter (AG of Figure 13), part number 200046M. Make sure the adapter shoulder is seated against the conveyor tail plate.

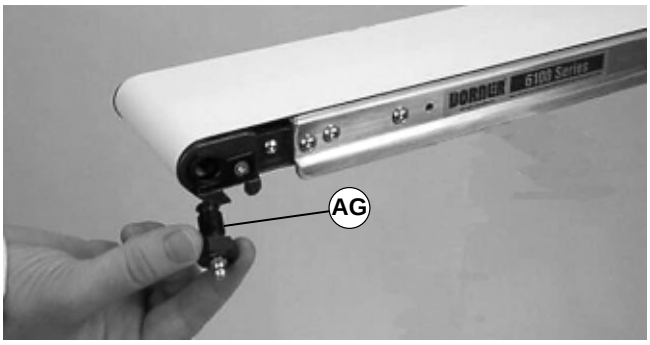


Figure 13

3. Use Dorner red grease, 14 oz (397 gram) cartridge (part # 829-002) or 14 oz (397 gram) can (part number 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.

Drive Module Idler Pulley Bearings

No lubrication is required. Replace pulley if worn.

Drive Module Drive Pulley Bearings

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

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

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 number 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

NOTE: See Table of Contents for beginning page numbers of following procedures.

- 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. From the discharge end, remove tail cover plate screws (AJ of Figure 14) from one side of the conveyor.

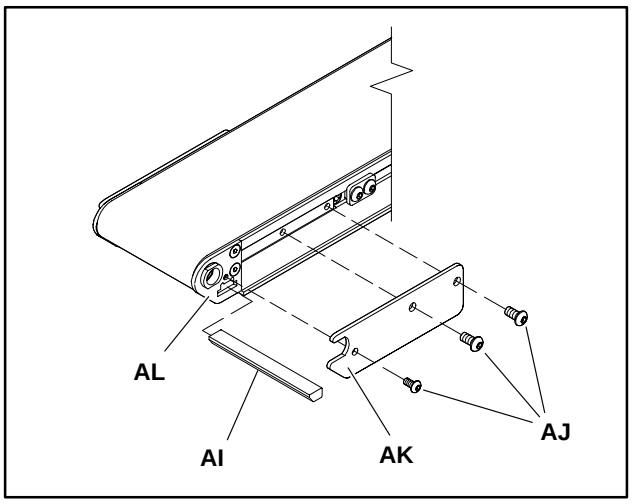


Figure 14

2. Remove tail cover plate (AK).
3. Slide bottom wiper (AI) through side slot of tail plate (AL).
4. If the conveyor is equipped with guiding and accessories, remove them from one side.

5. Loosen corner screws (AN of Figure 15), on each side of the center drive module (AO).

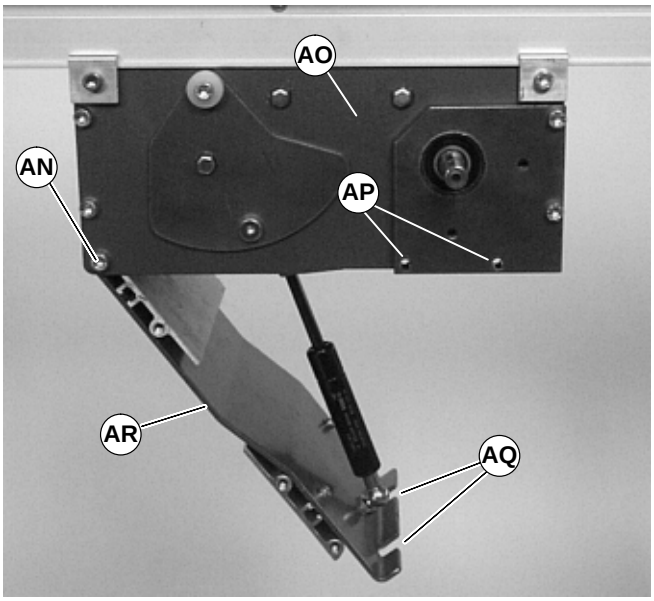


Figure 15

6. Remove tension door screws (AP) on each side of the center drive module.
7. Using finger grip holes (AQ), open the tension door (AR) to release conveyor belt tension.
8. On tension end of the conveyor, identified with label (AS of Figure 16), loosen tracking cam assemblies (AT) and cover plate screws (AU) on both sides of the conveyor.

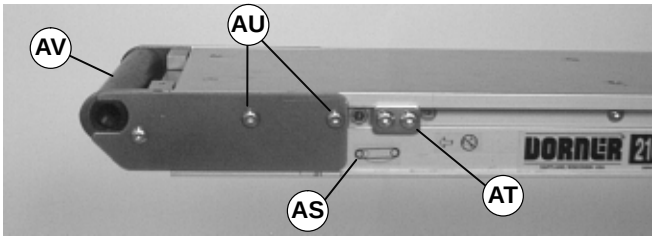


Figure 16

9. Slide the cam assemblies toward the center of the conveyor and push the end (AV) into the conveyor frame.

NOTE: On 4-ft (1219 mm) and shorter by 8" (203 mm) and wider conveyors, it will be necessary to remove the center drive module at the same time the conveyor belt is removed. See "Center Drive Module Removal" on page 11.

10. Remove conveyor belt.
11. Proceed to "Center Drive Module Removal" on page 11.

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

1. From the discharge end, remove tail cover plate screws (AJ of Figure 14) from one side of the conveyor.
2. Remove tail cover plate (AK).
3. Slide bottom wiper (AI) through side slot of tail plate (AL).
4. If the conveyor is equipped with guiding and accessories, remove them from one side.

NOTE: Figures 17 & 18 show a vertical mount in the A position with a parallel shaft gearmotor. Horizontal mount, D position and/or 90° gearmotor are similar.

5. Remove cover screws (AV of Figure 17) and remove cover (AW).

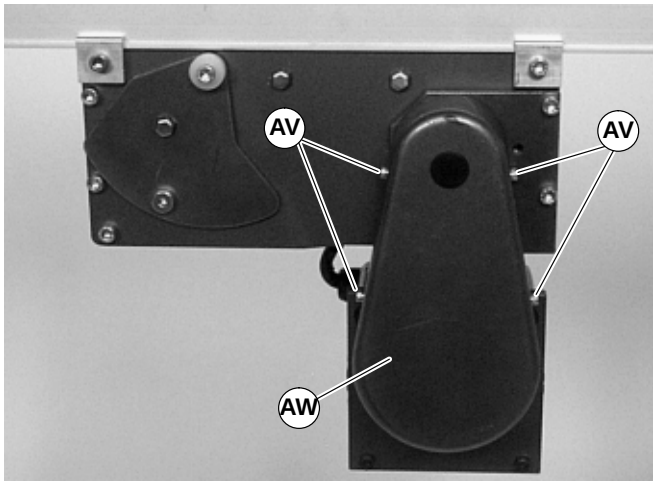


Figure 17

6. Loosen belt tensioner (AX of Figure 18) then remove the belt (AY).

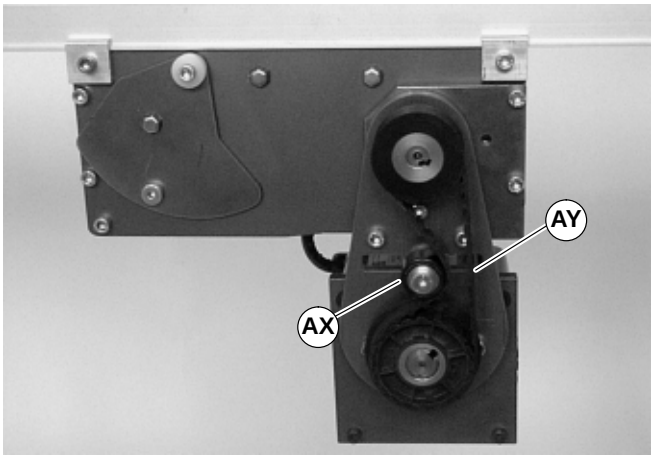


Figure 18

NOTE: If the timing belt does not slide over the pulley flange, loosen the driven pulley set screws (AZ of Figure 19) and remove the pulley (BA) with the belt (BB).

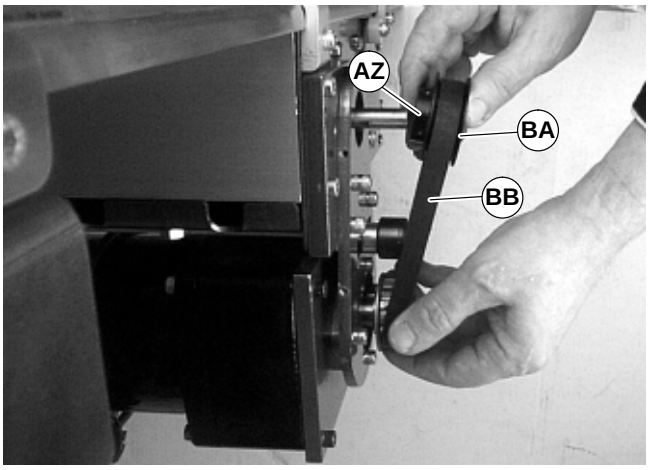


Figure 19

7. Remove three mounting screws (BE of Figure 20) and remove gearmotor package.

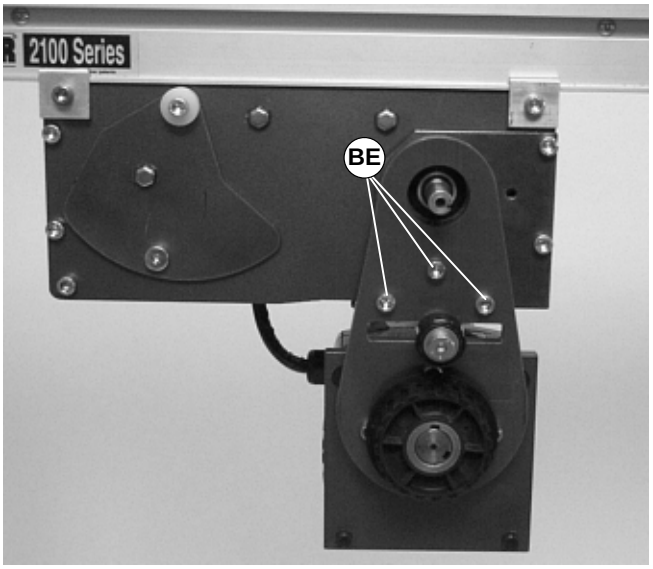


Figure 20

8. Loosen corner screws (AN of Figure 15), on each side of the center drive module (AO).

9. Remove tension door screws (AP) on each side of the center drive module.

NOTE: With vertical mounts, two cover screws (BE of Figure 20) were removed in step 7.

10. Using finger grip holes (AQ), open the tension door (AR) to release conveyor belt tension.

11. On tension end of the conveyor, identified with  label (AS of Figure 16), loosen tracking cam assemblies (AT) and cover plate screws (AU) on both sides of the conveyor.

12. Slide the cam assemblies toward the center of the conveyor and push the end (AV) into the conveyor frame.

WARNING

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

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

NOTE: To remove the belt, complete steps 13 & 14, at each stand location.

13. Loosen the mounting clamp plates (BF of Figure 21) on both sides of the conveyor. Raise the conveyor and remove the belt.

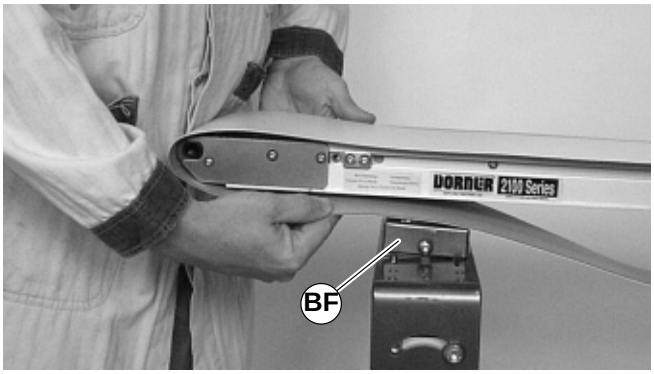


Figure 21

14. With the belt removed, secure the conveyor with clamp plates (BF).

15. Proceed to "Center Drive Module Removal", (next section).

Center Drive Module Removal

WARNING

Before loosening clamps (BG of Figure 22), provide a support (BH) under center drive module.

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

1. Loosen clamp screws (BG of Figure 22) in each corner of the module.

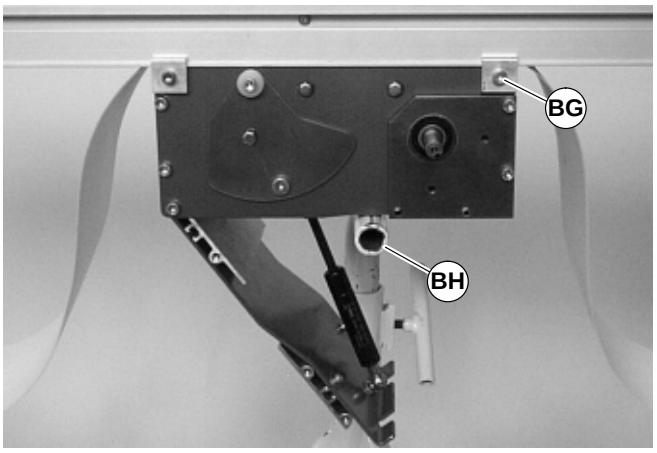


Figure 22

2. Remove the module.

Belt Removal from Center Drive Module

1. Remove drive plate screws (BI of Figure 23). Remove the tension drive plate (BJ).

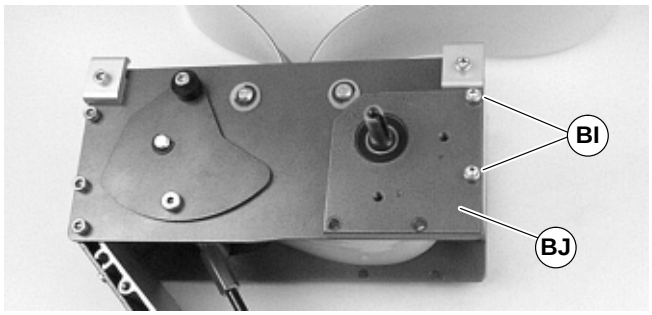


Figure 23

2. Remove drive pulley (BK of Figure 24).

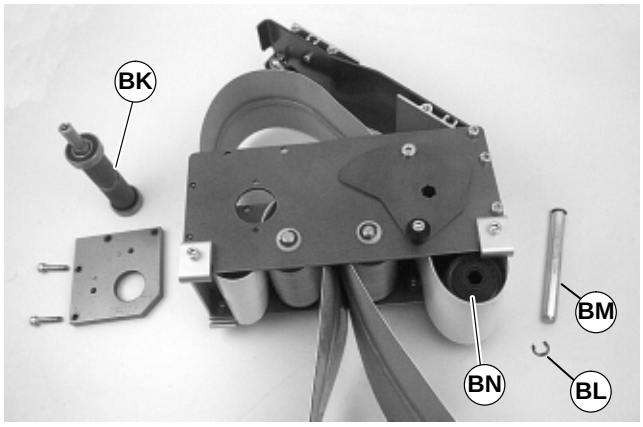


Figure 24

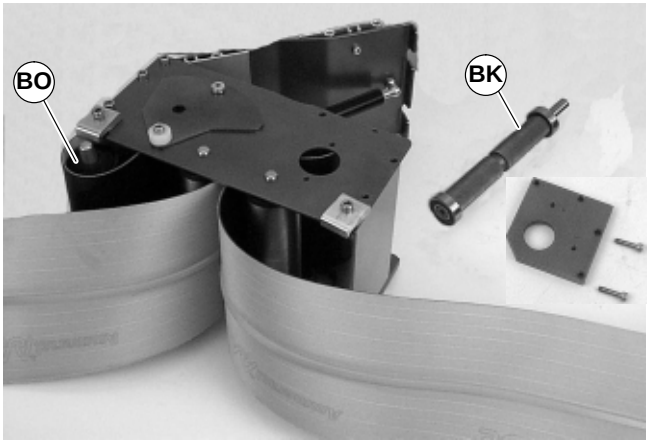


Figure 25

3. Remove grooved idler pulley:

- For 2” (44 mm), 3” (70 mm) or 4” (95 mm) wide conveyor, detach E-ring clip (BL of Figure 24). Remove pulley shaft (BM) and remove pulley (BN).
- For 5” (127 mm) or wider conveyor, depress both sides of spring-loaded shaft and remove pulley (BO of Figure 25).

4. Remove the conveyor belt.

Installing a New Conveyor Belt

IMPORTANT: On a center drive conveyors, belt travel direction is identified by an arrow decal on the side of the conveyor (BP of Figures 26 & 27).

Figure 26

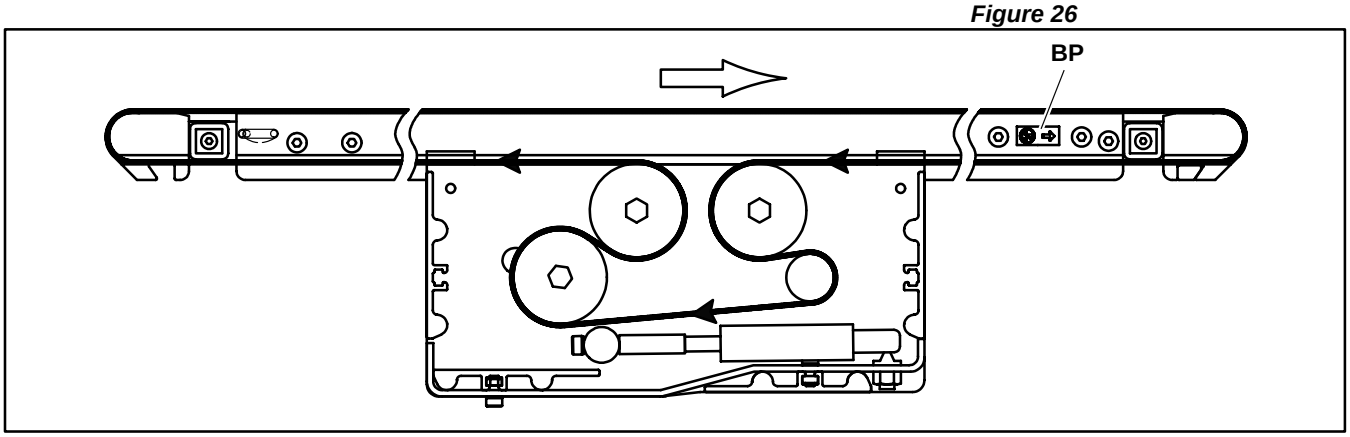


Figure 27

1. Orient the conveyor belt so that the splice leading fingers (BQ of Figure 28) point in the direction of belt travel as identified by the label (BP of Figure 26).

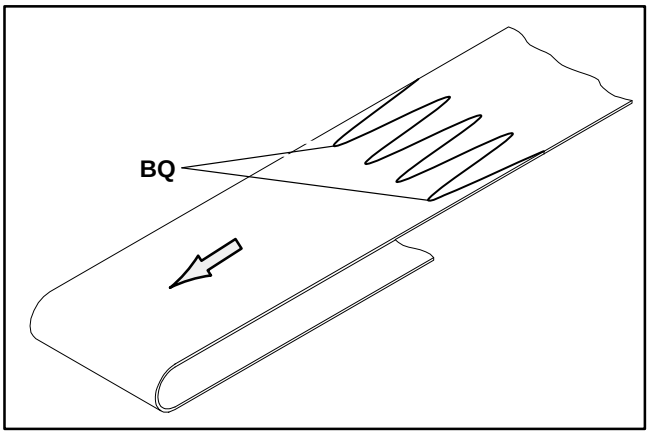


Figure 28

2. Place loop of belt into the drive module (Figure 29).

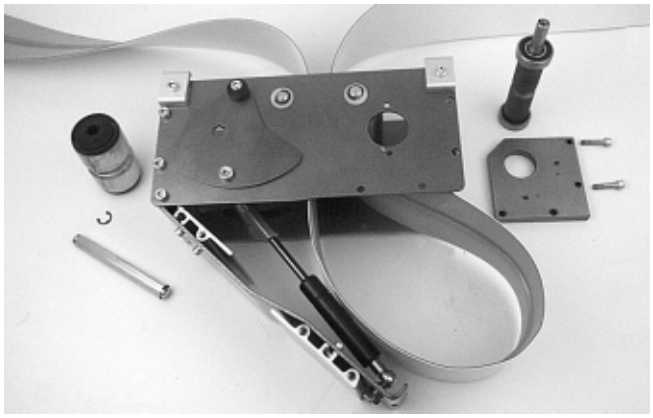


Figure 29

3. Place grooved idler pulley (BN of Figure 24 or BO of Figure 25) into the belt loop and install it in the drive module. Refer to "Belt Removal from Center Drive Module" on page 12 and reverse step 3.

4. Place drive pulley (BK of Figure 24 or 25) into the belt loop and install it in the drive module. Refer to "Belt Removal from Center Drive Module" on page 11 and reverse steps 1 and 2. Tighten screws (BI of Figure 23) to 80 in-lb (9 Nm).

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

5. Replace the center drive module onto the conveyor and attach clamps (BG of Figure 22) in each corner. Tighten screws to 80 in-lb (9 Nm).

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

6. Loosen the mounting clamp plates (BF of Figure 21), on both sides of the conveyor. Raise the conveyor and replace the belt.

7. Lower the conveyor onto the mounting blocks. Use care not to pinch belt.

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

9. Insert a 5 mm hex key wrench into either end of the pinion gear (BR of Figure 30). Rotate the pinion gear to extend the tensioning end gap (BU) to 1.19" (30 mm).

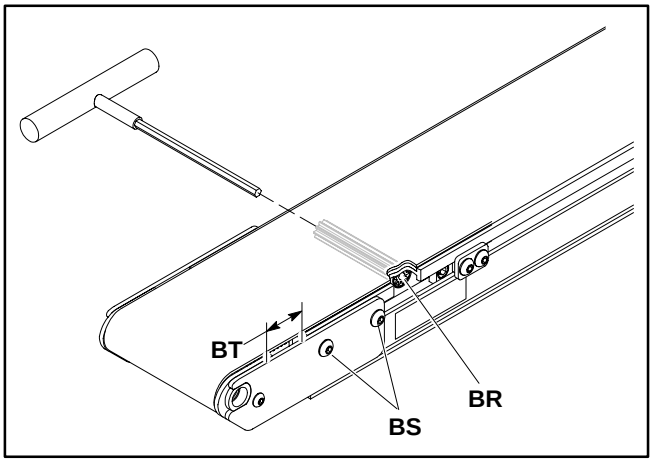


Figure 30

10. While holding the pinion gear (BR), tighten cover plate screws (BS) to 18 in-lb (2 Nm).

11. Carefully close the tension door (BU of Figure 31).

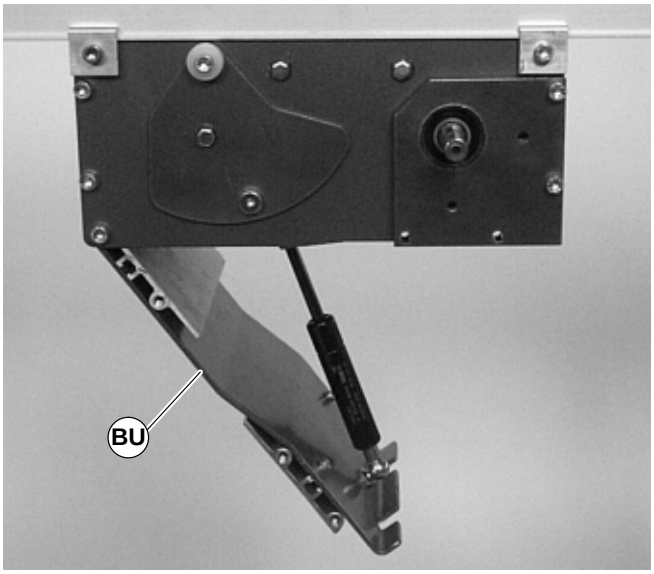


Figure 31

12. Tighten corner screws (BU of Figure 32) on each side of the drive module to 80 in-lb (9 Nm).

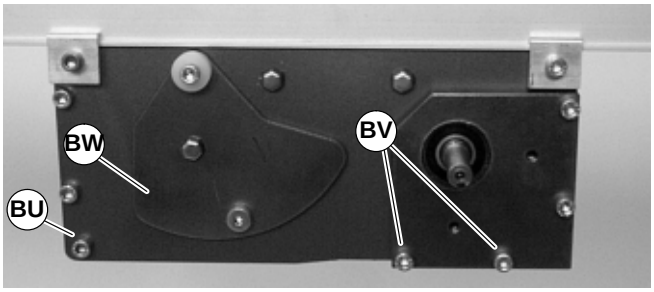


Figure 32

NOTE: If equipped with gearmotor mounting package, replace by completing in reverse order steps 3 through 5 of "Belt Removal for Conveyor With Stands and/or Gearmotor Mounting Package" on page 9.

13. Re-install tension door screws (BV of Figure 32) on each side of the module. Tighten screws to 80 in-lb (9 Nm).

14. Re–install discharge bottom wiper (AI of Figure 14): Reverse steps 1 through 3 of "Belt Removal for Conveyor Without Gearmotor Mounting Package or Stands", page 8.

15. Replace guiding, if applicable.

Conveyor Belt Tensioning

NOTE: For a new belt, the tension plate will be in position indicated in Figure 32 (BW). When the tension plate extends to position indicated in Figure 33 (BW), the conveyor belt must be replaced.

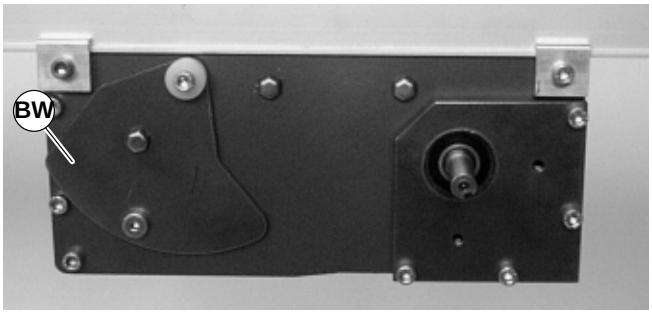


Figure 33

The conveyor is equipped with an automatic tensioning cylinder. No tensioning adjustment is required.

Pulley Removal

WARNING

Exposed moving parts can cause severe injury.

LOCK OUT POWER before removing guards or performing maintenance.

Remove the conveyor belt to access the pulley(s). Perform the indicated steps of one of the following procedures:

- "Belt Removal for Conveyor Without Gearmotor Mounting Package or Stands", page 8, steps 1 through 10.
- "Belt Removal for Conveyor With Stands and/or Gearmotor Mounting Package", page 9, steps 1 through 14.

Remove the desired pulley following procedures A, B or C:

- **A** – End Pulley Removal
- **B** – Drive Pulley Removal
- **C** – Idler Pulley Removal

A – End Pulley Removal

NOTE: Bearing removal tools (part numbers 25–09 and 906–278 included in Tool Kit 2500M–ENG) are required to remove end pulleys.

1. With a small flat bladed screwdriver, remove plug (BX of Figure 34) from retainer (BY).

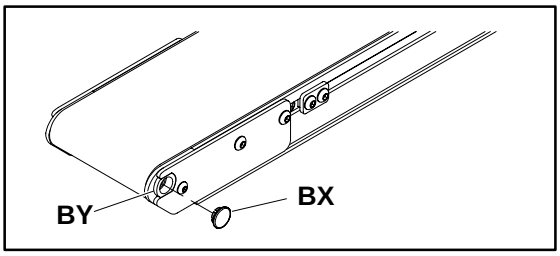


Figure 34

2. Remove the tail cover plate screws (BZ of Figure 35) and tail cover plates (CA) on both sides of the conveyor.

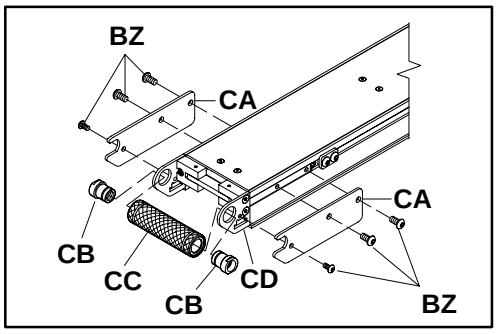


Figure 35

3. Position bearing anvil/sleeve removal tool (CJ of Figure 36), part number 25-09, over the retaining sleeve (CB of Figure 35 or Figure 36).

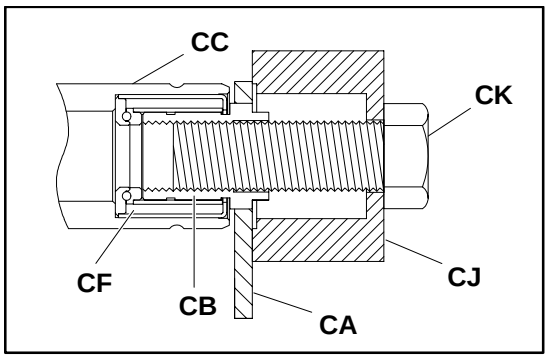


Figure 36

4. Insert threaded bolt (CK of Figure 36), part number 906-278, through the bearing anvil/sleeve removal tool (CJ) and into the retaining sleeve (CB).
5. Tighten the bolt (CK) until the retaining sleeve (CB) is free of the tail pulley plate (CA).
6. Remove the retaining sleeve (CB) from the bolt (CK) and repeat for the other side.
7. Remove the pulley (CC).

B – Drive Pulley Removal

1. Remove the gearmotor drive package. Refer to "Belt Removal for Conveyor With Stands and/or Gearmotor Mounting Package", page 9, steps 5 through 7.
2. Remove the drive pulley. Refer to "Belt Removal from Center Drive Module", page 11, steps 1 and 2.

C – Idler Pulley Removal

1. Remove the gearmotor drive package. Refer to "Belt Removal for Conveyor With Stands and/or Gearmotor Mounting Package", page 9, steps 5 through 7.
2. Detach the center drive module. Refer to "Center Drive Module Removal", page 11.
3. Remove the grooved idler pulley. Refer to "Belt Removal from Center Drive Module", step 3, page 12.
4. Remove smooth idler pulleys:

- For 2" (44 mm), 3" (70 mm) or 4" (95 mm) wide conveyor, detach E-ring clips and remove washers (CL of Figure 37). Remove pulley shafts (CM) and pulleys (CN).

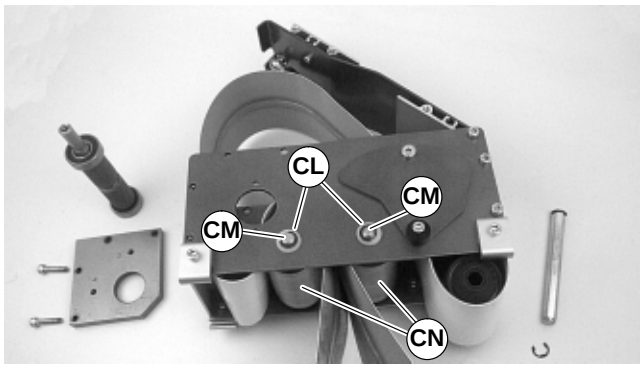


Figure 37

- For 5" (127 mm) or wider conveyor, depress both sides of each spring-loaded shaft (CO of Figure 38). Remove pulleys (CP).

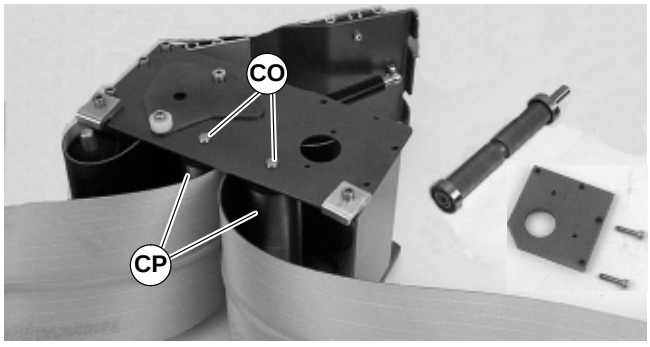


Figure 38

Bearing Replacement for End Pulleys

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

NOTE: Bearing removal and installation tools (part numbers 25–05, 25–08, 25–09 and 25–10 included in Tool Kit 2500M–ENG) are required to remove and install bearings.

Bearing Removal

NOTE: The bearings of a 2" (44 mm) wide gang drive pulley cannot be replaced. Order pulley assembly (part number 204002).

1. Insert bearing removal tool (CQ of Figure 39), part number 25–05, into the pulley (CR) until shoulder (CS) seats against bottom of bearing (CT).

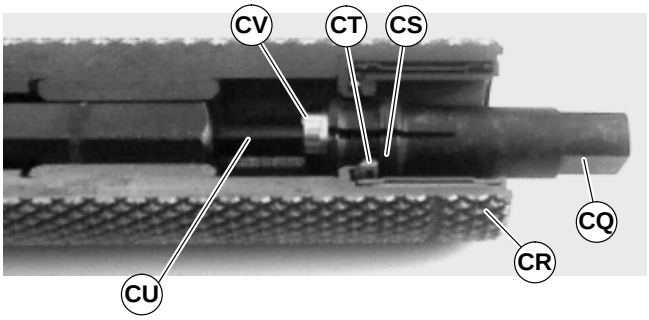


Figure 39

2. While holding bearing removal tool (CQ) in position, insert extension tool (CU), part number 25–08, into opposite end of pulley (CR). Rotate bearing removal tool (CQ) to engage hex tip of extension tool (CU) into screw (CV) of bearing removal tool.

3. While maintaining extension tool (CU) position, use a wrench (CW of Figure 40) to rotate the bearing removal tool (CQ) to expand the flare end of the tool.

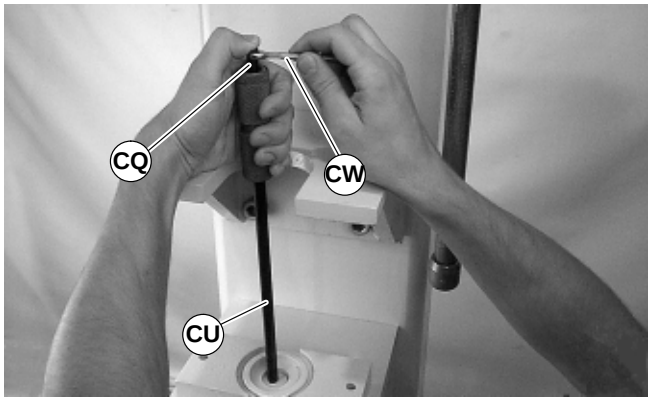


Figure 40

4. Orient bearing anvil/sleeve removal tool (CX of Figure 41), part number 25–09, with cavity facing up and place pulley (CR) onto tool.

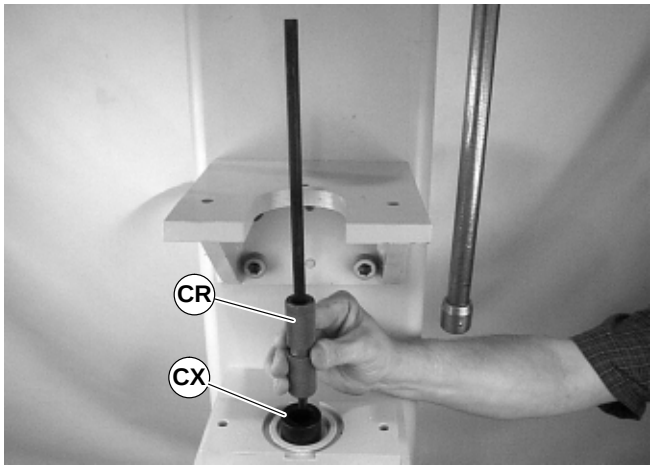


Figure 41

5. With arbor press (CY of Figure 42) or similar device, press bearing out of pulley (CR).

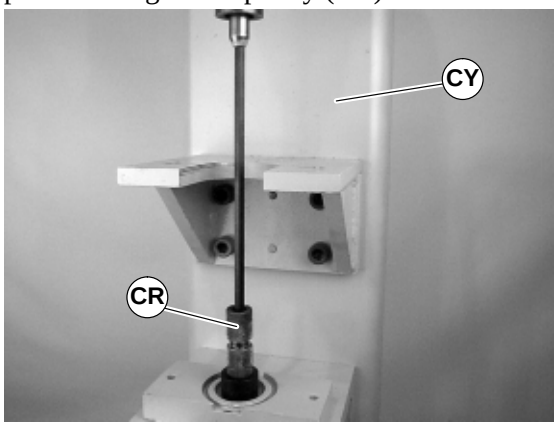


Figure 42

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

Bearing Installation

1. Orient bearing anvil/sleeve removal tool (CX of Figure 43), part number 25–09, with cavity facing up and place pulley (CR) onto tool.

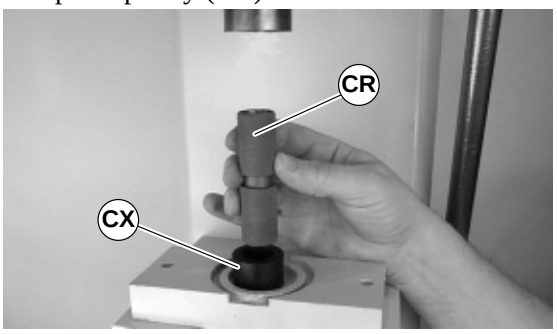


Figure 43

2. Install bearing insertion tool (CZ of Figure 44), part number 25–10, into arbor press (CY) or similar device.

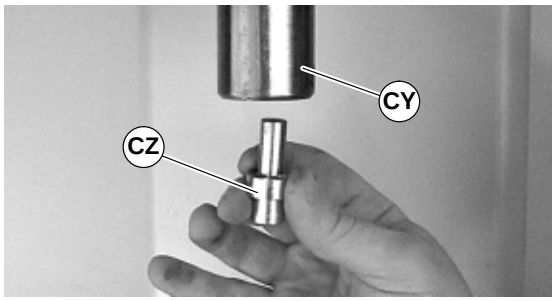


Figure 44

3. Place and hold bearing (CT of Figure 45), part number 21–33, onto insertion tool (CZ) in position over pulley (CR).

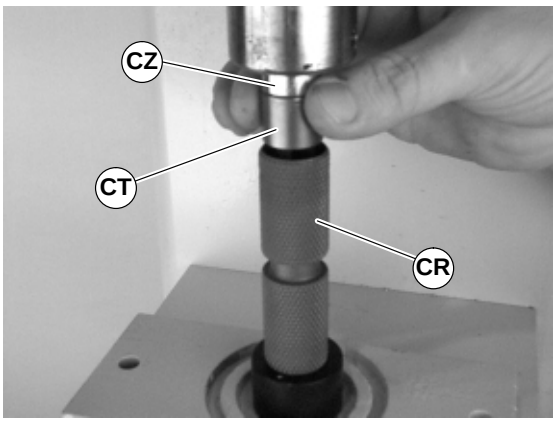


Figure 45

IMPORTANT: Bearing and pulley alignment is critical.

4. Press bearing (CT of Figure 46) into pulley (CR) until seated.

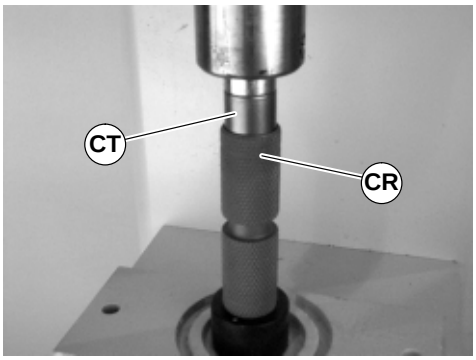


Figure 46

Bearing Replacement for Drive Pulley

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

Bearing Removal

1. Position the drive pulley (DA of Figure 47) in a standard bearing separator (DB) as shown.

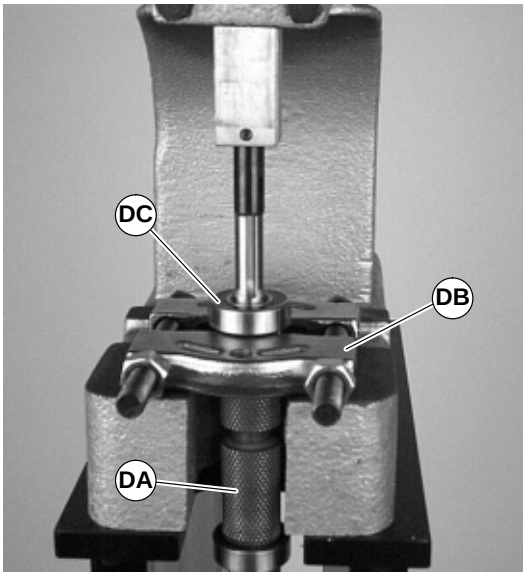


Figure 47

2. Using an arbor press or similar device, press-off the bearing (DC).

Bearing Installation

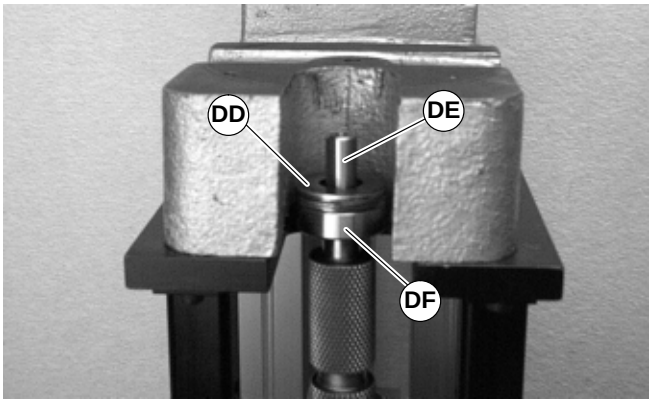


Figure 48

3. Place the shaft of the tool (part number 450282) (DG of Figure 49) over pulley shaft (DH).

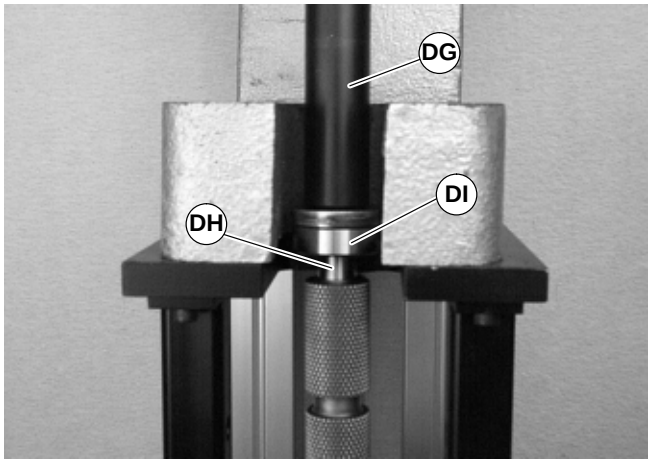


Figure 49

4. Using an arbor press or similar device, press the bearing (DI) 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", page 19.

Pulley Replacement

End Pulleys

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

Drive Pulley

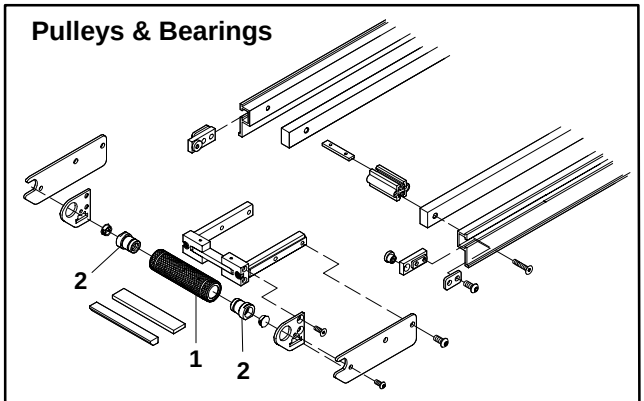
Reverse removal procedure "B" (see page 15).

Idler Pulley

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

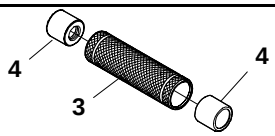
NOTE: For replacement parts other than those shown in this document, contact an authorized Dorner Service Center or the factory.

Pulleys & Bearings



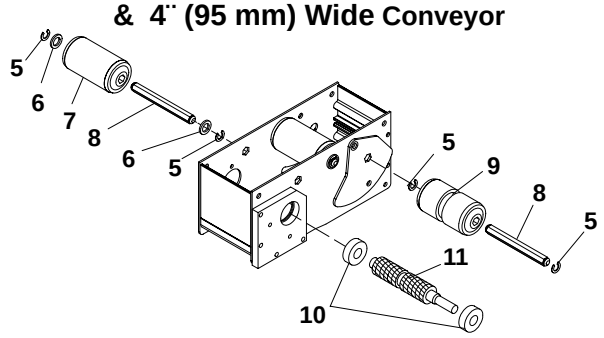
Item	Part No.	Part Description
1	See Chart	Pulley Assembly
2	200035	Pulley Retaining Sleeve

25 mm Diameter Drive/Idler Pulley Assembly (1)



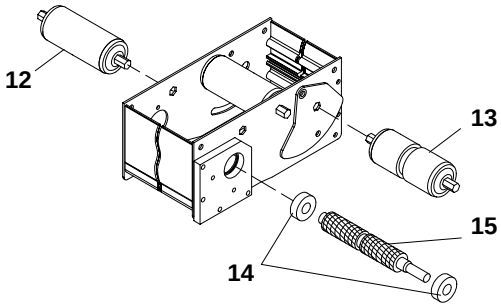
Nominal Conveyor Width	Part Number	
	Drive/Idler Pulley Assembly (1) with 21-33 Bearings (4)	Drive/Idler Pulley Only (3)
2” (44 mm)	204802	Not Applicable
3” (70 mm)	204803	204703
4” (95 mm)	204804	204704
5” (127 mm)	204805	204705
6” (152 mm)	204806	204706
7” (178 mm)	204807	204707
8” (203 mm)	204808	204708
10” (254 mm)	204810	204710
12” (305 mm)	204812	204712

Center Drive Module for 2¨ (44 mm), 3¨ (70 mm) & 4¨ (95 mm) Wide Conveyor



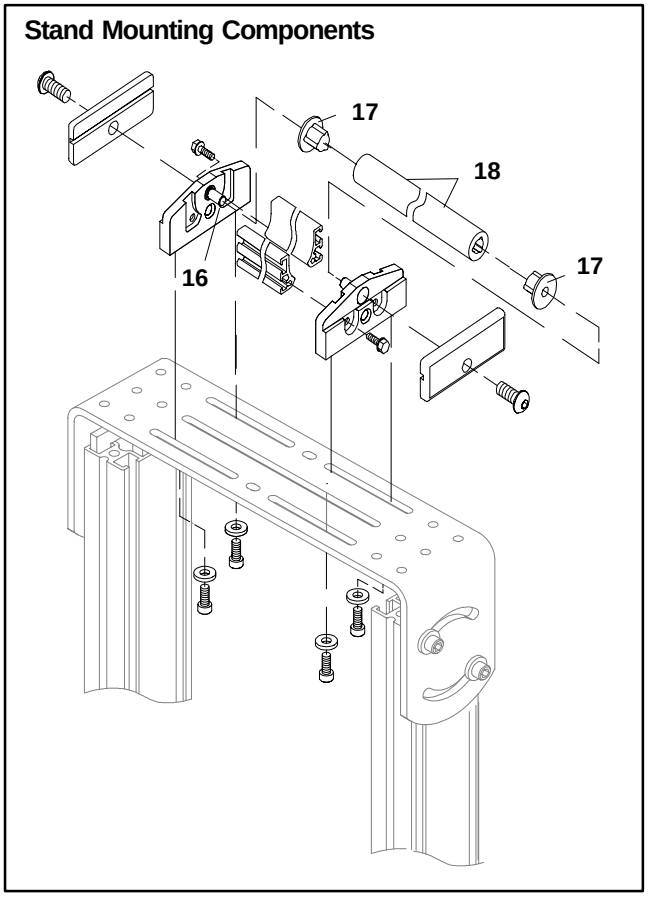
Item	Part No.	Part Description
5	915-215	E-Ring Clip (0.44 diameter)
6	801-115	Washer
7	463046	Idler Pulley, 2” (44 mm)
	807-1007	Idler Pulley, 3” (70 mm)
	807-1008	Idler Pulley, 4” (95 mm)
8	463402	Pulley Shaft, 2” (44 mm)
	463403	Pulley Shaft, 3” (70 mm)
	463404	Pulley Shaft, 4” (95 mm)
9	463044	Grooved Idler Pulley, 2” (44 mm)
	463045	Grooved Idler Pulley, 3” (70 mm)
	807-1001	Grooved Idler Pulley, 4” (95 mm)
10	802-124	Pulley Bearings
11	463102M	Drive Pulley, 2” (44 mm)
	463103M	Drive Pulley, 3” (70 mm)
	463104M	Drive Pulley, 4” (95 mm)

Center Drive Module for 5¨ (127 mm) or Wider Conveyor



Item	Part No.	Part Description
12	807-1009	Idler Pulley, 5” (127 mm)
	807-1010	Idler Pulley, 6” (152 mm)
	807-1011	Idler Pulley, 8” (203 mm)
	807-1012	Idler Pulley, 10” (254 mm)
	807-1013	Idler Pulley, 12” (305 mm)
13	807-1002	Grooved Idler Pulley, 5” (127 mm)
	807-1003	Grooved Idler Pulley, 6” (152 mm)
	807-1004	Grooved Idler Pulley, 8” (203 mm)
	807-1005	Grooved Idler Pulley, 10” (254 mm)
	807-1006	Grooved Idler Pulley, 12” (305 mm)
14	802-124	Pulley Bearings
15	463105M	Drive Pulley, 5” (127 mm)
	463106M	Drive Pulley, 6” (152 mm)
	463108M	Drive Pulley, 8” (203 mm)
	463110M	Drive Pulley, 10” (254 mm)
	463112M	Drive Pulley, 12” (305 mm)

Stand Mounting Components



Item	Part No.	Part Description
16	202348P	Bearing Pin
17	202311P	Return Roller Bearing
18	207702	Return Roller Tube, 2” (44 mm) Long
	207703	Return Roller Tube, 3” (70 mm) Long
	207704	Return Roller Tube, 4” (95 mm) Long
	207705	Return Roller Tube, 5” (127 mm) Long
	207706	Return Roller Tube, 6” (152 mm) Long
	207708	Return Roller Tube, 8” (203 mm) Long
	207710	Return Roller Tube, 10” (254 mm) Long
	207712	Return Roller Tube, 12” (305 mm) Long
	207718	Return Roller Tube, 18” (457 mm) Long
	207724	Return Roller Tube, 24” (610 mm) Long

Configuring Conveyor Belt Part Number

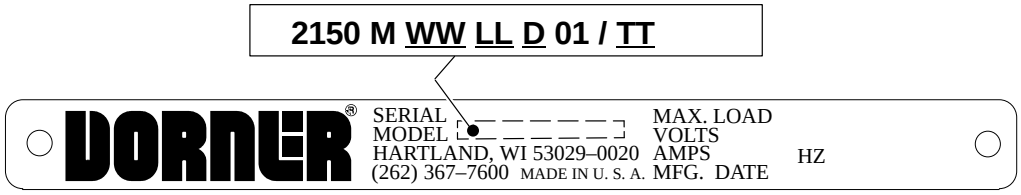


Figure 50

Conveyor Belt

Refer to serial and model number plate (Figure 50). Determine conveyor length (“LL”), width (“WW”) and belt type (“TT”).

25 – WW LL / TT

25– __ __ __ __ / __ __
(Fill In)

Notes

Return Policy

No returns will be accepted without prior written factory authorization. When calling for authorization, please have the following information ready for the Dorner Factory representative or your local distributor:

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

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

There will be a 15% restocking charge on all new items returned for credit where Dorner was not at fault. These will not be accepted after 60 days from original invoice date. The restocking charge covers inspection, cleaning, disassembly, and reissuing to inventory.

If a replacement is needed prior to evaluation of returned item, a purchase order must be issued. Credit (if any) is issued only after return and evaluation is complete.

Dorner has representatives throughout the world. Feel free to contact Dorner for the name of your local representative. Our technical sales and service staff will gladly help with your questions on Dorner products.

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

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

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