

# Installation, Maintenance & Parts Manual



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### Warnings – General Safety



### 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 3200 Series conveyors are covered by patent numbers 5156260, 5156261, 5203447, 5265714 and corresponding patents and patent applications in other countries.

Dorner LPZ Series conveyors are covered by patent numbers 5156260, 5156261, 5203447, 5265714, 5875883 and corresponding patents and patent applications in other countries.

Dorner's Limited Warranty applies.

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

#### **Required Tools**

• Hex key wrenches:

3 mm, 4 mm, 5 mm

• Torque wrench

#### **Pulley Transfer Plate Mounting**



# DANGER

Use of transfer plate with high friction conveyor belt will cause severe injury.

DO NOT use transfer plate with /03, /08, /55, /62, /64, or other high friction belts.



**1.** Gather components (Figure 1)

**Transfer Plate** 

А В

С

D

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

2. On tension end of the conveyor, identified by the pinion locking screw (E of Figure 2), push in head plate assembly (F): Loosen the pinion locking screw (E), adjust the pinion torque screw (G of Figure 3). On both sides of conveyor, loosen the two tail clamp bolts (H of Figure 2), and push head plate assembly (F) inward.



Figure 2



Figure 3

**3.** Loosen screw (I of Figure 4) on both sides of conveyor.



Installation Component List

Spacer Bracket, Transfer Plate (2x)

M4 x 10mm Socket Head Screw (2x)

M5 x 10mm Socket Head Screw (2x)

Figure 1



Figure 4

4. Remove screw (J of Figure 4) on both sides of conveyor. Remove existing spacer plates (K of Figure 5) on both sides of conveyor.



Figure 5

5. Replace with new spacer plates (B of Figure 6). Insert screw (J) hand tighten.



Figure 6

- 6. Place transfer plate support (A of Figure 7) on end of conveyor and attach with screws (C) and (D) on each side of conveyor. Tighten screws (C and D) to 50 in-lbs (5.6 N-m).
- 7. Tighten screws (I and J of Figure 7) to 146 in-lbs (16.5 N-m).



NOTE: For conveyors longer than 20 ft (6096 mm) the belt tensioning proceedure outlined below may be preformed on both the Drive and Idler Ends of the conveyor.

8. On tension end of the conveyor, identified by the pinion locking screw (E of Figure 8), loosen the two tail clamp bolts(H), on both sides of conveyor.



NOTE: Do not exceed a torque of 100 in-lb (11.3 N-m) on pinion gear. Over tensioning the conveyor belt could cause excessive pulley bearing load and early failure.

9. With 5mm hex wrench, hold pinion torque screw (G of Figure 9). Loosen the pinion locking screw (E of Figure 8) and turn the pinion torque screw(G) to extend head plate assembly.



**10.** Extend head plate assembly until proper tension in the belt is achived. If proper tensioning can not be obtained before the belt life indicator is all black (L of Figure 10) the belt must be replaced.



Figure 10

**11.** After adjusting proper tensioning, tighten the pinion locking screw (E of Figure 8) to 69 in–lbs (7.8 N–m), and tighten tail clamp bolts (H of Figure 8) on both sides of conveyor to 146 in-lb (16.5 N–m).

#### Mounting On Drive End of Conveyor





Use of end stop with high friction conveyor belt will cause severe injury.

DO NOT use end stop with /03, /08, /55, /62, /64, or other high friction belts.



## Exposed moving parts can cause severe injury. LOCK OUT POWER before

LOCK OUT POWER before removing guards or performing maintenance. NOTE: End stop is designed for parts 1/4" (6 mm) thick or larger.

**1.** Gather components (Figure 11)

#### Installation Component List

- A Transfer Plate
- B Spacer Bracket, Transfer Plate (2x)
- C M4 x 10mm Socket Head Screw (2x)
- D M5 x 10mm Socket Head Screw (2x)



Figure 11

On tension end of the conveyor, identified by the pinion locking screw (E of Figure 12), push in head plate assembly (F): Loosen the pinion locking screw (E), adjust the pinion torque screw (G of Figure 13). On both sides of conveyor, loosen the two tail clamp bolts (H of Figure 12), and push head plate assembly (F) inward.



Figure 12



Figure 13

- **3.** Remove the gearmotor mounting package. See instructions for your drive mounting package:
  - Step 4 Top Mount Drive Package
  - Step 5 Bottom Mount Drive Package
  - Step 6 Side Mount Drive Package
  - Step 7 No Drive Mount Package

#### 4. Top Mount Drive Package

**a**. Remove four (4) screws (M of Figure 14) and cover (N).



Figure 14

**b**. Loosen taper set screws (O of Figure 15) on the driven pulley. Remove one set screw and insert in open hole (P). Tighten until pully slides off drive shaft.



Figure 15

**c**. Remove pulley (Q of Figure 16) and timing belt (R).



Figure 16

**d**. Remove mounting screws (I, J and U of Figure 17) and remove drive package (S).



e. Goto step 8 on page 8.

#### 5. Bottom Mount Drive Package

**a**. Remove four (4) screws (M of Figure 18) and cover (N).



Figure 18

**b**. Loosen taper set screws (O of Figure 19) on the driven pulley. Remove one set screw and insert in open hole (P). Tighten until pully slides off drive shaft.





**c**. Remove pulley (Q of Figure 20) and timing belt (R).



Figure 20

**d**. Remove mounting screws (I, J and U of Figure 21) and remove drive package (S).



Figure 21

e. Goto step 8 on page 8.

#### 6. Side Mount Drive Package

**a**. Remove anti-rotation pin (T of Figure 22), loosen four (4) screws (M) and rotate and remove the side drive assembly.



Figure 22

**b**. Remove the four (4) screws (M of Figure 23) and two (2) screws (I and J)



Figure 23

- **c**. Goto step 8 on page 8.
- 7. Loosen screws (I and U of Figure 24).



Figure 24

**8.** Remove screw (J of Figrue 24). Remove existing spacer plates (K of Figure 25).



**9.** Replace with transfer plate spacer plates (B of Figure 26). Insert screw (J) hand tighten.



Figure 26

**10.** Place transfer plate support (B of Figure 27) on end of conveyor and attach with screws (C) and (D) on each side of conveyor. Tighten screws (C and D) to 50 in-lbs (5.6 N-m).





- **11.** Tighten screws (I and J of Figure 27) to 146 in–lbs (16.5 N–m) and tighten screw (U) on side of conveyor opposite the drive.
- **12.** Install the gearmotor mounting package. Reverse the instructions for your drive mounting packagestarting of page6:
  - Step 4 Top Mount Drive Package
  - Step 5 Bottom Mount Drive Package
  - Step 6 Side Mount Drive Package
  - Step 7 No Drive Mount Package

**NOTE:** For conveyors longer than 20 ft (6096 mm) the belt tensioning proceedure outlined below may be preformed on both the Drive and Idler Ends of the conveyor.

**13.** On tension end of the conveyor, identified by the pinion locking screw (E of Figure 28), loosen the two tail clamp bolts(H), on both sides of conveyor.



**14.** With 5mm hex wrench, hold pinion torque screw (G of Figure 29). Loosen the pinion locking screw (E of Figure 28) and turn the pinion torque screw(G) to extend head plate assembly.



**NOTE:** On pinion gear, do not exceed a torque of 100 in-lb (11.3 N-m). Over tensioning the conveyor belt could cause excessive pulley bearing load and early failure.

**15.** Extend head plate assembly until proper tension in the belt is achived. If proper tensioning can not be obtained before the belt life indicator is all black (L of Figure 30) the belt must be replaced.





16. After adjusting proper tensioning, tighten the pinion locking screw (E of Figure 28) to 69 in-lbs (7.8 N-m), and tighten tail clamp bolts (H of Figure 8) on both sides of conveyor to 146 in-lb (16.5 N-m).

### **Preventive Maintenance & Adjustment**

#### **Required Tools**

- Hex key wrenches: 3 mm
- Torque wrench

#### Cleaning



Periodically, remove two screws (C and D of Figure 31) on each side of conveyor and remove transfer plate (A).

#### **Service Parts**

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

#### 3" Pulley Transfer Plate

Item	Part Number	Part Description
1	301085	3" Transfer Plate Inside Spacer
2	3265 <u>WW</u>	3" Pulley Transfer Plate
3	920410M	M4 x 10mm Socket Head Screw
4	920510M	M5 x 10mm Socket Head Screw



Figure 32

#### 1" Pulley Transfer Tail Transfer Plate

Item	Part Number	Part Description
1	301086	3" Transfer Plate Inside Spacer
2	3264 <u>WW</u>	3" Pulley Transfer Plate
3	920410M	M4 x 10mm Socket Head Screw







Clean any debris from between plate and conveyor belt. Replace transfer plate (A). Tighten screws (C and D) to 50 in-lbs (5.6 N-m).



Figure 31

### 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 at www.dorner.com.

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

# DORNER

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