



End Stop for 3200 & LPZ Series Conveyors

Installation, Maintenance & Parts Manual



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Table of Contents

Introduction	2	Required Tools	11
Warnings - General Safety	3	Cleaning.....	11
Installation	4	Service Parts.....	11
Required Tools.....	4	End Stop	11
Mounting on Tension End of Conveyor	4	Return Policy.....	12
Mounting On Drive End of Conveyor	6		
Preventive Maintenance & Adjustment.....	11		

Introduction

IMPORTANT

<i>Some illustrations may show guards removed. DO NOT operate equipment without guards.</i>

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.

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



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



Exposed moving parts can cause severe injury.
REPLACE ALL GUARDS BEFORE RUNNING CONVEYOR.

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.


Installation

Required Tools

- Hex key wrenches:
3 mm, 5 mm
- Torque wrench

Mounting on Tension End of Conveyor

⚠ DANGER

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.

⚠ WARNING

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

NOTE
<i>End stop is designed for parts at least 1/4" thick or larger.</i>

Installation Component List:

A	End Stop
B	Spacer Bracket, End Stop (2x)
C	M4 x 10mm Socket Head Screw (4x)

1. Gather components (Figure 1)

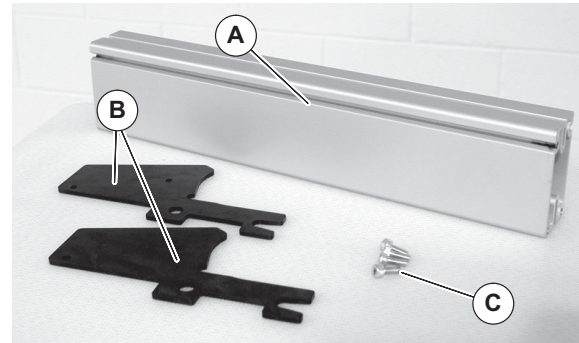


Figure 1

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

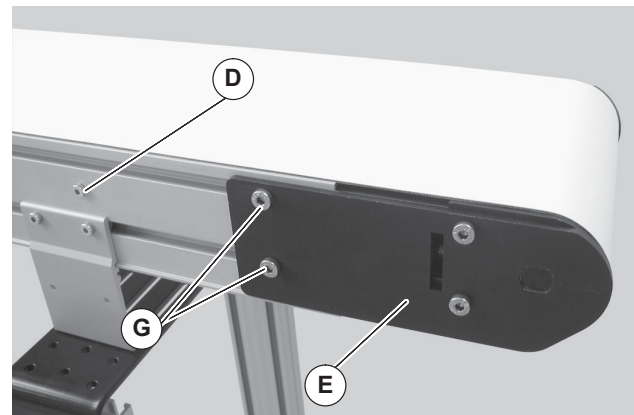


Figure 2



Figure 3

Installation

- Loosen screw (Figure 4, item H) on both sides of conveyor.

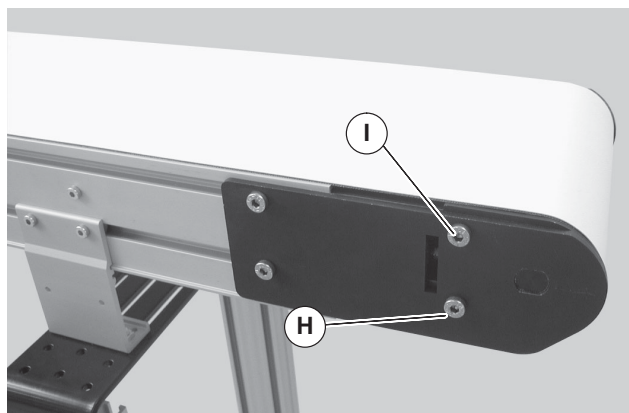


Figure 4

- Remove screw (Figure 4, item I) on both sides of conveyor. Remove existing spacer plates (Figure 5, item J) on both sides of conveyor.

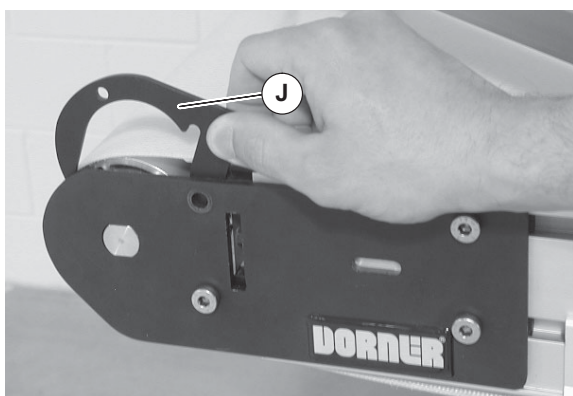


Figure 5

- Replace with new spacer plates (Figure 6, item B). Insert screw (I) hand tighten.

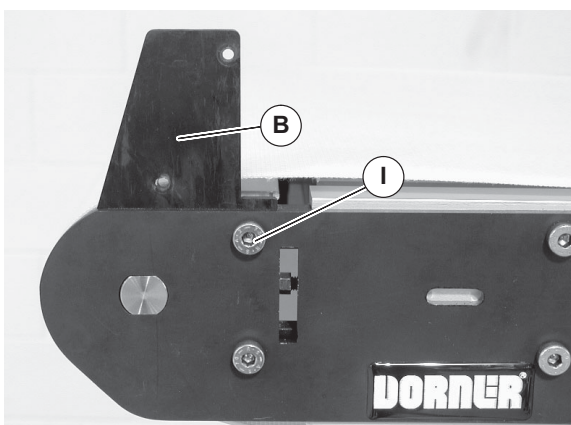


Figure 6

- Place end stop cross piece (Figure 7, item A) on end of conveyor and attach with screws (C) tighten to 50 in-lbs (5.6 N-m).

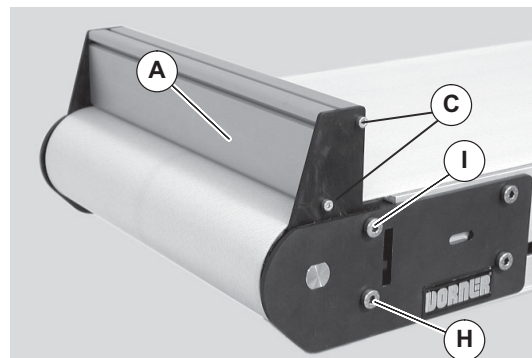


Figure 7

- Tighten screws (Figure 7, item H and I) to 146 in-lbs (16.5 N-m).
- On tension end of the conveyor, identified by the pinion locking screw (Figure 8, item D), loosen the two tail clamp bolts (G), on both sides of conveyor.

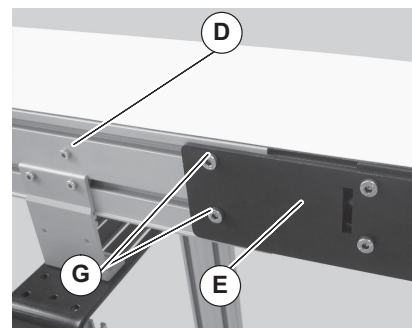


Figure 8

- With 5mm hex wrench, hold pinion torque screw (Figure 9, item F). Loosen the pinion locking screw (Figure 8, item D) and turn the pinion torque screw (F) to extend head plate assembly

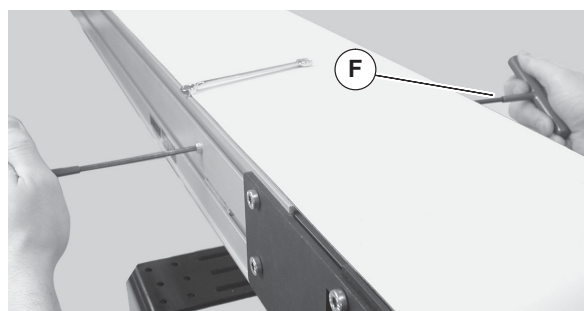


Figure 9

Installation

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.

- Extend head plate assembly until proper tension in the belt is achieved. If proper tensioning can not be obtained before the belt life indicator is all black (Figure 10, item K) the belt must be replaced.

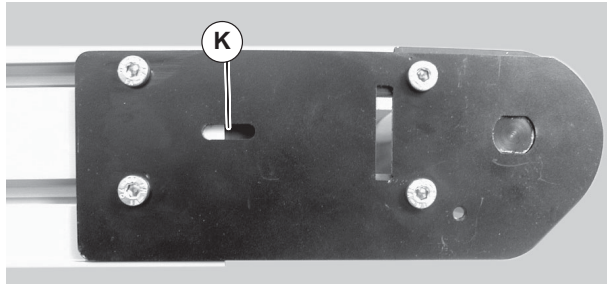


Figure 10

- After adjusting proper tensioning, tighten the pinion locking screw (Figure 8, item D) a to 69 in-lbs (7.8 Installation End Stop for 3200 & LPZ Industrial Series Conveyors: Installation, Maintenance & Parts Manual Dorner Mfg. Corp. 5 851-534 Rev. B N-m), and tighten tail clamp bolts (Figure 8, item G) on both sides of conveyor to 146 in-lb (16.5 N-m).

Mounting On Drive End of Conveyor

⚠ DANGER



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.

⚠ WARNING



Exposed moving parts can cause severe injury.

LOCK OUT POWER before removing guards or performing maintenance.

NOTE

End stop is designed for parts at least 1/4" thick or larger.

Installation Component List:

- | | |
|---|----------------------------------|
| A | End Stop |
| B | Spacer Bracket, End Stop (2x) |
| C | M4 x 10mm Socket Head Screw (4x) |

- Gather components (Figure 11)

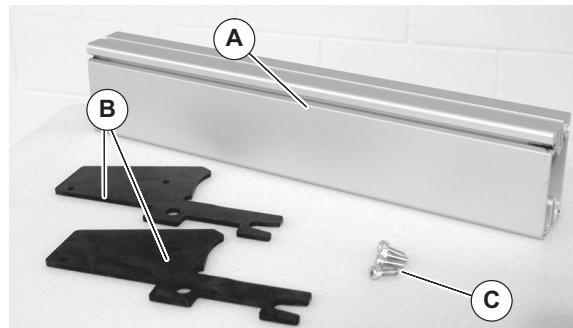


Figure 11

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

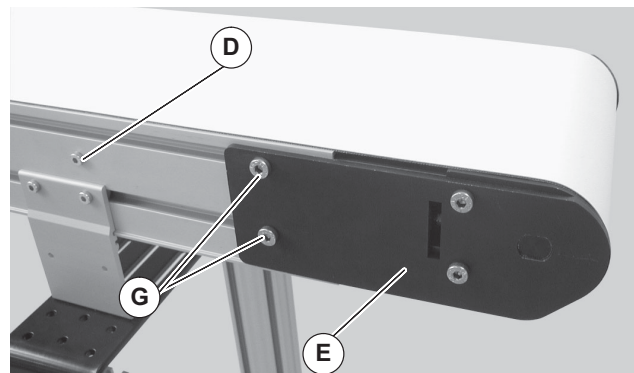


Figure 12



Figure 13

Installation

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 (Figure 14, item L) and cover (M).

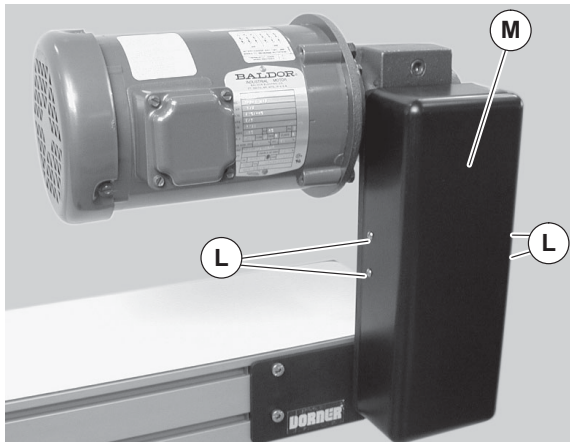


Figure 14

- b. Loosen taper set screws (Figure 15, item N) on the driven pulley. Remove one set screw and insert in open hole (O). Tighten until pulley slides off drive shaft.

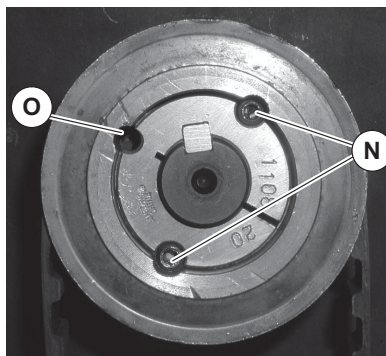


Figure 15

- c. Remove pulley (Figure 16, item P) and timing belt (Q).

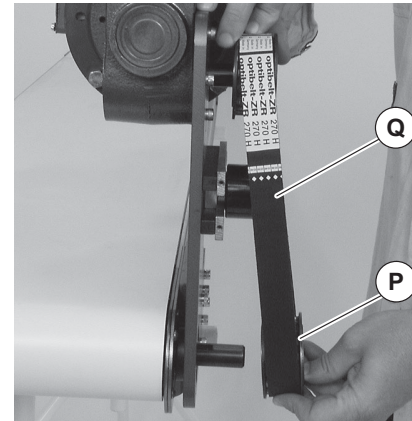


Figure 16

- d. Remove mounting screws (Figure 17, item H, I and T) and remove drive package (R).

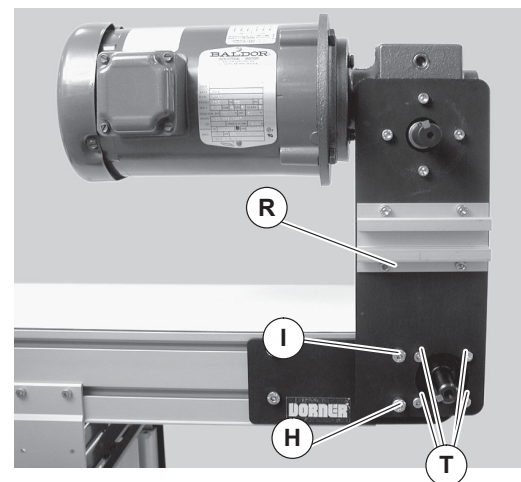


Figure 17

- e. Go to step 8 on page 9.

5. Bottom Mount Drive Package

- a. Remove four (4) screws (Figure 18, item L) and cover (M).

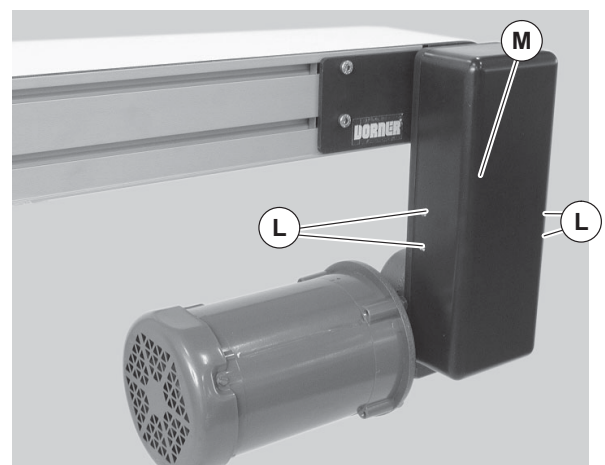


Figure 18

Installation

- b. Loosen taper set screws (Figure 19, item N) on the driven pulley. Remove one set screw and insert in open hole (O). Tighten until pulley slides off drive shaft.

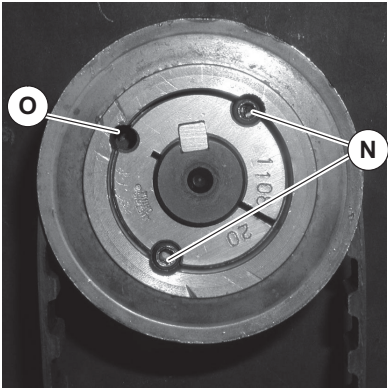


Figure 19

- c. Remove pulley (Figure 20, item P) and timing belt (Q).

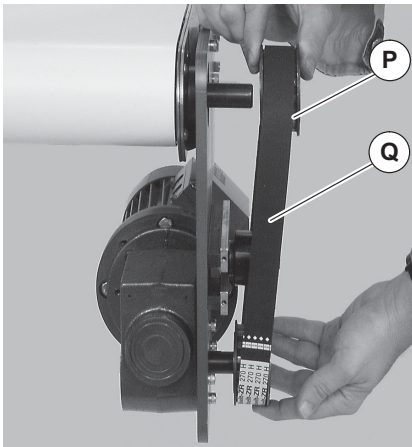


Figure 20

- d. Remove mounting screws (Figure 21, item H, I and T) and remove drive package (R).

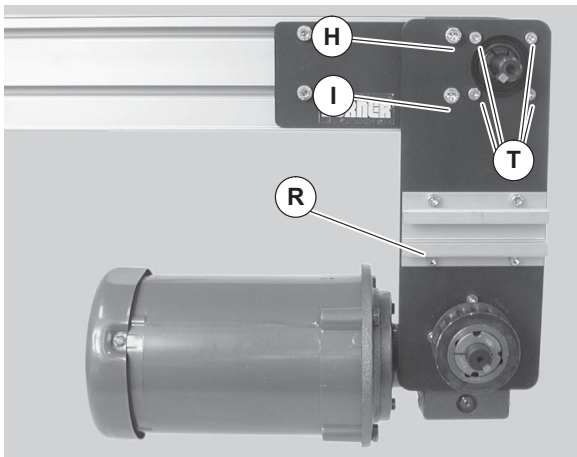


Figure 21

- e. Go to step 8 on page 9.

6. Side Mount Drive Package

- a. Remove anti-rotation pin (Figure 22, item S), loosen four (4) screws (L) and rotate and remove the side drive assembly.

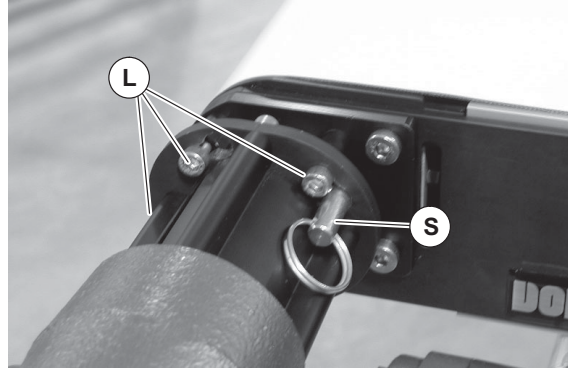


Figure 22

- b. Remove the four (4) screws (Figure 23, item L) and two (2) screws (H and I)

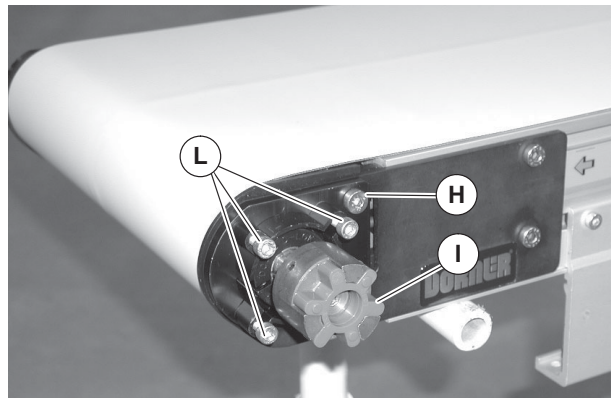


Figure 23

- c. Go to step 8 on page 9.

- 7. Loosen screw (Figure 24, item H) on both sides of conveyor.

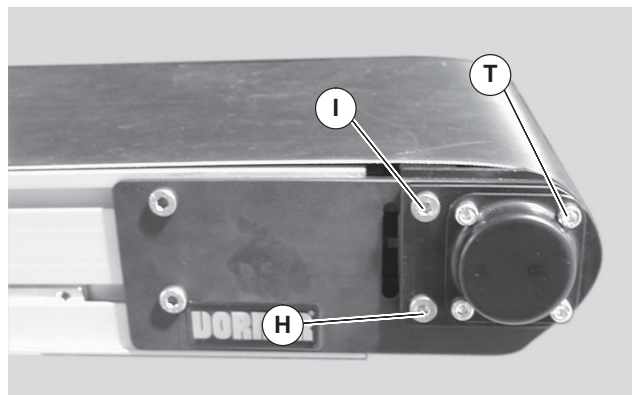


Figure 24

- Remove screw (Figure 24, item I) and screw (T). Remove existing spacer plates (Figure 25, item J) on both sides of conveyor.

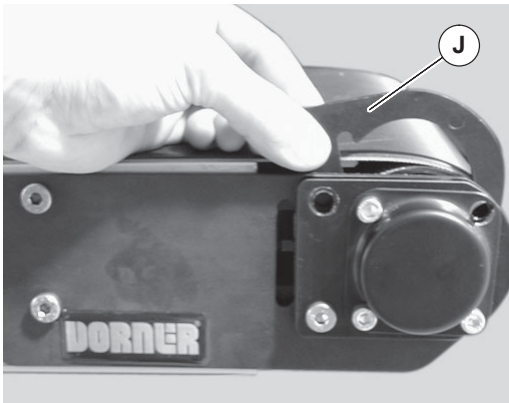


Figure 25

- Replace with new spacer plates (Figure 26, item B). Insert screws (I) and (T) and hand tighten.

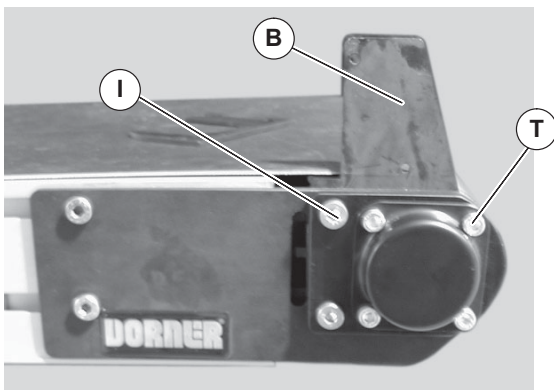


Figure 26

- Place end stop cross piece (Figure 27, item A) on end of conveyor and attach with screws (C) tighten to 50 in-lbs (5.6 N-m).

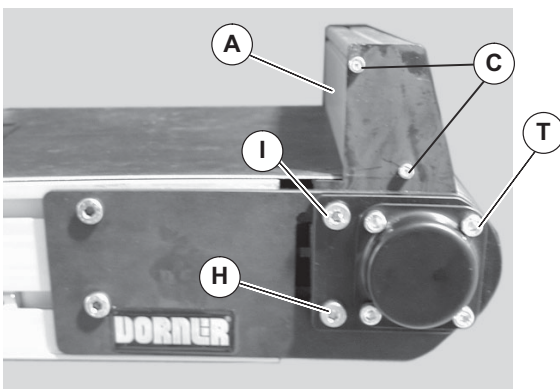


Figure 27

- Tighten screws (Figure 27, item H and I) to 146 in-lbs (16.5 N-m) and tighten screw (T) on side of conveyor opposite the drive.

- Install the gearmotor mounting package. Reverse the instructions for your drive mounting package starting on page 7:

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 procedure outlined below may be performed on both the Drive and Idler Ends of the conveyor.

- On tension end of the conveyor, identified by the pinion locking screw (Figure 28, item D), loosen the two tail clamp bolts (G), on both sides of conveyor.

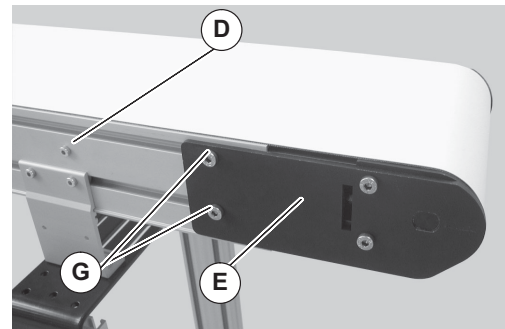


Figure 28

- With 5mm hex wrench, hold pinion torque screw (Figure 29, item F). Loosen the pinion locking screw (Figure 28, item D) and turn the pinion torque screw (F) to extend head plate assembly.

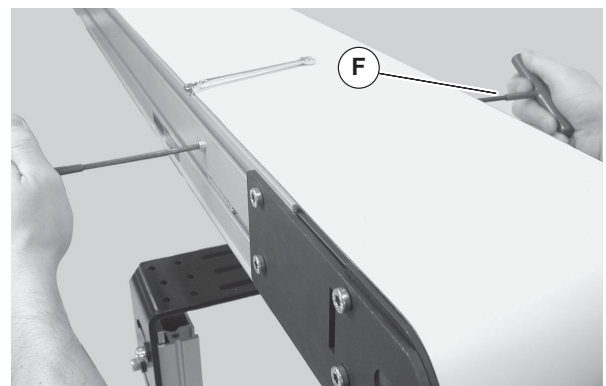


Figure 29

Installation

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 achieved. If proper tensioning can not be obtained before the belt life indicator is all black (Figure 30, item K) the belt must be replaced.

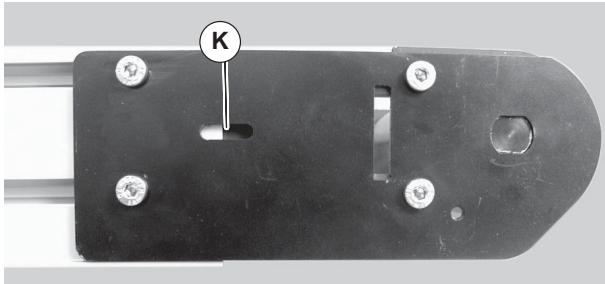


Figure 30


16. After adjusting proper tensioning, tighten the pinion locking screw (Figure 28, item D) to 69 in-lbs (7.8 N-m), and tighten tail clamp bolts (Figure 8, item G) 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

⚠ WARNING

<p>Exposed moving parts can cause severe injury.</p> <p>LOCK OUT POWER before removing guards or performing maintenance.</p>

Periodically, remove two (2) set screws (Figure 31, item C) on both sides of the conveyor and remove end stop (A). Clean any debris from between end stop and conveyor belt. Replace end stop (A).

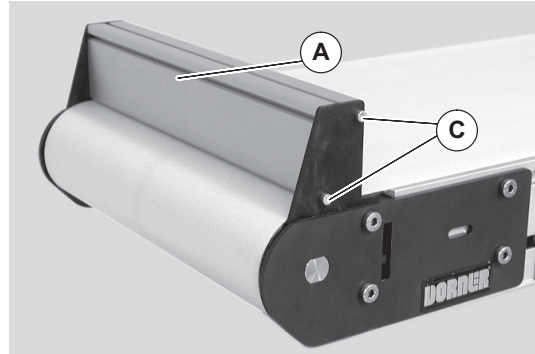


Figure 31

Service Parts

NOTE
<p><i>For replacement parts other than those shown on this page, contact an authorized Dorner Service Center or the factory.</i></p>

End Stop

Item	Part Number	Part Description
1	301100	End Stop Inside Spacer
2	3246WW	End Stop (WW = conveyor width)
3	920416M	M4 x 16mm Socket Head Screw

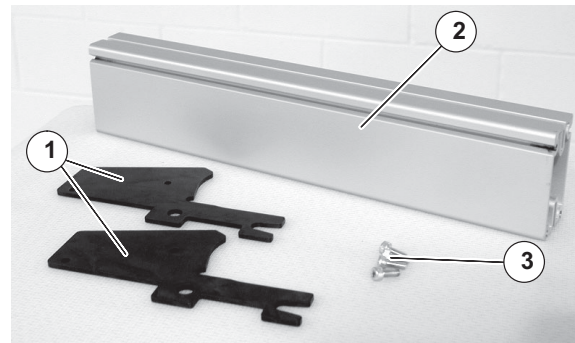


Figure 32

Return Policy

Returns must have prior written factory authorization or they will not be accepted. Items that are returned to Dorner without authorization will not be credited nor returned to the original sender. 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. Dorner part number(s) of 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 for reference.

There will be a return charge on all new undamaged items returned for credit where Dorner was not at fault. Dorner is not responsible for return freight on such items.

Conveyors and conveyor accessories	
Standard catalog conveyors	30%
MPB Series, cleated and specialty belt conveyors	50%
7400 & 7600 Series conveyors	non-returnable items
Engineered special products	case by case
Drives and accessories	30%
Sanitary stand supports	non-returnable items

Parts	
Standard stock parts	30%
MPB, cleated and specialty belts	non-returnable items

Returns will not be accepted after 60 days from original invoice date.

The return charge covers inspection, cleaning, disassembly, disposal and reissuing of components 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. Contact Dorner for the name of your local representative. Our Technical Sales, Catalog Sales and Service Teams will gladly help with your questions on Dorner products.

For a copy of Dorner's 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 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. 2006

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