



# End Stop for 6100 Series Industrial Conveyors

Installation, Maintenance & Parts Manual



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## Introduction

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

Dorner 6100 Series conveyors are covered by Patent No. 5,174,435, 6,109,472 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.

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.

## 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 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.

# Installation

## Required Tools

- Hex key wrenches:  
4 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.

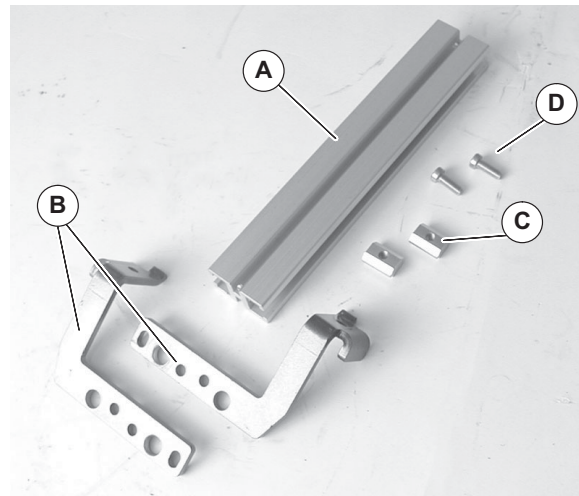
### **NOTE**

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

### Installation Component List:

- |   |                                |
|---|--------------------------------|
| A | End Stop                       |
| B | Bracket, End Stop (2x)         |
| C | T-Nut (2x)                     |
| D | M5 x 45 Socket Head Screw (2x) |


1. Gather components (Figure 1)

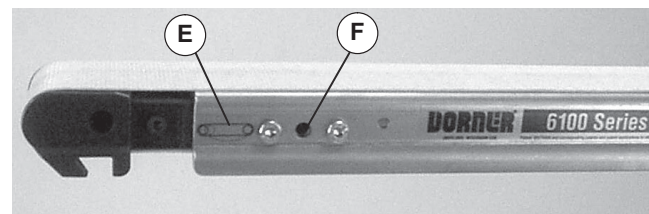


**Figure 1**

### **NOTE**

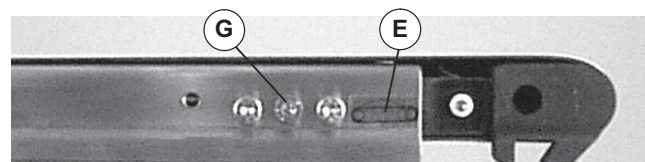
*If conveyor is equipped with optional Tool-less Belt Release, sequence is the same and no tools are required.*

2. On tension end of the conveyor identified with a  label (Figure 2, item E) and (Figure 3, item E), insert a 5 mm hex key wrench to engage pinion gear (Figure 2, item F).



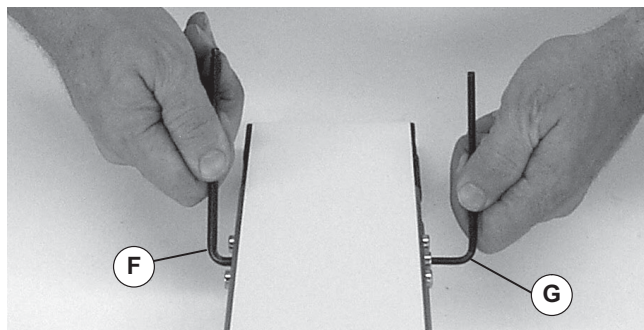
**Figure 2**

3. With pinion gear engaged, insert a 4 mm hex key wrench into lock screw (Figure 3, item G).



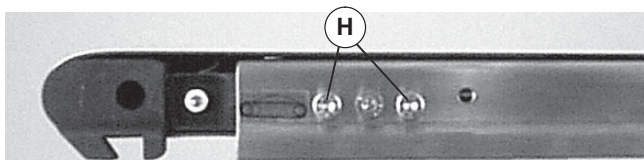
**Figure 3**

4. While maintaining tension on pinion gear (Figure 4, item F) loosen lock screw (G). Rotate pinion gear (F) clockwise to release conveyor belt tension.



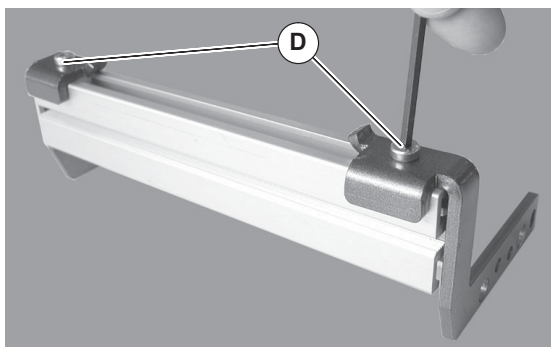
**Figure 4**

5. Remove head plate screws (Figure 5, item H) on both sides of the conveyor.



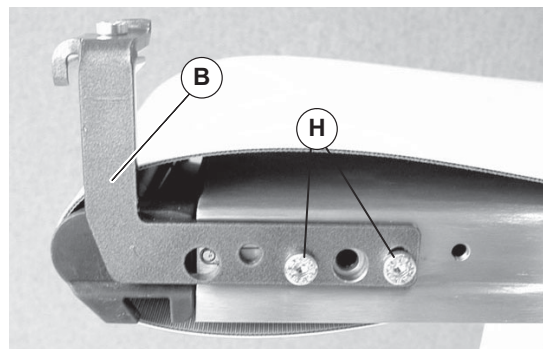
**Figure 5**

6. Loosen screws (Figure 6, item D) on both sides of end stop assembly.



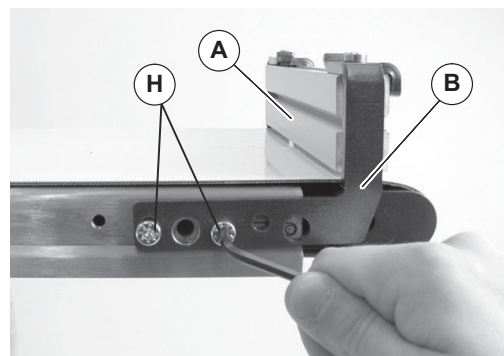
**Figure 6**

7. Place end stop support (Figure 7, item B) on end of conveyor and attach with head plate screws (H) tighten to 57 in-lbs (6.4 N-m).



**Figure 7**

8. Place the remainder of the end stop (Figure 8, item A and B) on end of conveyor and attach with head plate screws (H) tighten to 57 in-lbs (6.4 N-m).



**Figure 8**

9. Center the end stop (Figure 8, item A) on the conveyor and tighten screws (Figure 6, item D) to 57 in-lbs (6.4 N-m).
10. Insert a 5 mm hex key wrench to engage pinion gear (Figure 2, item F).

## NOTE

*On pinion gear (Figure 2, item F), do not exceed a torque of 25 in-lb (2.8 Nm) for 2" to 12" (44 mm to 305 mm) wide conveyors and 40 in-lb (4.5 Nm) for an 18" (457 mm) wide conveyor. Over-tensioning the conveyor belt could cause excessive pulley bearing load and early failure.*

11. With V-guide seated in pulley, rotate the pinion gear (Figure 2, item F) counter-clockwise to sufficiently tension the belt to handle the conveyor load.

## NOTE

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

12. Secure lock screw (Figure 4, item G) to 57 in-lb (6.4 N-m).

# Installation

## 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.

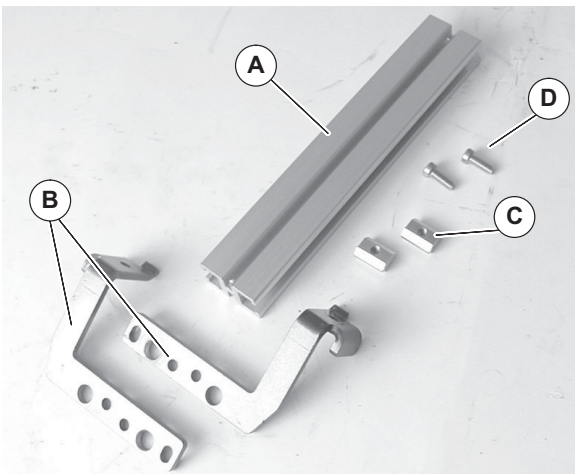
### **NOTE**

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

#### Installation Component List:

- |   |                                |
|---|--------------------------------|
| A | End Stop                       |
| B | Bracket, End Stop (2x)         |
| C | T-Nut (2x)                     |
| D | M5 x 45 Socket Head Screw (2x) |

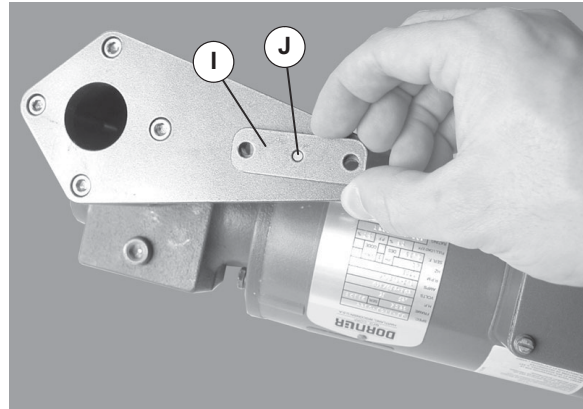
1. Gather components (Figure 9)



**Figure 9**

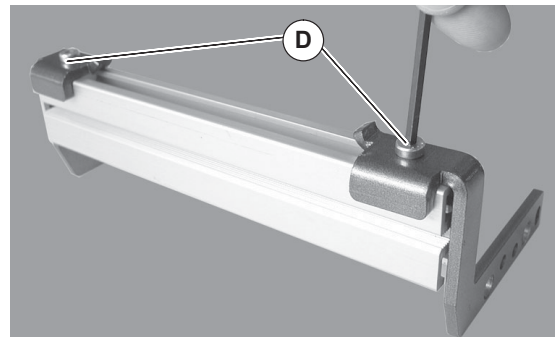
2. Remove the gearmotor mounting package. See your drive mount accessory instructions.

3. Remove gearmotor mount spacer (Figure 10, item I) and pin (J) from the mounting package typical mounting package shown, individual mounting package vary.



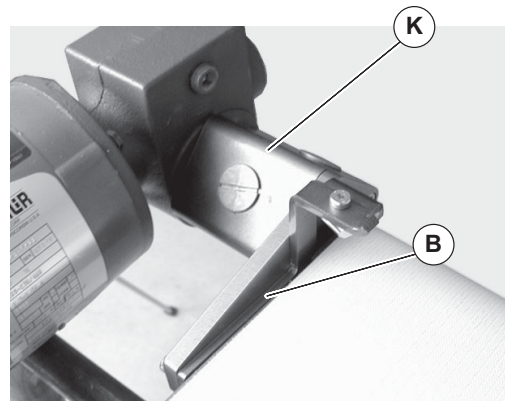
**Figure 10**

4. Loosen the socket head screws (Figure 11, item D) on the end stop assembly.



**Figure 11**

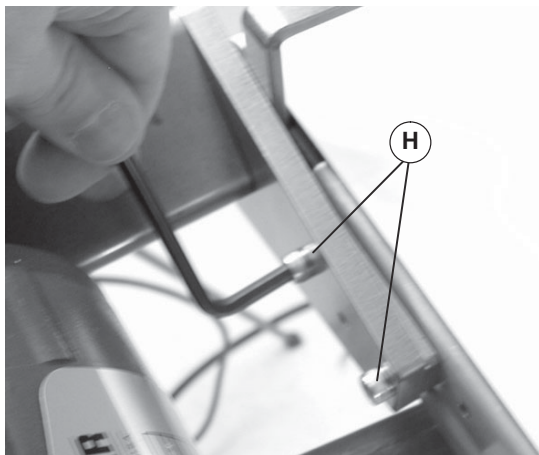
5. Install the gearmotor mounting package (Figure 12, item K) using the end stop bracket (B) in place of the mount spacer. See your drive mount accessory manual for additional instructions.



**Figure 12**

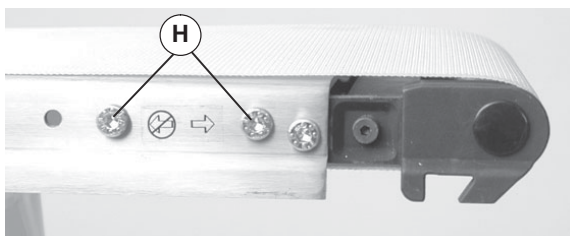


6. Tighten the mounting screws (Figure 13, item H) to 146 in-lbs (16.4 N-m)



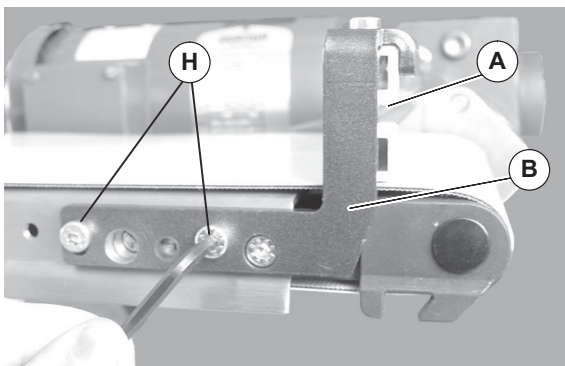
**Figure 13**

7. Remove head plate screws (Figure 14, item H) on the non-gearmotor mount side of the conveyor.



**Figure 14**

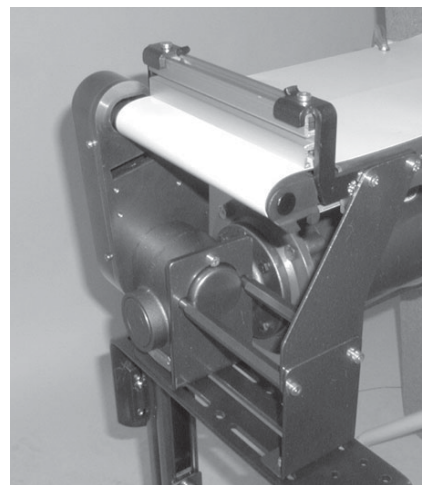
8. Place the remainder of the end stop assembly (Figure 15, item A and B) on end of conveyor and attach non-gearmotor mount side with head plate screws (H) tighten to 57 in-lbs (6.4 N-m).



**Figure 15**

## NOTE

*If used with Heavy Load Gearmotor Mounting Package, End Stop bracket (Figure 15, item B) replaces mount spacer as shown in Figure 16.*



**Figure 16**

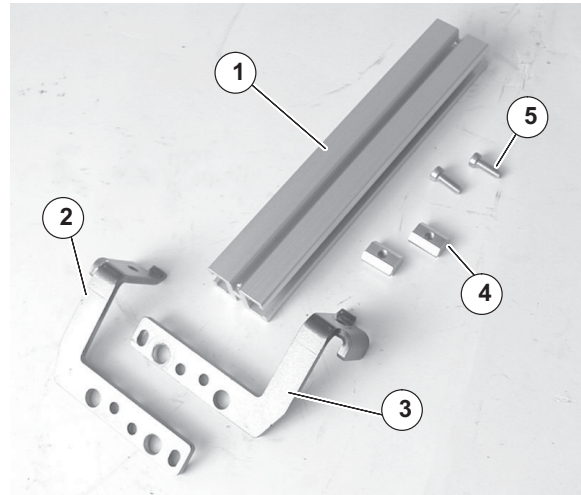
9. Center the end stop (Figure 15, item A) on the conveyor and tighten screws (Figure 11, item D) to 57 in-lbs (6.4 N-m).

# Service Parts

## NOTE

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

Item	Part No.	Part Description
1	460032	End Stop, 2" (51mm)
	460033	End Stop, 3" (76mm)
	460034	End Stop, 4" (102mm)
	460035	End Stop, 5" (127mm)
	460036	End Stop, 6" (152mm)
	460038	End Stop, 8" (203mm)
	460040	End Stop, 10" (254mm)
	460042	End Stop, 12" (305mm)
	460048	End Stop, 18" (457mm)
2	460049	End Stop Bracket, RH
3	460050	End Stop Bracket, LH
4	639971M	T-Nut
5	920693M	M6 x 16mm Low Head Socket Screw



**Figure 17**





# 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](http://www.dorner.com).

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



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