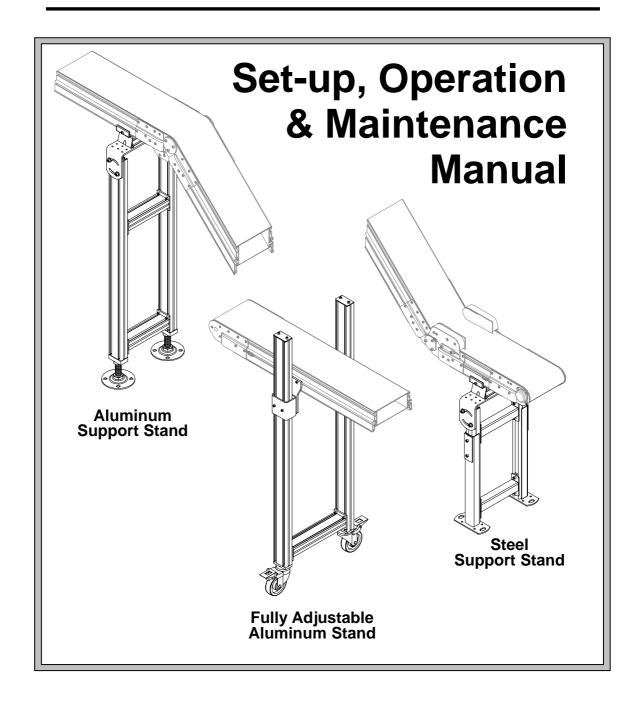


# Support Stands & Conveyor Mountings

(With Metric Fasteners)



#### **Table of Contents**

				Cleated Belt Support Stand Mounting	
	2	Diagonal Braces	4	Brackets with Return Rollers	5
Installation Instructions		Support Stand/Conveyor Mounting		Fully Adjustable Aluminum Stands .	6
General Instructions	3	Brackets	4		_
		Flat Belt Support Stand Mounting		Joining Conveyor Sections	6
Aluminum Support Stands	3	Bracket with Return Rollers	5	Replacement Parts	7

#### **Safe Practices**



#### WARNING



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



#### WARNING



Before proceeding to loosen hardware that locks-in the selected stand height, be sure that all related Conveyor sections are securely supported to prevent them from moving suddenly and dropping-down which may pinch or strike you, causing serious personal injury.



#### WARNING



Operating Dorner conveyors in an explosive environment is prohibited.

#### WARNING



When attaching stands with casters to aluminum extruded conveyors, the use of diagonal bracing is recommended to help prevent personal injury from possible collapse while wheeling conveyor.

#### WARNING



NEVER operate equipment without guards or other protective devices properly secured in place. In addition, to prevent injury, make sure all electrical power sources have been disconnected and locked-out before you perform any maintenance, make any adjustments or replace any components.

#### WARNING



Standing on a conveyor or transporting people is prohibited.

#### 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 startup. Because Dorner Mfg. Corp. cannot control the physical installation and applications of multiple conveyor systems, taking protective measures is the responsibility of the user.

### Foreword

For pictorial clarity, some illustrations in this manual may show guards or other protective devices open or removed. Under no circumstances should the conveyor be operated without these devices securely in place. By following the maintenance and adjustment instructions in this manual, you will prolong the life of your conveyor and maintain its maximum efficiency.

NOTE: All technical data in this publication is based on the product information available at time of printing. Dorner reserves the right to make changes at any time without notice or obligation to install those changes on units previously delivered.

#### **General Instructions**

Dorner stands and compatible mounting hardware are designed to squarely and securely support your Dorner conveyor.

Dorner provides three (3) different types of support stands. Refer to the following subtopics for appropriate details on conveyor adaptation to each type of stand.

#### **Aluminum Support Stands** (Figure 1)

Aluminum support stands are available with either permanent floor mounting pads (A of Figure 1) or optional pivoting and dual lockable, 102 mm diameter casters (B). Both the floor mounting pads or caster assemblies have threaded shafts that provide  $\pm$  51 mm of adjustment. Rotate the threaded shaft (C) in or out to obtain the desired height and then fix the position by tightening the locking nut (D). Activation of the caster wheel dual lock prevents the caster from both pivoting and rolling. Locks are activated and de-activated with foot pressure.

Standard aluminum support stands are available in compatible widths to match the respective conveyor widths and incremental heights from 457 to 1219 mm. Depending on the height of the stand, one or two re-positionable, stabilizing cross members (E) are also provided.

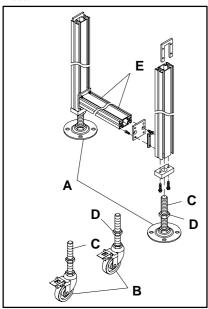


Figure 1: Standard Aluminum Support Stand

#### **Steel Support Stands** (Figure 2)

#### WARNING

Before proceeding to loosen hardware that locks-in the selected stand height, be sure that all related Conveyor sections are securely supported to prevent them from moving suddenly and dropping-down which may pinch or strike you, caus-

ing serious personal injury.

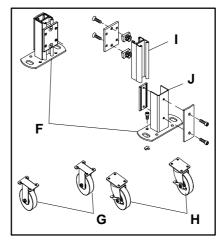


Figure 2: 152 mm & 203 mm High Steel Support Stands

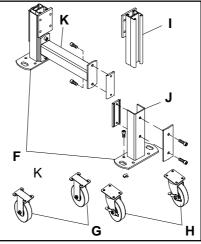


Figure 3: 305 mm High Steel Support Stand

Steel stands are available with permanent floor mounting feet (F of Figure 2) or with optional fixed position (G) or rotationally lockable, pivoting casters (H). The steel stand assemblies consists of several different combinations of differing length legs (I), differing length boots (J) and stabilizing cross members (K) that match the respective conveyor widths.

Variations in elevation can be achieved by unlocking the clamping plates and telescoping each leg (I) and boot (J) assembly. Be sure that the attaching hardware is always kept tightly secured at all times.

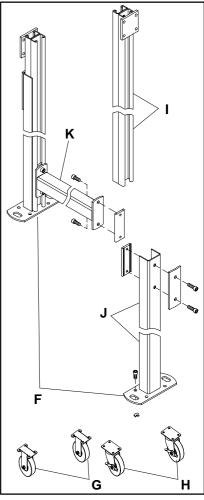


Figure 4: Taller Than 305 mm High Steel Support Stands

#### **Diagonal Braces**

# • WARNING !

When attaching stands with casters to aluminum extruded conveyors, the use of diagonal bracing is recommended to help prevent personal injury from possible collapse while wheeling conveyor.

Dorner recommends adding diagonal bracing (L of Figure 5) to aluminum extruded conveyors whenever casters are used. Attach and secure the top end of each diagonal brace (L) to the bottom lip of the conveyor sidewall with the appropriate 2100 Series clip (P of Figure 6) or 3100 Series clip (X of Figure 7) and an M8-1.25 x 18 mm button head screw (Q). On the bottom end, secure the diagonal brace (L) to appropriate right hand (R of Figure 6) or left hand offset plate (Y of Figure 7) with an M8-1.25 x 12 mm button head screw (S). Attach and secure the either offset plate to the stand cross member using either (2 each) M6 Spring Nuts (T) and M6-1.0 x 18 mm socket head cap screws (U) for aluminum stands or (2 each) M6 Spring Nuts (V) and M6-1.0 x 25 mm socket head cap screws (W) for steel stands.

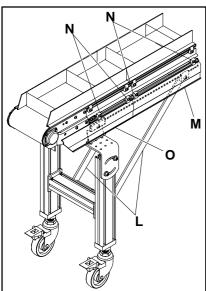


Figure 5: Aluminum Stand (with Casters and Diagonal Braces) Supporting Cleated Belt Conveyor with Return Belt Skirting

When a cleated belt conveyor is equipped with return belt skirting, the section of skirting (M of Figure 5) that is over the brace to conveyor anchoring hardware must be temporarily removed for access. Loosen the attaching hardware and rotate each guide retaining clip (N) to detach the skirting section.

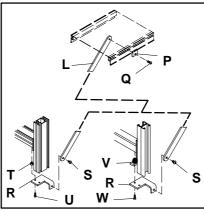


Figure 6: Aluminum Stand (left) & Steel Stand (right) Diagonal Brace Connection to 2100 Series Conveyor

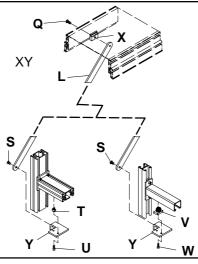


Figure 7: Aluminum Stand (left) & Steel Stand (right) Diagonal Brace Connection to 3100 Series Conveyor

#### Support Stand/Conveyor Mounting Brackets (Figures 8, 9 & 10)

The upper portion of the stand is connected to the conveyor by a single stand/conveyor mounting bracket (Z of Figure 8) or (AC of Figure 9). For wider than 610 mm wide conveyors, the upper portion of the stand is connected by two (2) "L" mounting brackets (AD of Figure 10). Slotted holes (AA), in all of the brackets allow the conveyor to be angled when necessary. Be sure to tightly secure both fasteners (AB), on each side to fix the position of the adjusted angle.

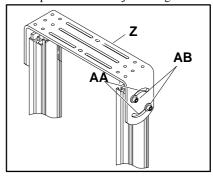


Figure 8: Stand Mounting Bracket for Up to 305 mm Wide Conveyors

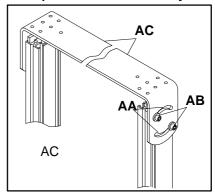


Figure 9: Stand Mounting Bracket for a 381 to 610 mm Wide Conveyors

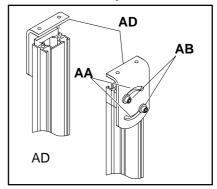


Figure 10: Stand Mounting Brackets for Wider than 610 mm Conveyors

#### Flat Belt Support Stand **Mounting Bracket with Return Rollers** (Figures 11 & 12)

The stand/conveyor mounting bracket (Z of Figure 8) or (AC of Figure 9) or "L" mounting brackets (AD of Figure 10) are linked to the flat belt conveyor section, on each side, by a stand mounting block (AE of Figures 11 & 12) secured with (2 each) M6 x 18 mm socket head cap screws and hard washers (AF). The bottom edge of the conveyor side rail, on each side, is attached by the stand mounting block and clamp plate (AG) which is secured with an M8 x 16 mm button head cap screw (AH).

An integral part of the stand mount block assembly, for flat belt conveyors, is a return belt roller assembly. The roller (AI) has return belt roller guards (AJ), on both sides. Installation of the guards involves proper orientation and attachment of each guard into one of the stand mounting blocks, with an M4 x 12 mm self threading screw (AK). The mounting block for the opposite side, is then slid onto the other ends of the guards and held in place by attachment of the other mounting block to the stand/conveyor mounting bracket or "L" mounting brackets.

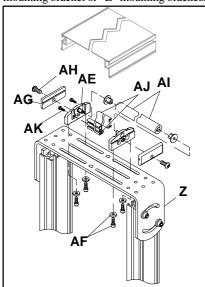


Figure 11: Mounting Bracket with Return Roller Assembly used with a Flat-Belt Conveyor (610 mm and Narrower)

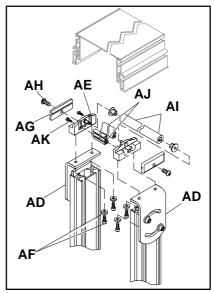


Figure 12: Mounting Bracket with Return Roller Assembly used with a Flat-Belt Conveyor (Wider than 610 mm)

#### **Cleated Belt Support Stand Mounting Brackets with Return Rollers** (Figures 13 & 14)

The stand/conveyor mounting bracket (Z of Figure 8) or (AC of Figure 9) or "L" mounting brackets (AD of Figure 10) are linked to the cleated belt conveyor section, on each side, by a mounting bracket with return belt roller assembly (AN) which is secured with (2 each) M6 x 18 mm socket head cap screws and hard washers (AF). The upper part of the bracket and belt guide bearing assembly is secured to the bottom edge of the conveyor side rail with a clamp plate (AL) that is secured with an M8 x 18 mm button head cap screw (AM of Figure 13) for 2100 Series conveyors or with an M8 x 30 mm button head cap screw (AM of Figure 14) for 3100 Series or LPZ conveyors.

When a cleated belt conveyor is equipped with return belt skirting, the section of skirting (O of Figure 5) that is over the return belt roller assembly must be temporarily

removed for access. Loosen the attaching hardware and rotate each guide retaining clip (N) to detach the skirting section.

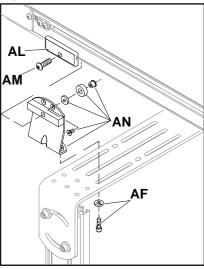


Figure 13: 2100 Series Cleated-Belt Conveyor Mounting Bracket with Return Belt Roller Assembly (3100 Series Components Similar)

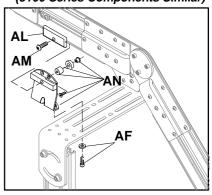


Figure 14: LPZ Series Cleated-Belt Conveyor Mounting Bracket with Return Belt Roller Assembly

# Fully Adjustable Aluminum Support Stands (Figure 15)

# A

#### WARNING



Before proceeding to loosen hardware that locks-in the selected stand height, be sure that all related Conveyor sections are securely supported to prevent them from moving suddenly and dropping-down which may pinch or strike you, causing serious personal injury.

The fully adjustable aluminum support stand is a moveable support that has two (2) pivoting and dual lockable, 102 mm diameter casters. Activating this type of lock prevents the caster from both pivoting and rolling. Locks are activated and de-activated with foot pressure.

This stand style is composed of two slotted aluminum vertical supports (AO of Figure 15) and two adjustable steel conveyor mounting assemblies (AP). Both adjustable assemblies can be slid up or down their respective vertical supports. The adjusted

vertical position can be locked by securing two (2) outboard mounting screws (AQ). A single re-positionable, stabilizing cross member (AR) is also provided (none on the 179 to 483 mm short stand).

The adjustable steel conveyor mounting assembly also has a pivot angle adjustment (AS) to coincide with the required conveyor section angle. The adjusted angle can be locked by securing two (2) inboard mounting screws.

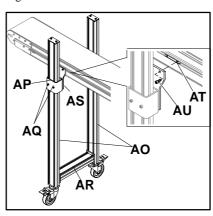


Figure 15: Fully Adjustable Aluminum Stand and Adapting Components for an LPZ Conveyor

The adjustable steel conveyor mounting assembly is attached to the conveyor section by a drop-in T-bar (AT) which is secured in the conveyor's lower T-slot with two (2) M6 x 16 mm socket head cap screws (AU).

# Joining Conveyor Sections (Figure 16)

The junctions of conveyor sections must always be supported by a stand and related attaching components shown in Figures 11 through 14. The joining components, on either side of the conveyor, are an intermediate clamp (AV), an intermediate T-bar (AW) and four (4) M6 x 12 mm button head screws (AX).

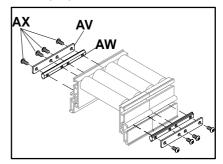


Figure 16: Conveyor Section Connection Detail

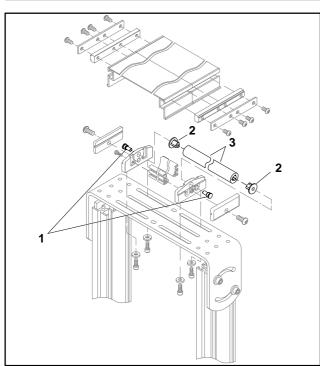
# **Conveyor Mountings**

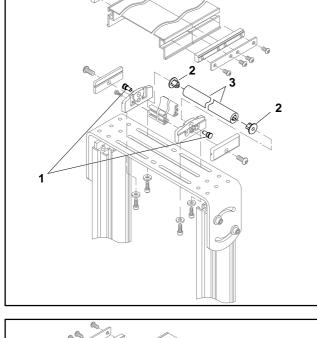
# **Replacement Parts**

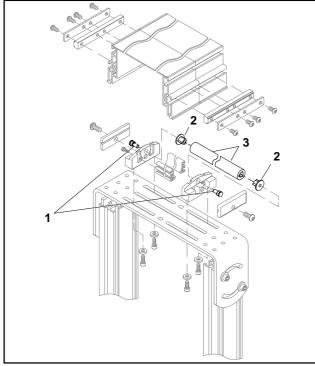
#### **Replacement Parts**

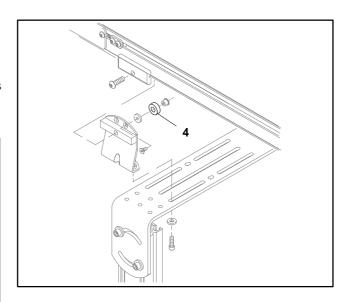
#### NOTE:

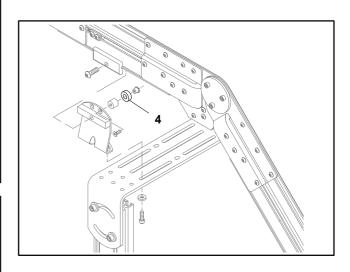
For replacement parts other than those shown on this page, contact the factory.











Item	Part No.	Part Description		
1	202348P	Bearing Pin		
2	202311P	Return Roller Bearing		
3 207702		Return Roller Tube, 44 mm		
	207703	Return Roller Tube, 70 mm		
	207704	Return Roller Tube, 95 mm		
	207705	Return Roller Tube, 127 mm		
	207706	Return Roller Tube, 152 mm		
	207708	Return Roller Tube, 203 mm		
	207710	Return Roller Tube, 254 mm		
	207712	Return Roller Tube, 305 mm		
	207718	Return Roller Tube, 457 mm		
	207724	Return Roller Tube, 610 mm		
	207730	Return Roller Tube, 762 mm		
	207736	Return Roller Tube, 915 mm		
	207740	Return Roller Tube, 1016 mm		
4	802-027	Sealed Ball Bearing		

#### **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.



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. 1997

DORNER MFG. CORP.

580 Industrial Drive, PO Box 20 Hartland, WI 53029-0020 USA **USA** 

TEL 1-800-397-8664 (USA) FAX 1-800-369-2440 (USA) Outside the USA:

TEL 1-414-367-7600, FAX 1-414-367-5827

**DORNER** 

Arnold-Sommerfeld-Ring 2 D-52499 Baesweiler Germany TEL (02401) 80 52 90 FAX (02401) 80 52 93