



Multi Tier Stands

Installation, Maintenance & Parts Manual



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Table of Contents

Introduction	2	Stand Assembly – Upper Tier(s)	7
Warnings - General Safety	3	Preventive Maintenance and Adjustment	8
Product Description	4	Required Tools	8
Specifications	4	Conveyor Height Adjustment.....	8
Multi Tier Support Stand Models	4	Angle Adjustment.....	9
Installation	5	Bottom or Middle Tier Conveyor Service.....	9
Recommended Installation Sequence	5	Service Parts.....	11
Required Tools.....	5	Multi Tier Stand	11
Stand Assembly – Base Tier.....	5	Return Policy.....	12

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'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




Insufficient clearance between conveyed product and upper conveyor support causes pinch points which can cause severe injury.
ALLOW A MINIMUM OF 2" (51mm) BETWEEN PRODUCT AND UPPER CONVEYOR MOUNTING.

⚠ WARNING




Exceeding maximum suggested height may cause instability of conveyors and stands.
DO NOT EXCEED 72" (1829mm) IN HEIGHT WITH MULTI TIER SUPPORT STANDS.

⚠ WARNING




Adding casters to Multi Tier Support Stands may cause instability of conveyors and stands.
DO NOT USE CASTERS WITH MULTI TIER STANDS.

⚠ WARNING




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

⚠ 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.

⚠ 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.

Product Description

Refer to **Figure 1** for typical stands components.

1	Tube End Covers
2	Tier Legs
3	Leg Support Brackets
4	Stand Legs
5	Base Assembly
6	Conveyor Mounting Brackets

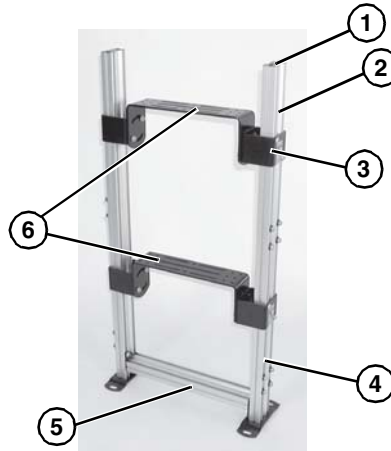


Figure 1

Specifications

Multi Tier Support Stand Models

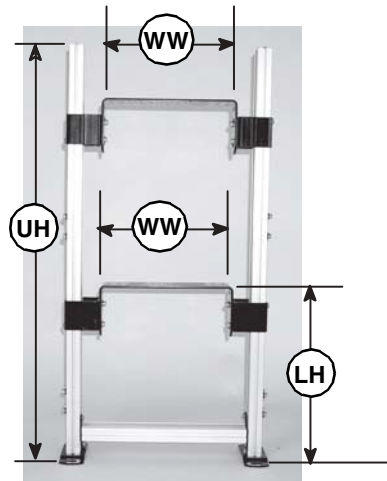
39 M TT WW LH UH

- Upper Height (UH)
- Lower Height (LH)
- Conveyor Width (WW)
02 (51mm) to 48 (1219mm)
- Stand Type (TT)
 - T1 = Multi Tier Stand - 1 Tier
 - T2 = Multi Tier Stand - 2 Tier
 - T3 = Multi Tier Stand - 3 Tier
 - T4 = Multi Tier Stand - 4 Tier
 - T5 = Multi Tier Stand - 5 Tier
 - T6 = Multi Tier Stand - 6 Tier
- Language Code
M = U.S. English

H Style Stand
 39 = 2200, 3200, 4100 & 6200 Series
 59 = 5200 Series
 39H = 3200 Modular Belt
 Conveyors with Standard Chain
 39R = 3200 Modular Belt
 Conveyors with High Strength Chain

Example: 39MT212-1260

2 Tiers of Multi Tier, H style stand for a 12" (305mm) wide conveyor with a lower height of 12" (305mm) and an upper height of 60" (1524mm).



⚠ WARNING



Insufficient clearance between conveyed product and upper conveyor support causes pinch points which can cause severe injury. **ALLOW A MINIMUM OF 2" (51mm) BETWEEN PRODUCT AND UPPER CONVEYOR MOUNTING.**

⚠ WARNING



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

Recommended Installation Sequence (see Table of Contents for page number)

- Assemble base tier
- Install bottom conveyor on base tier
- Assemble middle tier
- Attach middle tier to base tier
- Install middle conveyor
- Assemble top tier
- Attach top tier to middle tier
- Install top conveyor
- Adjust stand height and angle (see Preventive Maintenance and Adjustments section, page 8)

Required Tools

- 6 mm Hex Key Wrench

Stand Assembly – Base Tier

1. Typical components of multi tier stand (**Figure 2**).

- | | |
|---|------------------------------------|
| 1 | Stand/Conveyor Mounting Bracket(s) |
| 2 | Leg Support Brackets (2x) |
| 3 | Base Legs (2x) |
| 4 | Base Assembly (Base Tier, only) |
| 5 | Tube End Covers (2x) |
| 6 | Plastic Tree Rivets (4x) |
| 7 | Tier Hardware Pack |
| 8 | Tube Joining Bars (4x) |

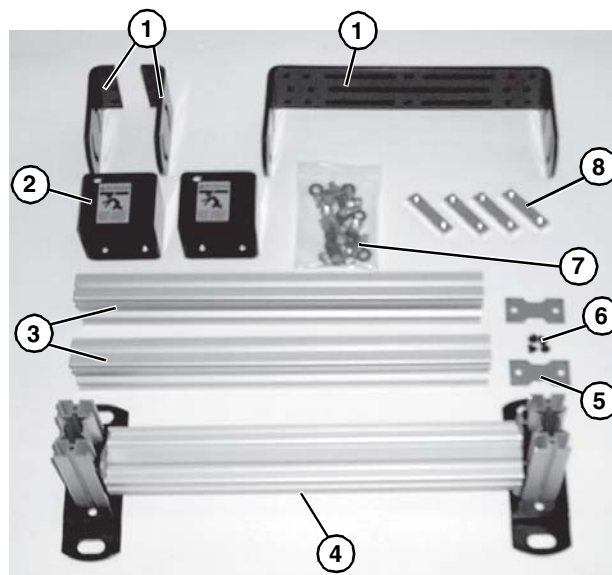


Figure 2

2. Open tier hardware pack (**Figure 2, item 7**). Install two hard washers (**Figure 3, item 1**) and M8 x 12mm socket head screws (**Figure 3, item 2**) on tube joining bar (**Figure 3, item 3**). Do not tighten screws.

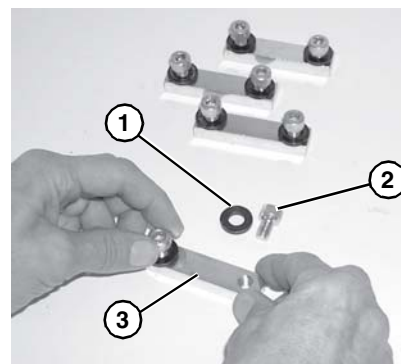


Figure 3

3. Repeat step 2 for three remaining tube joining bars.

Installation

⚠ WARNING



Failure to secure tier joint screws (Figure 4, item 3) and (Figure 6, item 1) may cause tube joining bar and conveyor sections to drop down, causing severe injury.

TIGHTEN ALL TIER JOINT SCREWS (Figure 4, item 3) and (Figure 6, item 1) AFTER INSTALLATION.

4. Install tube joining bar assembly (Figure 4, item 1) at top of leg on base assembly (Figure 4, item 2). Half of tube joining bar assembly must extend above leg, as shown. Tighten screw (Figure 4, item 3) to 130 in-lbs (15 Nm).

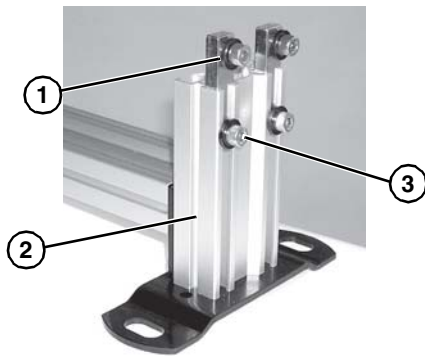


Figure 4

5. Repeat step 4 for three remaining tube joining bar assemblies.
6. Slide stand leg (Figure 5, item 1) over both tube joining bars (Figure 5, item 2) until it is resting on leg of base assembly (Figure 5, item 3).

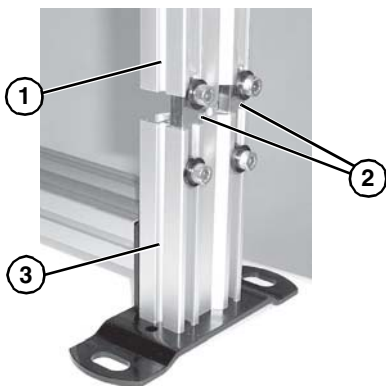


Figure 5

7. Tighten screws (Figure 6, item 1) to 130 in-lbs (15 Nm).

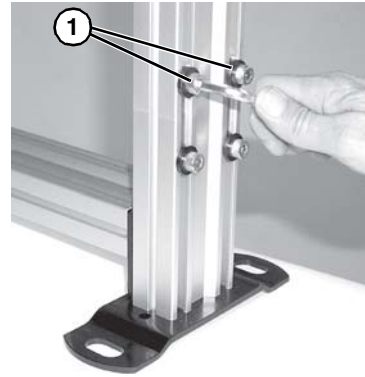


Figure 6

8. Repeat steps 6 and 7 for other stand leg.

NOTE

Leg support bracket (Figure 7, item 1) must be installed on stand/conveyor mounting bracket(s) (Figure 7, item 2) with warning label (Figure 7, item 4) facing out. When installed, round end of stand/conveyor mounting bracket will be down and warning label will be upright, as shown.

9. Attach leg support bracket (Figure 7, item 1) to stand/conveyor mounting bracket (Figure 7, item 2) with two flange socket head screws (Figure 7, item 3). Do not tighten screws.

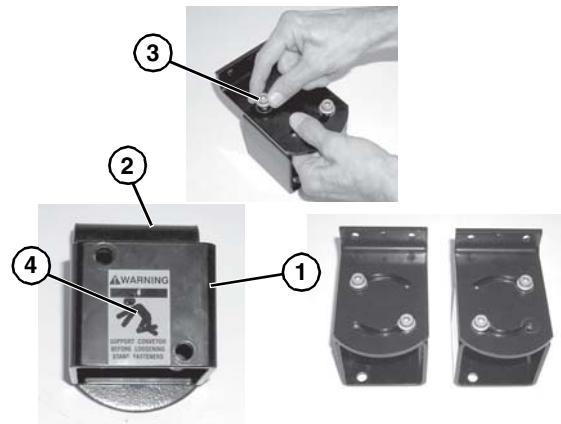


Figure 7

10. Repeat step 9 for opposite leg support bracket (Figure 7, item 1). To ensure proper attachment of stand/conveyor mounting bracket to conveyor, install flange socket head screws (Figure 7, item 3) in opposite holes on opposite leg support bracket, as shown.

11. Install two M10 x 16mm button head screws (**Figure 8, item 1**) and hex nuts (**Figure 8, item 2**) on leg support bracket (**Figure 8, item 3**). Do not tighten screws.

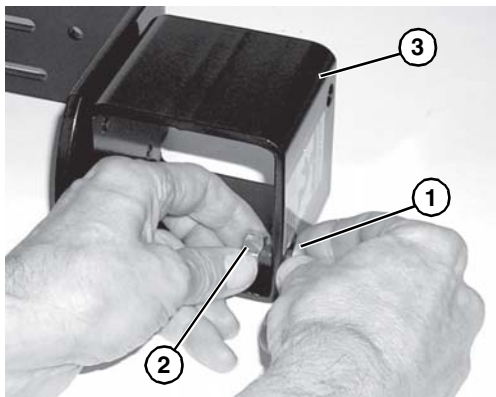


Figure 8

12. Repeat step 11 for other leg support bracket.
13. Align two hex nuts (**Figure 9, item 1**) on each leg support bracket (**Figure 9, item 2**) to t-slots at top, outside of stand legs (**Figure 9, item 3**). Slide leg support brackets down stand legs until top of stand/conveyor mounting bracket (**Figure 9, item 4**) is approximately the same height as the bottom of conveyor. Tighten four button head screws (**Figure 9, item 5**) just enough to keep leg support brackets in position.

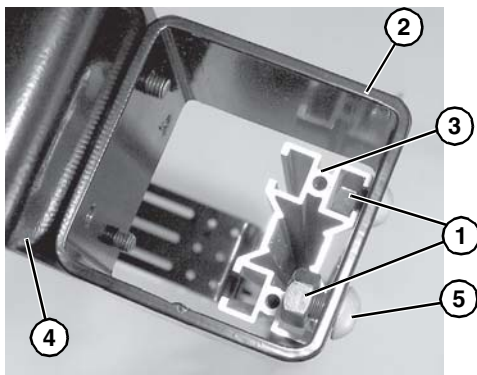


Figure 9

14. Install conveyor on base tier. See Conveyor Installation, Maintenance and Parts Manual for installation instructions.

⚠ WARNING

Failure to secure screws (Figure 10, item 1 and 2) may cause conveyor section(s) to drop down causing severe injury.

TIGHTEN SCREWS (Figure 10, item 1 and 2) AFTER ADJUSTMENT.

15. Tighten four flange socket head screws (**Figure 10, item 1**) to 24 ft-lb (33 N-m).
16. Tighten four button head screws (**Figure 10, item 2**) to 17 ft-lb (22.5 N-m).

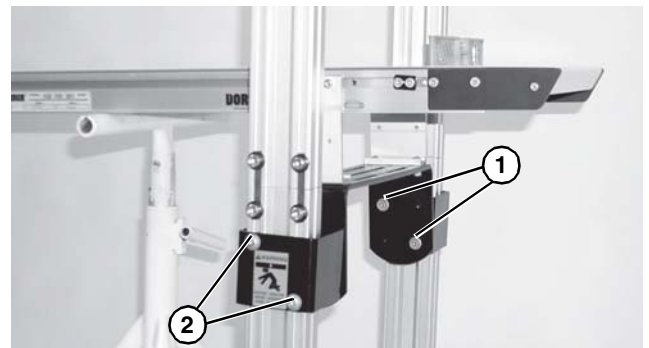


Figure 10

17. Make height and angle adjustments as required. See “Conveyor Height Adjustment” section on page 8. See “Angle Adjustment” section on page 9.

Stand Assembly – Upper Tier(s)

1. For assembly of upper tier(s) on multi tier stand, repeat steps 2 through 17 for “Stand Assembly – Base Tier” starting on page 5.
2. Attach tube end cover (**Figure 11, item 1**) on stand leg (**Figure 11, item 2**) with two plastic tree rivets (**Figure 11, item 3**).

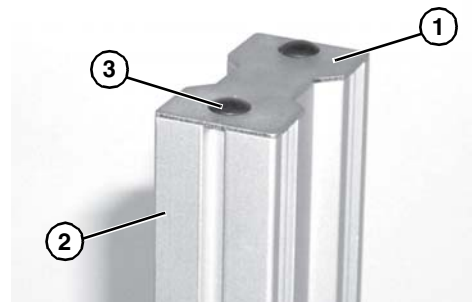


Figure 11


3. Repeat step 2 for opposite stand leg.

Preventive Maintenance and Adjustment

Required Tools

- 6 mm Hex Key Wrench
- Level

Conveyor Height Adjustment

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

1. Install a support (Figure 12, item 1) below conveyor (Figure 12, item 2) that will be adjusted.

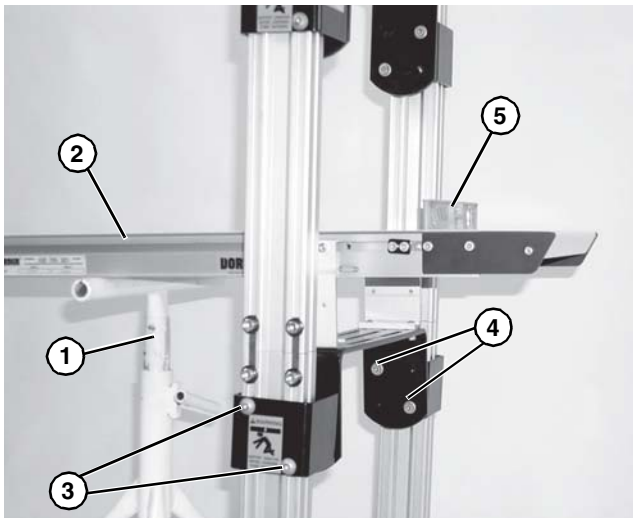




Figure 12

⚠ WARNING	
	
<p>Loosening conveyor height adjustment screws (Figure 12, item 3) or angle adjustment screws (Figure 12, item 4) may cause conveyor to drop down, causing severe injury. SUPPORT CONVEYOR PRIOR TO LOOSENING ANY OF THESE SCREWS.</p>	

2. Loosen two flange socket head screws (Figure 12, item 4) on each side of conveyor (Figure 12, item 2).
3. Loosen two button head screws (Figure 12, item 3) on each side of conveyor (Figure 12, item 2).
4. Adjust conveyor to desired height. Using a level (Figure 12, item 5), ensure conveyor is level from side to side.

⚠ WARNING	
	
<p>Failure to secure screws (Figure 12, item 4 and 3) may cause conveyor sections to drop down, causing severe injury. TIGHTEN SCREWS (Figure 12, item 4 and 3) AFTER ADJUSTMENT.</p>	

5. Tighten two flange socket head screws (Figure 12, item 4) on each side of conveyor (Figure 12, item 2) to 24 ft-lb (33 N-m).
6. Tighten two button head screws (Figure 12, item 3) on each side of conveyor (Figure 12, item 2) to 17 ft-lb (22.5 N-m).

Preventive Maintenance and Adjustment

Angle Adjustment

⚠ WARNING



Loosening angle adjustment screws (Figure 13, item 2) may cause conveyor sections to drop down, causing severe injury. **SUPPORT CONVEYOR SECTIONS PRIOR TO LOOSENING ANGLE ADJUSTMENT SCREWS.**

NOTE

To rotate conveyor mounting bracket (Figure 13, item 1), it may need necessary to relocate screws (Figure 13, item 2) to holes (Figure 13, item 3).

1. Loosen angle adjustment screws (Figure 13, item 2) on both sides of conveyor.

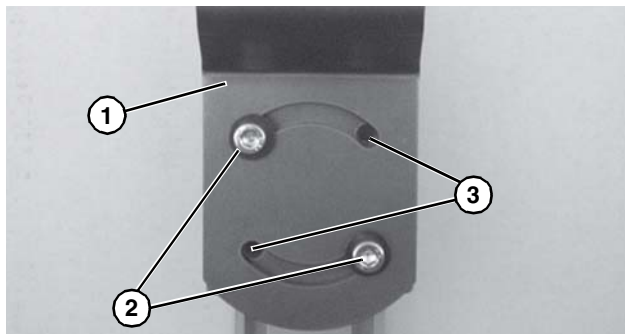


Figure 13

2. Adjust conveyor to desired angle. Using a level (Figure 12, item 5), ensure conveyor is level from side to side.

⚠ WARNING



Failure to secure screws (Figure 13, item 2) may cause conveyor sections to drop down, causing severe injury. **TIGHTEN SCREWS (Figure 13, item 2) AFTER ADJUSTMENT.**

3. Tighten angle adjustment screws (Figure 13, item 2) to 24 ft-lb (33 N-m).

Bottom or Middle Tier Conveyor Service

⚠ WARNING



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

1. Near the multi-tier stand, support the conveyor to be serviced AND the conveyor directly above.
2. Remove two flange socket head screws (Figure 14, item 1) from the conveyor to be serviced.

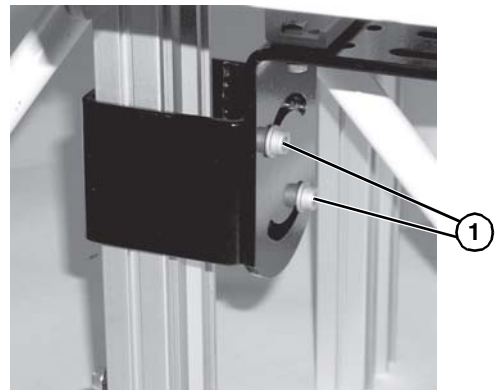


Figure 14

3. Loosen eight screws (Figure 15, item 1).

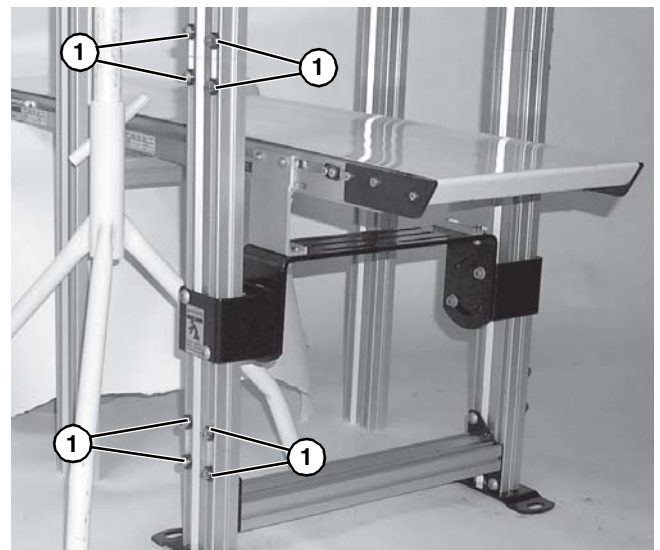


Figure 15

Preventive Maintenance and Adjustment

- Slide four tube joining bar assemblies (**Figure 16, item 1**) out of the way. Remove stand section (**Figure 16, item 2**) and leg support bracket (**Figure 16, item 3**) from multi tier stand.

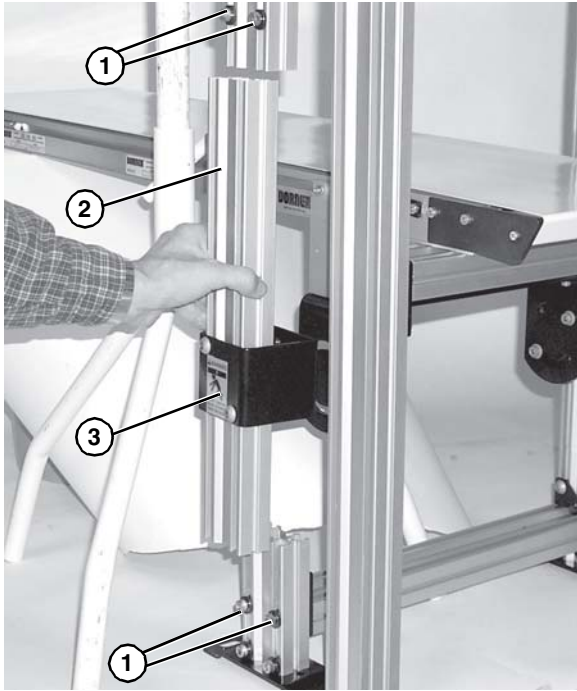


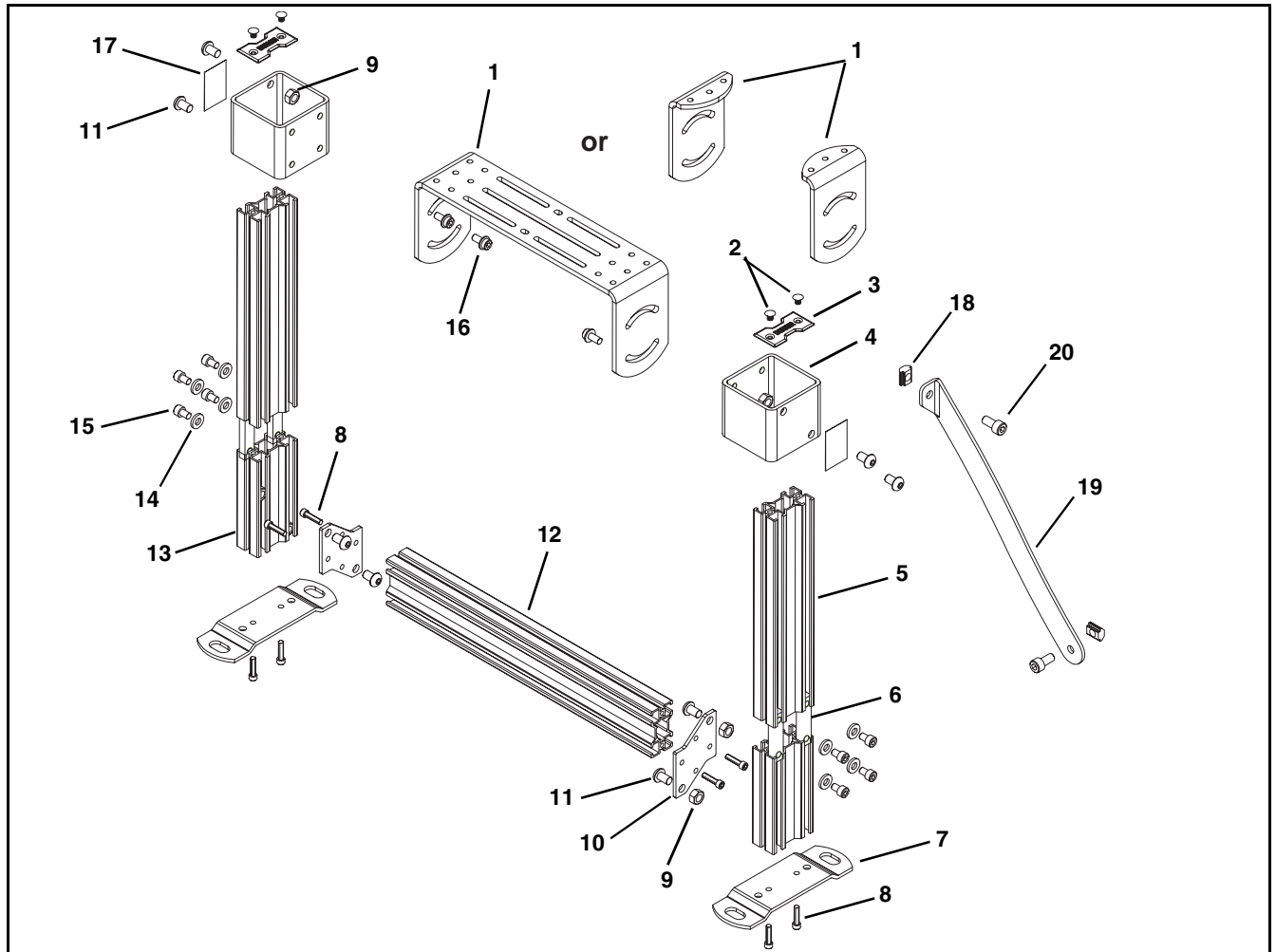
Figure 16

- Perform maintenance as required on conveyor.
- Reverse steps to reinstall stand section (**Figure 16, item 2**) and leg support bracket (**Figure 16, item 3**) on multi tier stand when service is complete.
- Tighten eight screws (**Figure 15, item 1**) to 130 in-lbs (15 N-m) and two flange socket head screws (**Figure 14, item 1**) to 24 ft-lb (33 N-m).

NOTE

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

Multi Tier Stand



Item	Part Number	Description
1	202148	Stand Brackets, for Stands 12" wide and under
	200697	Stand Brackets, for Stands 14" wide and over and for 3200 Modular Belt 12" wide and over
	352318	Stand Brackets for 5200 Series 8"-10" wide and for 3200 Modular Belt 6"-10" wide
	352310	Stand Brackets for 5200 Series 12" wide and over
2	807-1289	Tree Rivet, 0.22 Dia. x 0.75 Long
3	710003	Cover Label
4	710016	Bracket, Leg Support
5	710211-LLLLL	Stand Leg
6	710041	Joining Bar
7	710004	Foot, Stand, Floor Mounting
8	708180P	Socket Head Screw, M6-1.00 x 25mm
9	991001M	Hex Nut, M10-1.50

Item	Part Number	Description
10	710006	Crossmember End Plate
11	911016M	Button Head Screw, M10-1.50 x 16mm
12	710210-LLLLL	Crossmember
13	710213-00554	Base Leg
14	605280P	Washer, Hard, 0.361x0.750x0.120
15	920812M	Socket Head Screw, M8-1.25 x 12mm
16	960883M	Flange Hex Head Screw, M8 x 16mm
17	300324P	Label, Warning, Overhead Hazard
18	202390M	Cam Follower Nut, for Stands 20" wide and wider
19	734056	Angle Brace, for Stands 20" wide and wider
20	920816M	Socket Head Screw, M8-1.25 x 16mm, for Stands 20" wide and wider
LLLLL = Length in inches with 2 decimal places.		
Length Example: Length = 95.25" LLLLL = 09525		

Multi Tier Stands

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 (if available, part serial number).

A representative will discuss action to be taken on the returned items and provide a Returned Goods Authorization (RMA) number for reference. RMA will automatically close 30 days after being issued. To get credit, items must be new and undamaged. There will be a return charge on all items returned for credit, where Dorner was not at fault. It is the customer's responsibility to prevent damage during return shipping. Damaged or modified items will not be accepted. The customer is responsible for return freight.


Product Type									
Standard Products									Engineered to order parts
Product Line	Conveyors	Gearmotors & Mounting Packages	Support Stands	Accessories	Spare Parts (non-belt)	Spare Belts - Standard Flat Fabric	Spare Belts - Cleated & Specialty Fabric	Spare Belts - Plastic Chain	All equipment and parts
1100	30% return fee for all products except: 50% return fee for conveyors with modular belt, cleated belt or specialty belts						non-returnable		case-by-case
2200									
2200 Modular Belt									
2200 Precision Move									
2300									
2300 Modular Belt									
3200									
3200 LPZ									
3200 Precision Move									
4100									
5200									
5300									
6200									
Controls									
7200 / 7300	50% return fee for all products								
7350	non-returnable								
7360									
7400									
7600									

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 Customer Service Team 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.

 <p>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. 2014</p>	<p>DORNER MFG. CORP. 975 Cottonwood Ave., PO Box 20 Hartland, WI 53029-0020 USA TEL 1-800-397-8664 (USA) FAX 1-800-369-2440 (USA) Internet: www.dorner.com</p>	<p>Outside the USA: TEL 1-262-367-7600 FAX 1-262-367-5827</p>
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