

# Setup, Operation & Maintenance Manual



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# **Warnings - General Safety**



# WARNING



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



# A

# **DANGER**

Climbing, sitting, walking or riding on conveyor will cause severe injury.

**KEEP OFF CONVEYORS.** 



# A

### **WARNING**

Exposed moving parts can cause severe injury.

LOCK OUT POWER before removing guards or performing maintenance.





### **DANGER**

Pillar supports not anchored to floor will tip, causing severe injury or death.

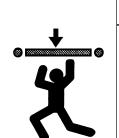
PILLAR SUPPORT MUST BE ANCHORED TO FLOOR.





# **DANGER**

DO NOT OPERATE CONVEYORS IN AN EXPLOSIVE ENVIRONMENT.





# **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 startup.

### 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's Limited Warranty applies.

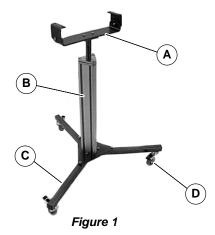
Dorner reserves the right to make changes at any time without notice or obligation.

# **Product Description**

Refer to Figure 1 for typical components.

#### **Typical Components**

- A Conveyor Support
- B Post
- C Base
- D Casters



# **Specifications**

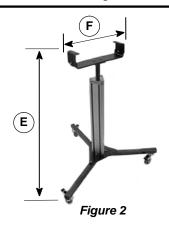
#### **Model Dimensions**

#### **Casters:**

• For stand with casters, add C to the end of the part number (Example: 49M1240C)

#### **Diagonal Brace Models:**

- 49M01WW: for Metric Stands 30" (762 mm) and taller
- 49M00WW: for Metric Stands Under 30" (762 mm)



**Table 1: Aluminum Single Post Support Stand** 

Stand Height Range (E)			Nominal Stand Width (F)							
Height Ref.	inches	mm	2" (51mm)	3" (76mm)	4" (102mm)	5" (127mm)	6" (152mm)	8" (203mm)	10" (254mm)	12" (305mm)
16	16 – 26	406 – 660	49M0216	49M0316	49M0416	49M0516	49M0616	49M0816	49M1016	49M1216
24	24 – 34	610 – 864	49M0224	49M0324	49M0424	49M0524	49M0624	49M0824	49M1024	49M1224
32	32 – 42	813 – 1067	49M0232	49M0332	49M0432	49M0532	49M0632	49M0832	49M1032	49M1232
40	40 – 50	1016 – 1270	49M0240	49M0340	49M0440	49M0540	49M0640	49M0840	49M1040	49M1240
48	48 – 58	1219 – 1473	49M0248	49M0348	49M0448	49M0548	49M0648	49M0848	49M1048	49M1248

**Table 2: Aluminum Pillar Support** 

Stand	Height Range (E)		Nominal Stand Width (F)							
Height Ref.	inches	mm	2" (51mm)	3" (76mm)	4" (102mm)	5" (127mm)	6" (152mm)	8" (203mm)	10" (254mm)	12" (305mm)
16	16 – 26	406 – 660	49MP0216	49MP0316	49MP0416	49MP0516	49MP0616	49MP0816	49MP1016	49MP1216
24	24 – 34	610 – 864	49MP0224	49MP0324	49MP0424	49MP0524	49MP0624	49MP0824	49MP1024	49MP1224
32	32 – 42	813 – 1067	49MP0232	49MP0332	49MP0432	49MP0532	49MP0632	49MP0832	49MP1032	49MP1232
40	40 – 50	1016 – 1270	49MP0240	49MP0340	49MP0440	49MP0540	49MP0640	49MP0840	49MP1040	49MP1240
48	48 – 58	1219 – 1473	49MP248	49MP0348	49MP0448	49MP0548	49MP0648	49MP0848	49MP1048	49MP1248

#### Requirements for Use of One Single Post Stand for Conveyor Support



# **WARNING**



For maximum stability, install the conveyor on the stand so it is positioned and balanced as shown (at right).

DO NOT use with conveyors over 4ft (1219mm) long.

DO NOT use with conveyor equipped with a heavy load gearmotor bottom mounting package.

Failure to heed this warning could result in the conveyor being unstable and tipping over, resulting in equipment damage or personal injury.

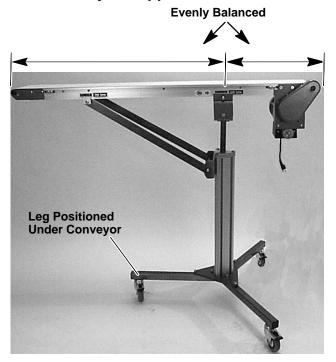


Figure 3

#### **Required Tools**

- 13 mm wrench
- Hex key wrenches: 4 mm, 5 mm, 6 mm

#### **Aluminum Single Post Stand Assembly**

**1.** Gather components (Figure 4).

#### **Installation Component List**

- G Post
- H Conveyor Support
- I Base Leg (3x)
- J M6 Socket Head Screws (2x)
- K M8 Socket Head Screws (6x)

NOTE: Caster option shown. Foot pad option similar.

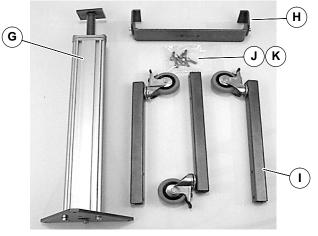


Figure 4

**2.** Assemble conveyor support (H of Figure 5) to post with M6 screws (J). Tighten screws to 140 in-lb (15 Nm).



**3.** Assemble base legs (I) to post with M8 screws (K). Tighten screws to 250 in-lb (28 Nm).

#### **Height Adjustment**

**1.** Loosen three post bolts (L of Figure 6). Adjust conveyor support (H).

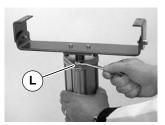


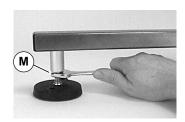


Figure 6

**2.** Re-tighten post bolts (L).

#### **Foot Pad Adjustment**

**1.** Loosen jam nuts (M of Figure 6). Adjust foot pads (N) to level stand.



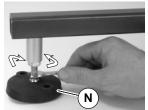


Figure 7

2. Re-tighten jam nuts (M).

#### **Pillar Support Assembly**



**1.** Gather components (Figure 8).

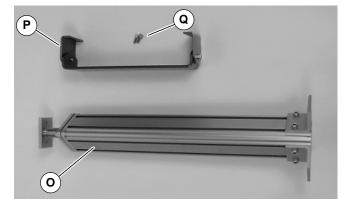


Figure 8

#### Installation Component List

O Pillar

P Conveyor Support

Q M6 Socket Head Screws (2x)

**2.** Assemble conveyor support (Q of Figure 9) to pillar (O) with M6 screws. Tighten screws to 140 in-lb (15 Nm).



Figure 9

#### **Height Adjustment**

Refer to "Height Adjustment" of previous section.

### **Flat Belt Conveyor Mounting Brackets** 2100, 3100, LPZ Conveyors

**1.** Gather components (Figure 10).

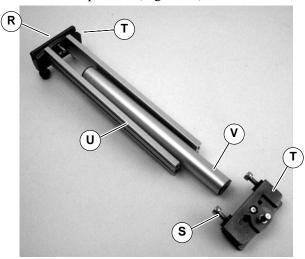


Figure 10

#### **Installation Component List**

- R M8 x 18 Button Head Screw (2x) or 5/16 x 3/4 Button Head Screw (2x)
- S M6 x 18 Socket Head Screw & Washers (4x) or 1/4 x 3/4 Socket Head Screw & Washers(4x)
- Τ Bracket Assembly (2x)
- Roller Guide (2x) U
- ٧ Return Roller

NOTE: Roller guides (U) are shipped attached to one bracket assembly (T). DO NOT attach guards to other bracket assembly.

2. Assemble components (Figure 11). Loosen, do not remove, bracket screws (R). Remove mounting screws and washers (S).

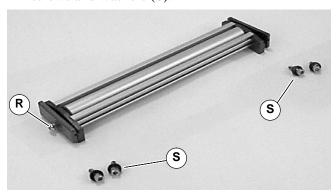


Figure 11

3. Install assembly (W of Figure 12) on bottom of conveyor. Align assembly perpendicular to conveyor frame. Tighten bracket screws (R): Tighten M8 screws to 80 in-lb (9 Nm). Tighten 5/16 screws to 150 in-lb (17 Nm).

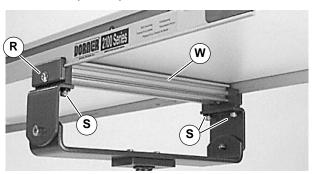


Figure 12

- **4.** Install conveyor on stand. Tighten mounting screws (S) 80 in-lb (9 Nm).
- **5.** Make sure belt moves freely over assembly (W).

#### 6100 Conveyors

#### Conveyors 2-6" (44-152mm) Wide

**1.** Gather components (Figure 13).

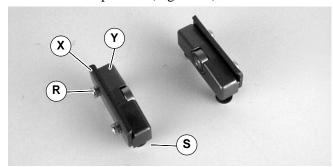


Figure 13

- R M6 x 12 Socket Head Screw (4x)
- S M6 x 18 Socket Head Screw & Washers (4x)
- Χ Bracket (2x)
- Roller Assembly (2.)

**2.** Loosen, do not remove, bracket screws (R of Figure 14). Remove mounting screws and washers (S).

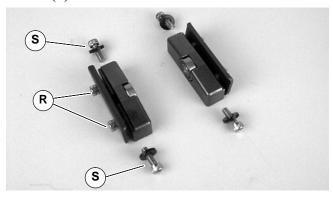


Figure 14

**3.** Install assemblies (W of Figure 15) on bottom of conveyor. Tighten bracket screws (R) to 80 in-lb (9 Nm).

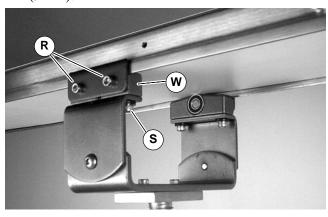


Figure 15

- **4.** Install conveyor on stand. Tighten mounting screws (S) 80 in-lb (9 Nm).
- **5.** Make sure belt moves freely over assembly (W).

#### Conveyors 8" (203mm) and Wider

**1.** Gather attachment components (Figure 16).

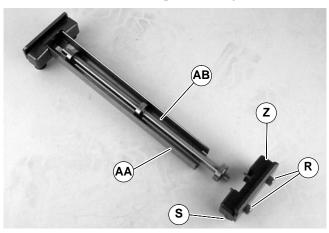


Figure 16

- R M6 x 12 Socket Head Screw (4x)
- S M6 x 18 socket head screw (4x)
- Z Bracket Assembly (2x)
- AA Roller Guide Assembly
- AB Return Roller Assembly
- **2.** Assemble components (Figure 17). Loosen, do not remove, bracket screws (R of Figure 14). Remove mounting screws and washers (S).

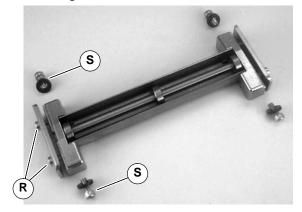


Figure 17

Install assembly (W of Figure 18) on bottom of conveyor. Align assembly perpendicular to conveyor frame. Tighten bracket screws (R) to 80 in-lb (9 Nm).

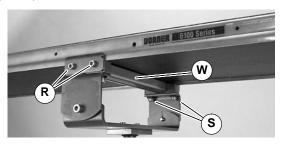


Figure 18

- **3.** Install conveyor on stand. Tighten mounting screws (S) 80 in-lb (9 Nm).
- **4.** Make sure belt moves freely over assembly (W).

#### 2200 Conveyors

**1.** Gather components (Figure 19).

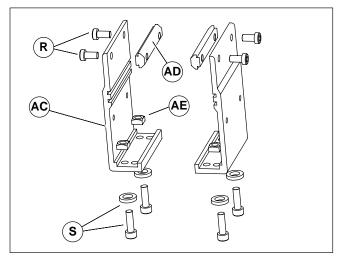


Figure 19

#### **Installation Component List**

- R M6 x 16 Low Head Screw (4x)
- S M6 x 20 Socket Head Screw & Washer (4x)
- AC Mounting Bracket (2x)
- AD T-bar (2x)
- ΑE Anchor Nut (4x)
- 2. Remove screws (R & S of Figure 19), nuts (AE) and T-bars (AD) from brackets (AC).
- 3. Insert T-bars (AD of Figure 19) into conveyor side slots (AF of Figure 20). Fasten brackets (AC) to conveyor with mounting screws (R).

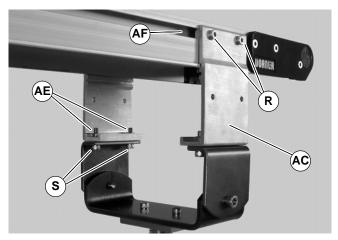


Figure 20

- **4.** Fasten brackets to stand with mounting screws & washers (S of Figure 20) and nuts (AE).
- 5. Tighten screws (R & S of Figure 20) to 80 in-lb (9 Nm).

Aluminum Single Post Support Stands & Pillar Supports: Setup, Operation & Maintenance Manual

# Cleated Belt Conveyor Mounting Brackets 2100, 3100, LPZ Conveyors

**1.** Gather components (Figure 21).

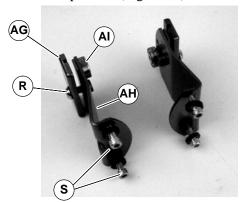


Figure 21

#### **Installation Component List**

- R M8 x 18 Button Head Screw (2x) or 5/16 x 3/4 Button Head Screw (2x) or M8 x 30 button head screw (2x), LPZ
- S M6 x 18 Socket Head Screw & Washers (4x) or 1/4 x 3/4 Socket Head Screw & Washers (4x)
- AG Bracket (2x)
- AH Roller Support (2x)
- Al Return Roller (2x)
- **2.** Loosen, do not remove, bracket screws (R of Figure 22). Remove mounting screws and washers (S).

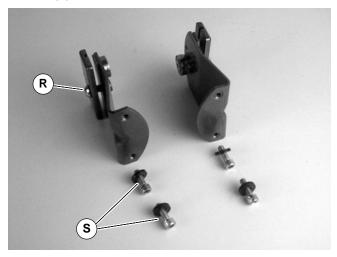


Figure 22

**3.** Install attachment assembly (W of Figure 23) on bottom of conveyor. Tighten bracket screws (R): Tighten M8 screws to 80 in-lb (9 Nm). Tighten 5/16 screws to 150 in-lb (17 Nm).

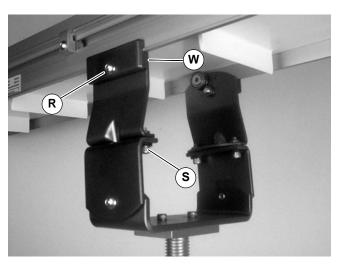


Figure 23

- **4.** Install conveyor on stand. Tighten mounting screws (S) 80 in-lb (9 Nm).
- **5.** Make sure belt moves freely over assembly (W).

#### 6100 Conveyors

**1.** Gather components (Figure 24).

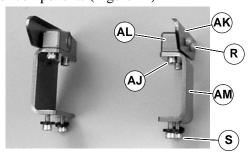


Figure 24

- R M6 x 12 Socket Head Screw (4x)
- S M6 x 18 Socket Head Screw & Washers (4x)
- AJ M6 x 16 Socket Head Screw (4x)
- AK Bracket (2x)
- AL Roller Assembly (2x) AM Roller Support (2x)

2. Loosen, do not remove, bracket screws (R of Figure 25). Remove mounting screws and washers (S).

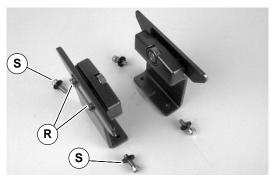


Figure 25

3. Install assembly (W of Figure 26) on bottom of conveyor. Tighten bracket screws (R) to 80 in-lb (9 Nm).

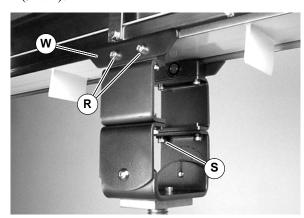


Figure 26

- **4.** Install conveyor on stand. Tighten mounting screws (S) 80 in-lb (9 Nm).
- **5.** Make sure belt moves freely over assembly (W).

#### 2200 Conveyors

**1.** Gather components (Figure 27).

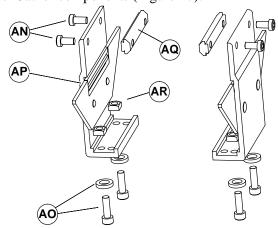


Figure 27

- AN M6 x 16 low head screw (4x)
- AO M6 x 20 socket head screw with washer (4x)
- ΑP Mounting Bracket (2x)
- AQ T-bar (2x)
- AR Anchor Nut (4x)
- 2. Remove screws (AN & AO of Figure 27), nuts (AR) and T-bars (AQ) from brackets (AP).
- 3. Insert T-bars (AQ of Figure 27) into conveyor side slots (AF of Figure 28). Fasten brackets (AP) to conveyor with mounting screws (AN).

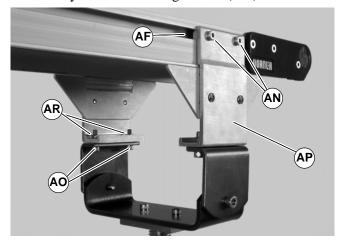


Figure 28

- **4.** Fasten brackets to stand with mounting screws (AO of Figure 20), washers and nuts (AR).
- 5. Tighten screws (AN & AO of Figure 20) to 80 in-lb (9 Nm).

#### **Diagonal Brace**

#### Conveyors 2" (44mm) Wide

**1.** Gather components (Figure 29).

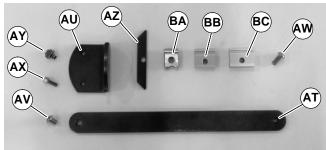


Figure 29

Fastening Hardware				
AT	Diagonal Brace			
AU	Brace Bracket			
AV	M8 x 12 Button Head Screw (1x)			
AW	M8 x 18 Button Head Screw (1x)			
AX	M6 x 16 Socket Head Screw (2x)			
AY	M6 Spring Nut (2x)			
AZ	6100 Cleated Belt Guard			
BA	6100 Clip			
BB	2100/2200 Clip			
ВС	3100/LPZ Clip			

**2.** Insert spring nuts (AYof Figure 30) into stand post.

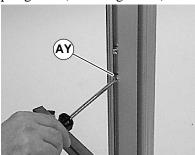


Figure 30

**3.** Attach brace bracket (AU of Figure 31) with M6 screws (AX). Tighten screws 80 in-lb (9 Nm).

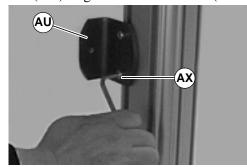


Figure 31

**4.** Attach brace (AT of Figure 32) to brace bracket (AU) with M8 screw (AV).

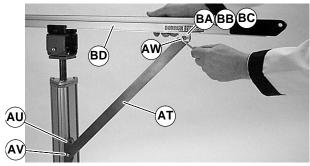


Figure 32

- **5A.** For 2100 and 2200 conveyors: Attach brace (AT) to conveyor rail (BD) with 2100/2200 clip (BB) and M8 screw (AW).
- **5B.** For 3100 and LPZ conveyors: Attach brace (AT) to conveyor rail (BD) with 3100/LPZ clip (BC) and M8 screw (AW).
- **5C.** For 6100 conveyors: Insert belt guard (AZ of Figure 33) into 6100 clip (BA). Attach brace (AT of Figure 32) to conveyor rail (BD) with clip (BA) and M8 screw (AW).



Figure 33

**6.** Tighten M8 screws (AV & AW of Figure 32) to 80 in-lb (9 Nm).

#### Conveyors 3" (70mm) and Wider

**1.** Gather attachment components (Figure 34).

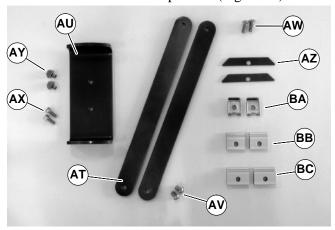


Figure 34

	Fastening Hardware				
	. actorning manana				
AT	Diagonal Brace (2x)				
AU	Brace Bracket				
AV	M8 x 12 Button Head Screw (2x)				
AW	M8 x 18 Button Head Screw (2x)				
AX	M6 x 16 Socket Head Screw (2x)				
AY	M6 Spring Nut (2x)				
AZ	6100 Cleated Belt Guard (2x)				
BA	6100 Clip (2x)				
ВВ	2100/2200 Clip (2x)				
вс	3100/LPZ Clip (2x)				

**2.** Insert spring nuts (AY) in post (Figure 35).



Figure 35

3. Attach brace bracket (AU of Figure 36) with M6 screws (AX). Tighten screws 80 in-lb (9 Nm).

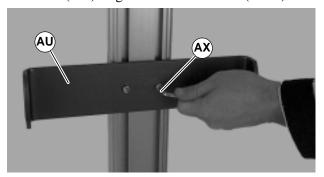


Figure 36

4. Attach braces (AT of Figure 37) to brace bracket (AU) with M8 screw (AV).

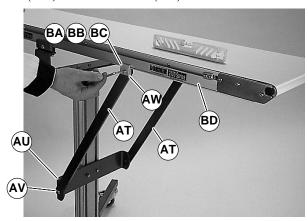


Figure 37

- **5A.** For 2100 and 2200 conveyors: Attach braces (AT) to conveyor rails (BD) with 2100/2200 clips (BB) and M8 screws (AW).
- **5B.** For 3100 and LPZ conveyors: Attach braces (AT) to conveyor rails (BD) with 3100/LPZ clips (BC) and M8 screws (AW).
- 5C. For 6100 conveyors: Insert belt guards (AZ of Figure 38) into 6100 clips (BA). Attach braces (AT of Figure 37) to conveyor rails (BD) with 6100 clips (BA) and M8 screws (AW).

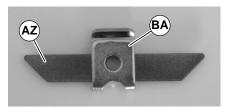


Figure 38

6. Tighten M8 screws (AV & AW of Figure 37) to 80 in-lb (9 Nm).

# **Preventive Maintenance and Adjustment**

#### **Required Tools**

- 13 mm wrench
- Hex key wrenches: 4 mm, 5 mm, 6 mm

#### **Height Adjustment**



**1.** Place temporary support stand (BE of Figure 39) under conveyor.

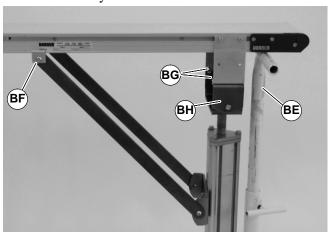


Figure 39

- **2.** If installed, remove brace fastening hardware (BF) from the conveyor. Allow brace(s) to rest against the post of the stand.
- **3.** Remove fastening hardware (BG) from the conveyor support (BH).
- **4.** Raise conveyor off from conveyor support (BH) by adjusting temporary stand (BE) upward.
- **5.** Loosen three post bolts (BI of Figure 40). Adjust conveyor support (BJ).

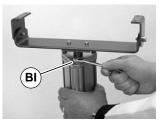




Figure 40

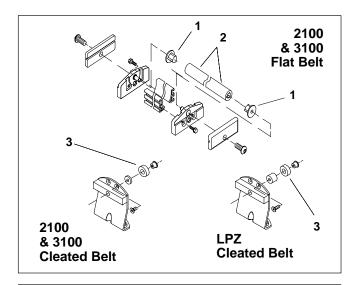
- **6.** Re-tighten post bolts (BI).
- **7.** Lower conveyor onto conveyor support (BH of Figure 39). Attach conveyor with fastening hardware (BG).

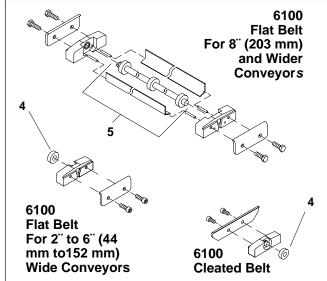
# **Service Parts**

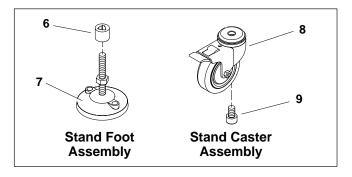
#### **Replacement Parts**

**NOTE:** For replacement parts other than those shown here, contact Dorner or an authorized service center.

Item	Part No.	Part Description	
1	202311P	Return Roller Bearing	
2	20777WW	Return Roller Tube	
3	802-027	Sealed Ball Bearing	
4	802-123	Ball Bearing	
5	4531WWSS	Return Roller Assembly	
6	688054	Stand Foot Spacer Tube	
7	807-930	3" (70 mm) Dia. Leveling Foot	
8	807-936	Caster Assy, 3" (70 mm) Dia.	
9	921020M	Socket Head Cap Screw, M10-1.5 x 20 mm	
NOTE: WW = conveyor width			







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	•		

# **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 @ www.dorner.com

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



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