

# Set-up, Operation & Maintenance Manual

# **Sanitary Single Post Support Stands**





# WARNING



- •The safety alert symbol, black triangle with white exclamation, is used to alert you to potential personal injury hazards.
- •When only one single post support stand is used to support a conveyor, diagonal bracing must be used to properly secure the conveyor to the stand to help prevent personal injury from possible collapse or tip-over.
- •Standing on a conveyor or transporting people is prohibited.
- •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. Because Dorner Mfg. Corp. cannot control the physical installation and applications of multiple conveyor systems, taking protective measures is the responsibility of the user.
- •Operating Dorner conveyors in an explosive environment is prohibited.
- •NEVER operate equipment without guards or other protective devices properly secured in place. 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, unless instructed otherwise.
- •Due to the wide variety of conveyor and stand options, along with possible configurations, stability of the final setup is the responsibility of the end user.

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# **Special Safety Considerations**

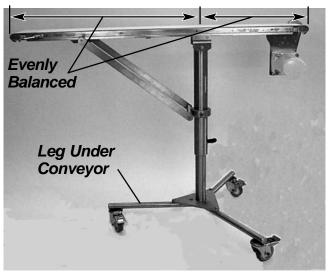


Figure 1

### When Installing One (1) Single Post Stand on a Maximum 4-ft (1219 mm) long Conveyor

# WARNING

For maximum stability, position and balance conveyor on stand as shown in Figure 1. Failure to follow these instructions could lead to conveyor instability and possible tip-over, causing personal injury.

To help maintain stability, do not attempt to mount a Heavy Load Bottom Drive to only one single post support stand. Due to the weight of the gearmotor, it must be supported by a stand which must be anchored to the bottom of the drive; thus, requiring at least two stand assemblies for a conveyor and drive combination. Refer to the Heavy Load Bottom Drive assembly instructions for additional details.

NOTE: When stands are ordered and installed with a Heavy Load Bottom Drive, be sure to note the height difference, between the bottom of the drive support and the conveyor's return belt roller assembly, is 8" (203 mm). If only one support stand is used, refer to the Special Safety Considerations" information above.

## Introduction

**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.

Some illustrations in this manual may show guards or other protective devices open or removed. Under no

circumstances should the equipment be operated without these devices securely in place.

**NOTE:** Dorner 6100 Series conveyors are covered by Patent No. 5,174,435 and corresponding patents and patent applications in other countries.

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Your Dorner Sanitary Single Post Support Stand may have the following general characteristics. Refer to the following illustration and associated component identification listing for product nomenclature.

#### **Component Identifications**

Conveyor

А

- В Gearmotor Mounting Package С
  - Gearmotor
- D Mounting Bracket with Return Roller
- Е Single Post Support Stands
- F Diagonal Brace
- G Casters Н
  - Variable Speed Controller

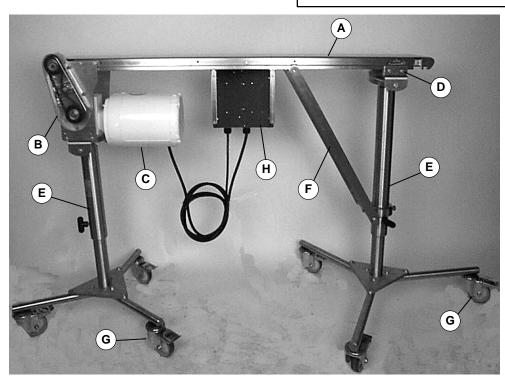


Figure 2

# **Specifications**

#### Models\*

Stand	Stand Width								
Height Range	1.75 <sup>"</sup> (44 mm)	2.75 <sup></sup> (70 mm)	4 <sup></sup> (102 mm)	5 <sup></sup> (127 mm)	6 <sup></sup> (152 mm)	8 <sup></sup> (203 mm)	10 <sup>¨</sup> (254 mm)	12 <sup>¨</sup> (305 mm)	18 <sup>"</sup> (457 mm)
9 to 17 <sup>°</sup> (229 to 432 mm)	49M0209S	49M309S	49M0409S	49M0509S	49M0609S	49M0809S	49M1009S	49M1209S	49M1809S
16 to 29 <sup>°°</sup> (406 to 737 mm)	49M0216S	49M316S	49M0416S	49M0516S	49M0616S	49M0816S	49M1016S	49M1216S	49M1816S
27 to 42 <sup></sup> (686 to 1067 mm)	49M0227S	49M327S	49M0427S	49M0527S	49M0627S	49M0827S	49M1027S	49M1227S	49M1827S
40 to 55 <sup>°°</sup> (1016 to 1397 mm)	49M0240S	49M340S	49M0440S	49M0540S	49M0640S	49M0840S	49M1040S	49M1240S	49M1840S

\* For models with castors, add C prior to S (Example: 49M1227CS)

Dorner Mfg. Corp. makes every effort to properly package and ship its products. Upon receipt, inspect all packages for any shipping damage. Notify the carrier immediately, when problems are first discovered. Compare the shipment with the packing slip and contact the factory about any discrepancies (see back page for phone number).

#### **Illustration References**

- I Tube Assembly
- J Mounting Bar
- K M10 x 45 mm Stainless Steel Hexagon Head Cap Screw
- L Leg Assemblies (3x)
- M M8 x 35 mm Stainless Steel Hexagon Head Cap Screws (6x)
- N Locking Knob
- O Tube Spacers (6x)
- P M8 x 80 mm Stainless Steel Hexagon Head Cap Screws (6x)
- Q Sleeve & Mounting Bar Assembly
- R M8 x 16 mm Stainless Steel Hexagon Head Cap Screws (4x)
- S Diagonal Braces
- T Guard Plate (2x)
- U Mounting Clip (2x)
- V Jam Nut (3x)
- W M6 x 12 mm Stainless Steel Hex Head Cap Screws (4x)
- X M6 x 16 mm Stainless Steel Hex Head Cap Screw & Washer Assemblies (4x)
- Y M6 x 16 mm Stainless Steel Stand Ear Mounting Screw (2x)
- Z Collar Position Brass Locking Screw

#### Stand Assembly

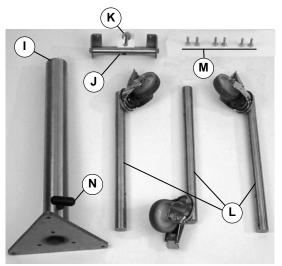
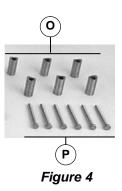
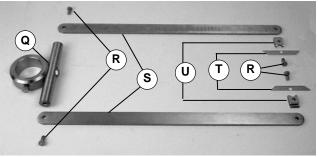


Figure 3

**1.** Typical components (Figure 3) - caster option shown, foot pads similar



**2.** Additional components (Figure 4) required for certain stands. See "Stand Height Chart" for specific models.



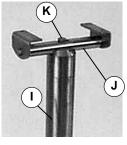
#### Figure 5

**3.** Optional diagonal brace components (Figure 5) - long braces shown, short braces similar





**4.** If diagonal bracing is required, install sleeve assembly (Q of Figure 6) over tube assembly (I).





**5.** Secure mounting bar (J of Figure 7) onto outer portion of tube assembly (I) with screw (K) using 25 ft-lb (34 Nm) torque.

Height	Fig.	Attaching Hardware		
9 to 12.25"	228 to 311 mm	10	O & P	
12.25 to 15.5"	311 to 381 mm	8	М	
14.75 to 18"	374 to 457 mm	9	O & P	
16 to 24"	406 to 609 mm	10	O & P	
21 to 29"	533 to 736 mm	9	O & P	
27 to 55"	686 to 1397 mm	8	М	

#### **Stand Height Chart**

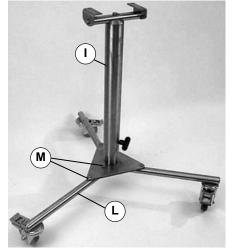


Figure 8

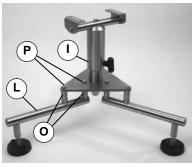
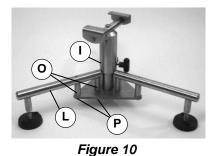


Figure 9



**6.** Refer to "Stand Height Chart". Assemble legs (L) to tube assembly (I) using hardware indicated. Secure hardware with 18 ft-lb (25.5 Nm) torque.

#### **Height Adjustment**

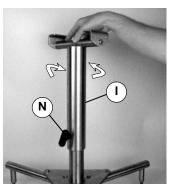


Figure 11

**1.** Loosen knob (N of Figure 11). Rotate outer portion of tube assembly (I) to adjust stand height. Re-tighten knob (N).

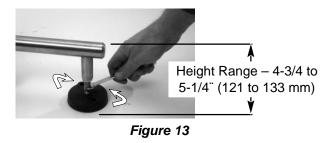
#### Leveling Stand Foot Pads

NOTE: Leveling does not apply to a stand with casters.



Figure 12

**1.** Loosen jam nut (V of Figure 12).



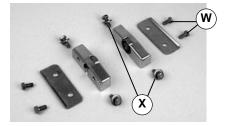
**A WARNING A** Do not exceed a maximum height (floor to top of stand leg) of 5-1/4 " (133 mm). Exceeding maximum height will allow parts to separate causing possible

**2.** Rotate threaded pad mounting shaft (Figure 13) to level stand. Re-tighten jam nut (V of Figure 12).

personal injury.

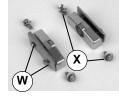
#### Flat Belt Conveyor Attachment

For 2 to 6<sup>°°</sup> (44 to 152 mm) Wide 6100 Series Sanitary Conveyors





**1a.** Typical Components (Figure 14)



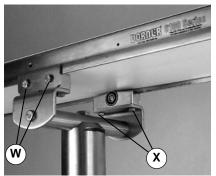


2a. Sub-assemble as shown (Figure 15).



Figure 16

**3a.** Assemble and loosely attach the mounting bracket with return roller to the stand as shown (Figure 16). Leave hardware (W & X) loosely attached at this time.





**4a.** Attach clamp plates on each side of conveyor (Figure 17). Tightly secure screws (W & X) with 92 in-lb (10.4 Nm) torque. Make sure belt is free to move.

For 8<sup>°</sup> (203 mm) and Wider 6100 Series Sanitary Conveyors

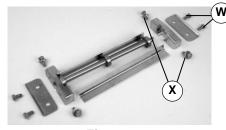


Figure 18

**1b.**Typical Components (Figure 18)



Figure 19

**2b.**Sub-assemble as shown (Figure 19).



Figure 20

**3b.** Assemble and loosely attach the mounting bracket with return roller to the stand as shown (Figure 20). Leave hardware (W & X) loosely attached at this time.

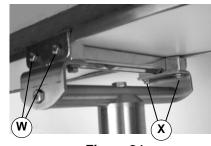


Figure 21

**4b.** Attach clamp plates on each side of conveyor (Figure 21). Tightly secure screws (W & X) with 92 in-lb (10.4 Nm) torque. Make sure belt is free to move.

# Cleated Belt Conveyor for 6100 Series Sanitary Conveyor

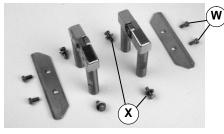


Figure 22

1. Typical Components (Figure 22)

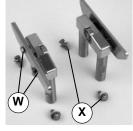


Figure 23

**2.** Sub-assemble as shown (Figure 23).



Figure 24

**3.** Assemble and loosely attach the mounting bracket with return roller to the stand as shown (Figure 24). Leave hardware (W & X) loosely attached at this time.

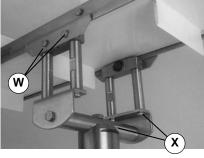


Figure 25

**4.** Attach clamp plates on each side of conveyor (Figure 25). Tightly secure screws (W & X) with 92 in-lb (10.4 Nm) torque. Make sure belt is free to move.

#### **Attaching Optional Diagonal Braces**

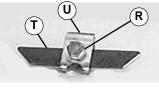


Figure 26

**1.** Assemble mounting clip (U), guard plate (T) and screw (J) as shown (Figure 26).

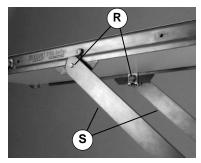


Figure 27

**2.** Attach clip assemblies to conveyor. Attach diagonal braces (S of Figure 27) to clip assembly (Figure 26) with screws (R).

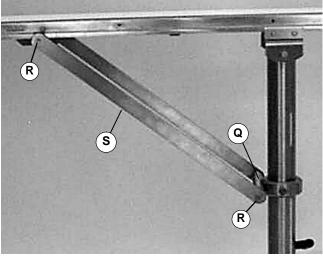


Figure 28

**3.** Attach each brace (S of Figure 28) to the bar portion of sleeve assembly (Q) with screw (R). Tightly secure all screws (R) with 18 ft-lb (25.5 Nm) torque.

# Preventive Maintenance and Adjustment

#### **Return Roller Cleaning**



# WARNING



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.

Inspect each return roller assembly and remove debris. Conveyor may be cleaned with mild soap and water, as required. Refer to the "Flat Belt Conveyor Attachment" topic on page 6 or "Cleated Belt Conveyor Attachment" topic on page 7 for return roller removal details.

**IMPORTANT:** Due to the wide variety of possible applications for washdown conveyors, methods and materials used to clean the conveyor equipment is the responsibility of the user. If a high pressure washer is used, avoid direct contact with bearings and gearmotors.

Stand Height Adjustment (While attached to Conveyor)



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.

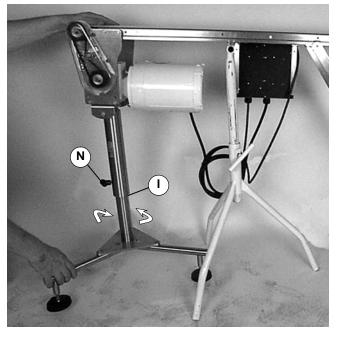


Figure 29

- **1.** Raise the end of the conveyor and safely support it so that the stand feet (or casters) are not touching the floor(Figure 29).
- 2. Loosen the knob (N).
- 3. Rotate bottom portion of tube assembly (I) to adjust stand height.
- **4.** Re-tighten knob (N).
- 5. Repeat steps 1 through 4 until the desired height is obtained.

# **Preventive Maintenance and Adjustment**

Conveyor Angle Adjustment for a Stand with Diagonal Braces



Before loosening any of the angle adjustment screws (R, Y & Z of Figure 30) make sure that all related conveyor sections are securely supported to prevent movement that could cause serious personal injury.

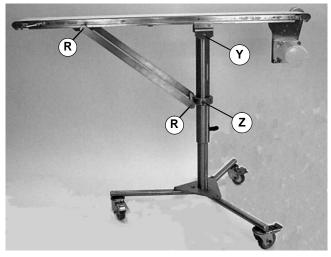


Figure 30

- **1a.** Loosen (but do not remove) hardware (R & Z of Figure 30).
- **2a.** Loosen (but do not remove) the M8 x 16 mm stand ear mounting screw (Y) on each side.
- **3a.** Adjust conveyor to desired angle and secure screws (R &Y) to 18 ft-lb (25.5 Nm) torque. Secure screw (Z) to 75 in-lb (8.5 Nm) torque.



Conveyor Angle Adjustment for a Stand without Diagonal Braces



Before loosening any of the angle adjustment screws (Y of Figure 30) make sure that all related conveyor sections are securely supported to prevent movement that could cause serious personal injury.

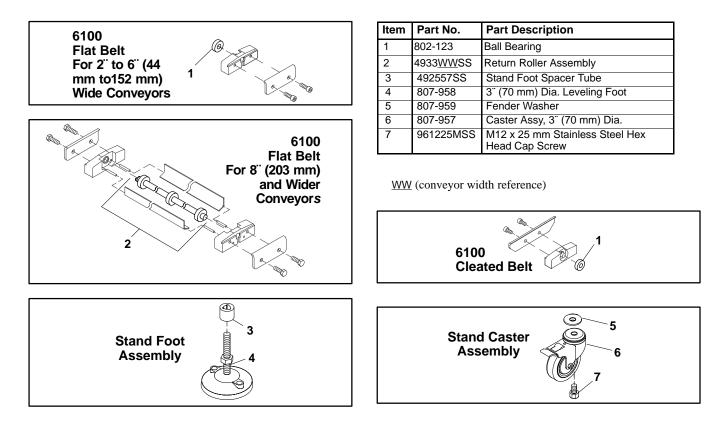
- **1b.** Loosen (but do not remove) the M8 x 16 mm screw (Y of Figure 30) on each side.
- **2b.** Adjust conveyor to desired angle and secure screws (Y) with 18 ft-lb (25.5 Nm) torque.



Make sure the angle adjustment screws (Y of Figure 30) are secured after the desired conveyor angle is adjusted. Failure to secure screws could cause serious personal injury.

### Notes

# **Replacement Parts**



# **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.

# DORNER®

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