

Set-up, Operation & Maintenance Manual

Industrial Aluminum Support Stands & Diagonal Bracing







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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 conveyor components.

Typical Components

- A ConveyorB Gearmotor Mounting Package
- B Gearmotor MC Gearmotor
- D Guiding & Accessories
- E Mounting Brackets with Return Rollers
- F Support Stands
- G Variable Speed Controller
- H Drive End
- I Idler/Tension End



Figure 1

Specifications

Stand Models*:

Stand Height Ref.	Height Range (J)		Nominal Stand Width (K)							
	inches	mm	12	15	18	21	24	30	36	40
			(305 mm)	(381 mm)	(457 mm)	(533 mm)	(610 mm)	(762 mm)	(914 mm)	(1016 mm)
18	16 to 20	406 to 508	39M1218	39M1518	39M1818	39M2118	39M2418	39M3018	39M3618	39M4018
21	19 to 23	483 to 584	39M1221	39M1521	39M1821	39M2121	39M2421	39M3021	39M3621	39M4021
24	22 to 26	559 to 660	39M1224	39M1524	39M1824	39M2124	39M2424	39M3024	39M3624	39M4024
27	25 to 29	635 to 737	39M1227	39M1527	39M1827	39M2127	39M2427	39M3027	39M3627	39M4027
30	28 to 32	711 to 813	39M1230	39M1530	39M1830	39M2130	39M2430	39M3030	39M3630	39M4030
33	31 to 35	787 to 889	39M1233	39M1533	39M1833	39M2133	39M2433	39M3033	39M3633	39M4033
36	34 to 38	864 to 965	39M1236	39M1536	39M1836	39M2136	39M2436	39M3036	39M3636	39M4036
39	37 to 41	940 to 1041	39M1239	39M1539	39M1839	39M2139	39M2439	39M3039	39M3639	39M4039
42	40 to 44	1016 to 1118	39M1242	39M1542	39M1842	39M2142	39M2442	39M3042	39M3642	39M4042
45	43 to 47	1092 to 1145	39M1245	39M1545	39M1845	39M2145	39M2445	39M3045	39M3645	39M4045
48	46 to 50	1168 to 1270	39M1248	39M1548	39M1848	39M2148	39M2448	39M3048	39M3648	39M4048

* NOTE:

- For stand with casters, add C to the end of the part number (Example: 39M1239C)
- Casters add 4-1/2" (114 mm) to stand height
- Metric fastener part numbers listed. For stands with SAE fasteners, replace "M" with "-" (Example: 39-1239)

Diagonal Brace Models:

- 201267 [for SAE Stands 30^{..} (762 mm) & taller]
- 201267M [for Metric Stands 30" (762 mm) & taller]
- 300870M [for Metric Stands Under 30" (762 mm)]



Figure 2

Installation

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

- Attach stand(s) to conveyor (see Conveyor Set-up, Operation & Maintenance Manual)
- Attach optional diagonal bracing
- Adjust stand height and level

Optional Diagonal Bracing



Required Tools

- For SAE Support Stands
 - 3/16^{..} 1/4^{..}

No. 3 phillips screwdriver

- For Metric Support Stands
- -5 mm 6 mm

No. 3 phillips screwdriver

NOTE:

- For aluminum stands, parts (O & P of Figure 3) are not used; please discard
- For SAE diagonal bracing, parts (W & X) are not included

SAE Hardware Illustration References

- L 5/16-18 x 3/4 Button Head Cap Screws (2x)
- M 2100 Brace Clips (2x)
- N 3100 Brace Clips (2x)
- O 1/4-20 x 1-1/4 Socket Head Cap Screws (4x)
- P 1/4-20 Spring Channel Nuts (4x)
- Q 1/4-20 x 5/8 Socket Head Cap Screws (4x)
- R 1/4-20 Spring T-nuts (4x)
- S Offset Plate (Right)
- T Offset Plate (Left)
- U 5/16-18 x 5/8 Button Head Cap Screws (2x)
- V Brace Bars (2x)

Metric Hardware Illustration References

- M8 x 18 mm Button Head Cap Screws (2x)
- 2100 Brace Clips (2x)

L

Μ

Ν

0

Ρ

- 3100 Brace Clips (2x)
- M6 x 25 mm Socket Head Cap Screws (4x)
- M6 Spring Channel Nuts (4x)
- Q M6 x 18 mm Socket Head Cap Screws (4x)
- R M6 Spring T-nuts (4x)
- S Offset Plate (Right)
- T Offset Plate (Left)
- U M8 x 12 mm Button Head Cap Screws (2x)
- V Brace Bars (2x)
- W 6100 Brace Clips (2x)
- X Guard Plates (2x)

1. Typical components (Figure 3)



Figure 3

NOTE: For conveyors narrower than 6^{°°} (152 mm), install one (1) brace bar per stand.

2. Using phillips screwdriver, install four (4) nuts (R of Figure 4) into same T-slot of crossmember.





4

Installation

3. Loosely attach right offset plate (S of Figure 5) to nuts (R) with two (2) screws (Q).



- **4.** Repeat step 3 for left offset plate (T).
- **5.** Loosely attach brace bars (V) to offset plates (S & T) with screws (U).
- **6.** If required, loosen eight (8) screws (Y of Figure 6) and re-locate crossmember (Z) to attach brace bar(s) to conveyor.





For a 2100 Series Conveyor:

7a. Loosely attach brace bars (V of Figure 7) to conveyor using clips (M) and screws (L).



Figure 7

For a 3100 Series or LPZ Conveyor:

7b. Loosely attach brace bars (V of Figure 8) to conveyor using clips (N) and screws (L).



Figure 8

For a 6100 Series Conveyor:

7c. Pre-assemble mounting clips (W of Figure 9), guard plates (X) and screws (L).



Figure 9

7d. Loosely attach brace bars (V of Figure 10) to conveyor using clip assemblies.



Figure 10



- **8.** Align brace bars with conveyor side rails and secure mounting hardware.
- For SAE Support Stands
 - Tighten screws (Q) to 143 in-lb(16 Nm)
 - Tighten screws (U & L) to 13 ft-lb (17 Nm)
 - Tighten screws (Y) to 24 ft-lb (33 Nm)
- For Metric Support Stands
 - Tighten screws (Q) to 146 in-lb (17 Nm)
 - Tighten screws (U & L) to 7 ft-lb (9 Nm)
 - Tighten screws (Y) to 24 ft-lb (33 Nm)

Preventive Maintenance and Adjustment

Required Tools For SAE Support Stands

- Hex key wrenches $-3/16^{\circ\circ}$ $-1/4^{\circ\circ}$
- Adjustable Wrench (to 1-1/2")
- Level

For Metric Support Stands

- Hex key wrenches - 5 mm - 6 mm
- Adjustable Wrench (to 40 mm)
- Level

Stand Height Adjustment



1. Loosen jam nuts (AA of Figure 11 or 12).

Do not exceed a maximum height of 6-1/2" (165 mm) on a stand with foot pads or 11-5/8" (295 mm) on a stand with casters. Exceeding maximum height will allow parts to separate causing possible personal injury.



Figure 11



Figure 12

- **2.** Rotate nut (AB of Figure 11 or 12) to adjust height and level stand (AC of Figure 11).
- **3.** Tighten jam nuts (AA of Figure 11 or 12).

Conveyor Angle Adjustment for a Stand with Diagonal Bracing



NOTE: To rotate stand top plate, screws (AD of Figure 13) may need to be re-located to holes (AE).

Preventive Maintenance and Adjustment



Figure 13

1. Loosen screws (L, U & AD of Figure 14) on both sides of stand.



Figure 14



WARNING

Failure to secure screws (L, U & AD of Figure 14) may cause conveyor sections to drop down, causing severe injury.

TIGHTEN SCREWS (L, U & AD) AFTER ADJUSTMENT.

NOTE: Crossmember (Z of Figure 14) may need to be re-located (see step 6 on page 5).

- 2. Adjust conveyor to desired angle and secure screws.
- For SAE Support Stands
 - Tighten screws (Y & AD) to 24 ft-lb (33 Nm)
 - Tighten screws (U & L) to 13 ft-lb (17 Nm)
- For Metric Support Stands
 - Tighten screws (Y & AD) to 24 ft-lb (33 Nm)
 - Tighten screws (U & L) to 7 ft-lb (9 Nm)

Conveyor Angle Adjustment for a Stand without Diagonal Bracing



NOTE: To rotate stand top plate, screws (AD of Figure 13) may need to be re-located to holes (AE).

- **1.** Loosen screws (AD of Figure 14) on both sides of stand.
- 2. Adjust conveyor to desired angle.





3. Secure screws (AD of Figure 14) to 24 ft-lb (18 Nm).

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	662150	Caster Ass'y			
2	200797	Foot Ass'y (for SAE stand)			
	200797M	Foot Ass'y (for Metric stand)			

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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