



7400 and Ultimate Series Gravity Roller Conveyors

Installation, Maintenance and Parts Manual



7400 Roller Conveyor



Ultimate Roller Conveyor

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Introduction

 **CAUTION**

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.

The Dorner Limited Warranty applies.

Dorner AquaPruf conveyors are covered by Patent Numbers 7,207,435, 7,246,697, 7,383,944, additional patent pending applications, and corresponding patents in other countries.

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

Dorner has convenient, pre-configured kits of Key Service Parts for all conveyor products. These time saving kits are easy to order, designed for fast installation, and guarantee you will have what you need when you need it. Key Parts and Kits are marked in the Service Parts section of this manual with the Performance Parts Kits logo .

Warnings – General Safety

DANGER



SEVERE HAZARD!

KEEP OFF CONVEYORS. Climbing, sitting, walking or riding on conveyor will result in death or serious injury.

DANGER



EXPLOSION HAZARD!

- **DO NOT OPERATE CONVEYORS IN AN EXPLOSIVE ENVIRONMENT.** The electric gearmotor generates heat and could ignite combustible vapors.
- Failure to comply will result in death or serious injury.

WARNING



CRUSH HAZARD!

- **DO NOT** place hands or fingers inside the conveyor while it is running.
- **DO NOT** wear loose garments while operating the conveyor. Loose garments can become caught up in the conveyor.
- Failure to comply could result in serious injury.

WARNING



CRUSH HAZARD!

- **SUPPORT CONVEYOR SECTIONS PRIOR TO LOOSENING STAND HEIGHT OR ANGLE ADJUSTMENT SCREWS.**
- Loosening stand height or angle adjustment screws may cause conveyor sections to drop down, causing serious injury.

WARNING



SEVERE HAZARD!

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

WARNING



BURN HAZARD!

DO NOT TOUCH the motor while operating, or shortly after being turned off. Motors may be **HOT** and can cause serious burn injuries.

WARNING



PUNCTURE HAZARD!

Handle drive shaft keyway with care. It may be sharp and could puncture the skin, causing serious injury.

WARNING



SEVERE HAZARD!

- 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.
- Failure to comply could result in serious injury.

Product Description

Refer to **(Figure 1)** for typical conveyor components.

Typical Components	
1	Conveyor
2	Roller
3	Stand

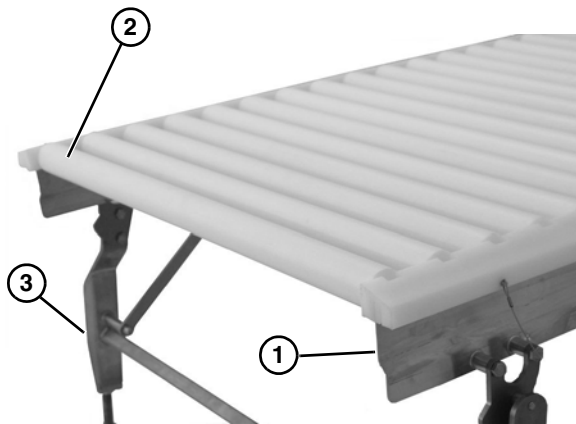
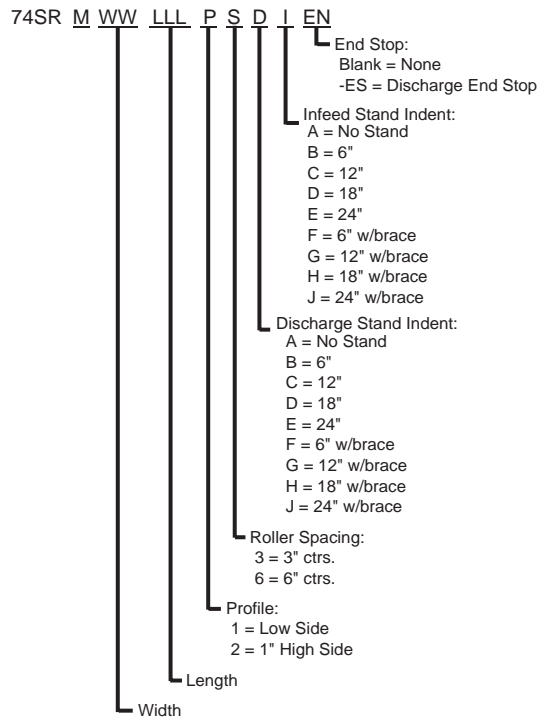
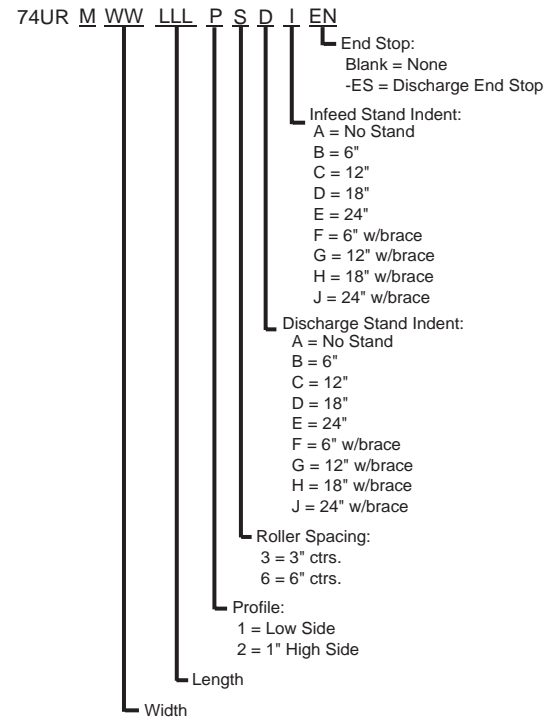


Figure 1

7400 Roller Conveyor



Ultimate Roller Conveyor



Conveyor Supports

Maximum Distances:

1 = 2 ft (610 mm)

2 = 8 ft (2438 mm)**

** For conveyors longer than 10 ft (3.05 m), install support at frame joint.

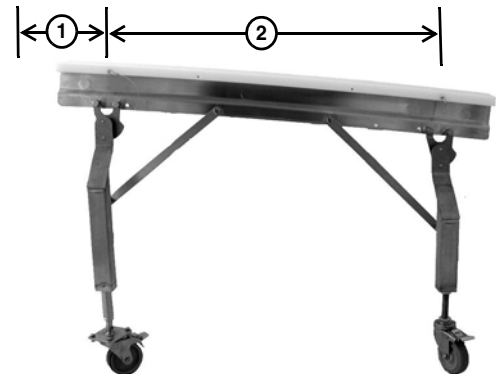


Figure 2

Specifications

Conveyor Width Reference (WW)	08, 12, 18, 24, 30, 36
Conveyor Belt Width	8" (203 mm), 12" (305 mm), 18" (457 mm), 24" (610 mm), 30" (762 mm), 36" (914 mm)
Maximum Conveyor Load	20 lbs. per roller. Recommend 3 rollers are in contact with product.
Roller Spacing	3" (76 mm) or 6" (152 mm)
Minimum Angle	5 degrees for products 10lbs. or greater, 7-10 degrees for products less than 5lbs.

Conveyor Length Reference (LLL)	036 – 120 in 003 increments
Conveyor Length	36" (914 mm) – 120" (3.05 m) in 3" (76 mm) increments

Installation

⚠ CAUTION

Dorner recommends cleaning all the “food zones” prior to placing conveyor into service. Ensure adequate access is provided for cleaning and servicing equipment so that the required level of hygiene can be maintained.

⚠ CAUTION

Conveyor **MUST** be mounted straight, flat, and level within confines of conveyor. Use a level (Figure 3, item 1), during setup.

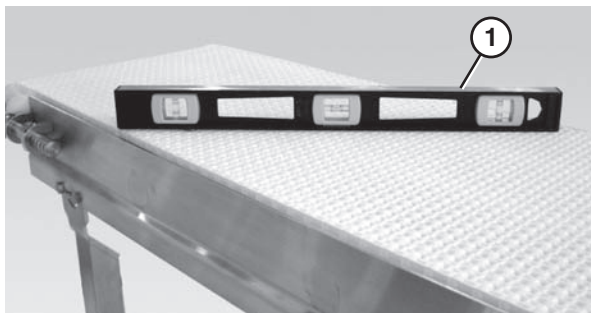


Figure 3

Required Tools

- 17 mm wrench (for hexagonal head fasteners)
- Level
- Small Screwdriver

Recommended Installation Sequence

1. Attach the stands to the conveyor. Refer to “Stand Installation” on page 6.
2. Attach the rollers to the frame. Refer to “Roller Installation” on page 7.

Stand Installation

7400 Roller Conveyor Stand Installation

Typical Stand Components (Figure 4)

- | | |
|---|--|
| 1 | Conveyor frame |
| 2 | Stand |
| 3 | M10 - 1.5 x 12 mm hex head cap screws (x4) |

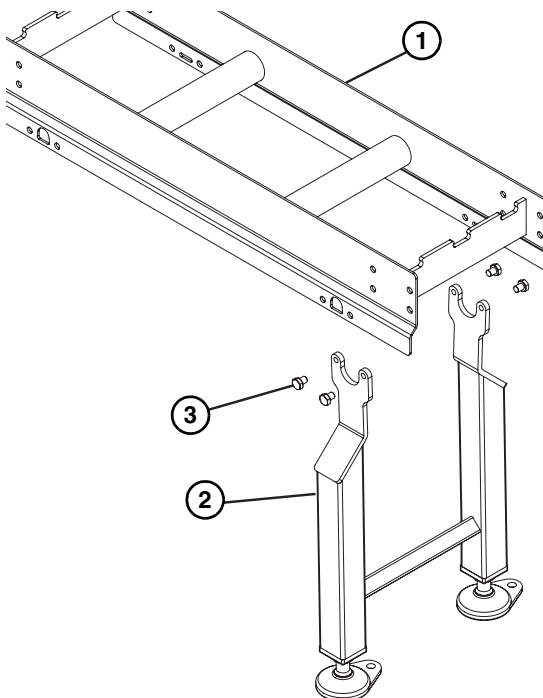


Figure 4

1. Position the stands on a flat, level surface.
2. Attach the stands to the frame (Figure 5).



Figure 5

Ultimate Roller Conveyor Stand Installation

Typical Stand Components (Figure 6).

1	Conveyor frame
2	Stand
3	M10 - 1.5 x 16 mm hex head cap screws (x4)

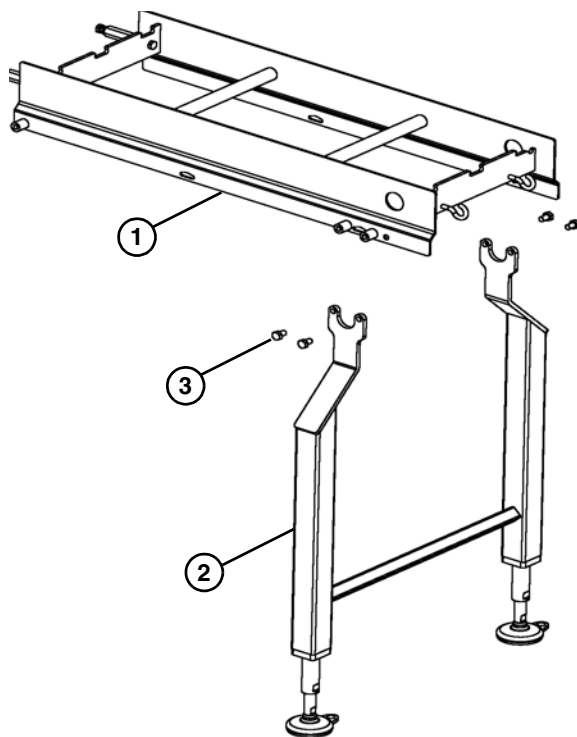


Figure 6

1. Position the stands on a flat, level surface.
2. Attach the stands to the frame (Figure 7).

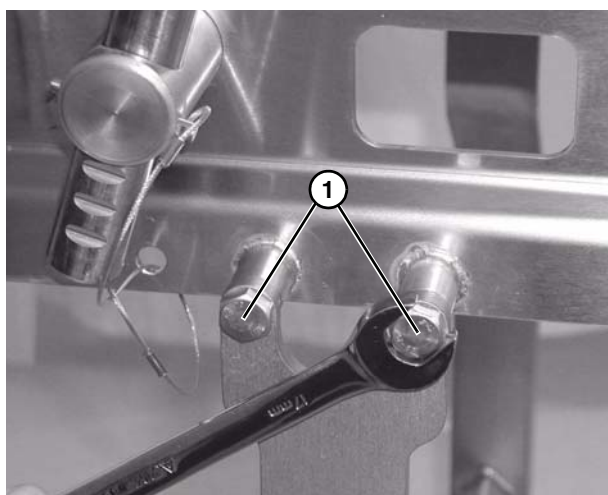


Figure 7

3. Tighten hex screws (Figure 7, item 1).

Roller Installation

⚠ WARNING

PUNCTURE HAZARD!

Press in spring loaded hex shaft with care. Screwdriver may slip and could puncture the skin, causing serious injury.

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1. Place one end of the roller into the side rail of conveyor.
2. On the opposite end of the roller, push in spring loaded hex shaft with screwdriver and push roller down. (Figure 8).



Figure 8

Ultimate Roller Conveyor

1. Place roller into pockets in side guides. (Figure 9).



Figure 9

Preventive Maintenance and Adjustment

Required Tools

- 17 mm wrench (or adjustable wrench)
- Small Blade Screwdriver

Checklist

- Keep service parts on hand. Refer to the "Service Parts" section starting on page 10 for recommendations.
- Replace any worn or damaged parts

Cleaning

Routine Cleaning

⚠ WARNING

SEVERE HAZARD! LOCK OUT POWER before removing guards or performing maintenance. Exposed moving parts can cause serious injury.

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⚠ CAUTION
7400 Series Roller Conveyors utilize hollow tube rollers with non-sealed bearings. These rollers can fill with liquid in the cleaning process. DO NOT USE THE 7400 SERIES ROLLER CONVEYOR IN APPLICATIONS WHERE BACTERIA IS PRESENT.

Dorner recommends cleaning the inside and the outside of the conveyor on a daily basis. The 7400 Roller Conveyor should be wiped down as required.

Ultimate Roller Conveyor

Dorner recommends cleaning the inside and the outside of the conveyor on a daily basis. Refer to the following steps to access the inside of the conveyor.

1. Remove the rollers from the pockets in the side guides.
2. Remove the guides by removing the pull pins (**Figure 10, item 1**) that connect the guide (**Figure 10, item 2**) to the frame.

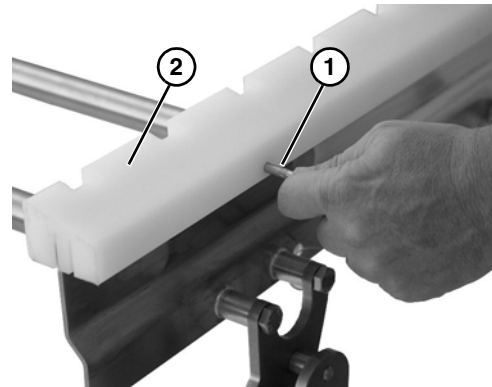


Figure 10

3. Remove the guides (**Figure 11, item 1**).

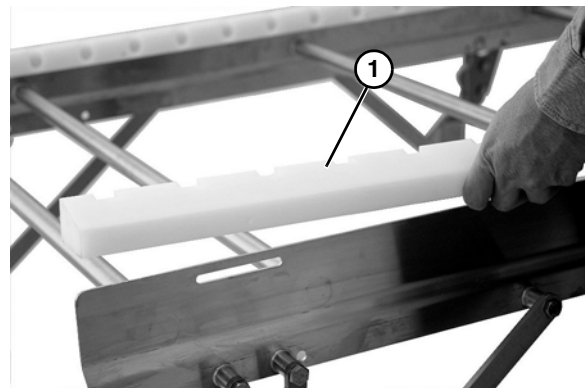



Figure 11

Preventive Maintenance and Adjustment

Roller Replacement

 WARNING

PUNCTURE HAZARD! Press in spring loaded hex shaft with care. Screwdriver may slip and could puncture the skin, causing serious injury.

7400 Roller Conveyor

1. Remove the rollers (**Figure 12, item 1**) by pressing in the spring loaded hex shaft (**Figure 12, item 2**).

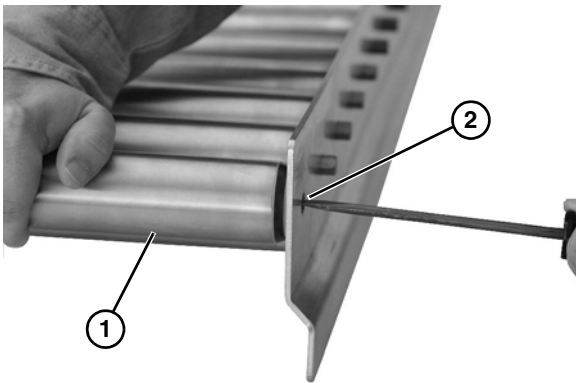


Figure 12

2. Lift roller out (**Figure 13, item 1**).

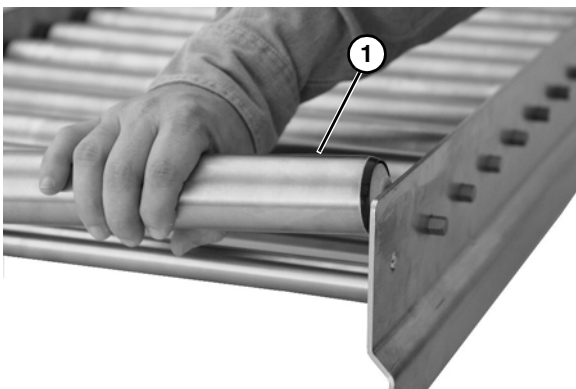


Figure 13

3. Install new roller. Refer to "Roller Installation" on page 7.

Ultimate Roller Conveyor

1. Remove the roller from the pockets in the side guides. (**Figure 14, item 1**).

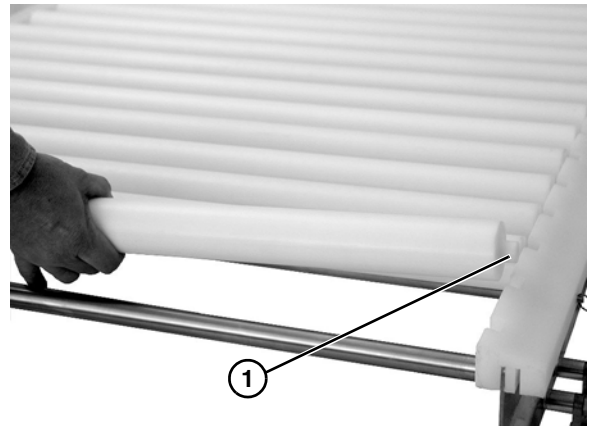



Figure 14

2. Install new roller.

Service Parts

NOTE

For replacement parts other than those shown in this section, contact an authorized Dorner Service Center or the factory. Key Service Parts and Kits are identified by the Performance Parts Kits logo . Dorner recommends keeping these parts on hand.

7400 Roller Conveyor

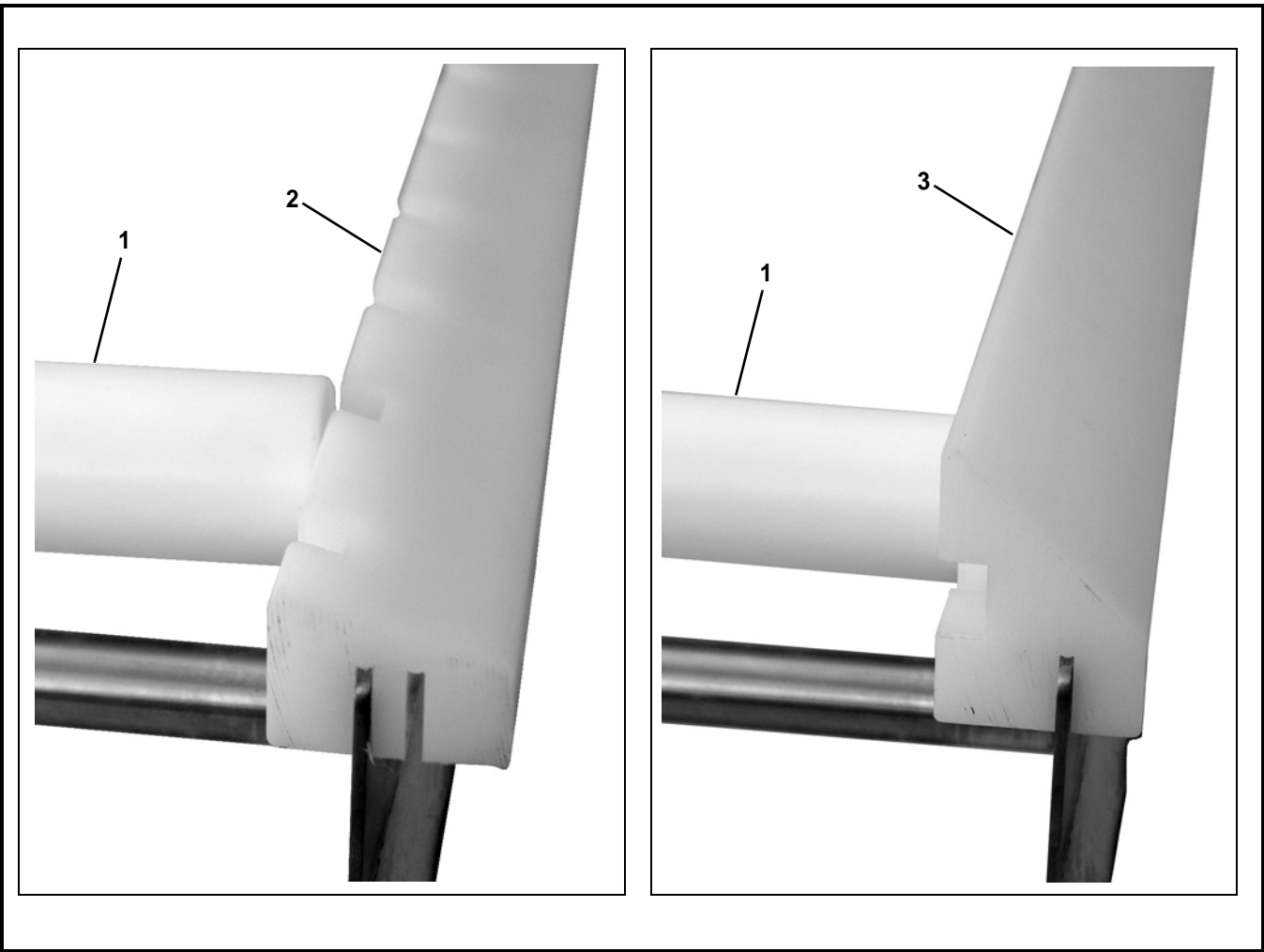
Rollers



Item	Part Number	Description
1	807-1786	8" Roller
	807-1787	12" Roller
	807-1788	18" Roller
	807-1789	24" Roller
	807-1790	30" Roller
	807-1791	36" Roller

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Rollers and Support Rails



Item	Part Number	Description
1	506259-08	8" Roller
	506259-12	12" Roller
	506259-18	18" Roller
	506259-24	24" Roller
	506259-30	30" Roller
	506259-36	36" Roller
2	506262-LLLLL	Low Side Support Rail
3	506263-LLLLL	High Side Support Rail
LLLLL = Guide Length in inches with 2 decimal places		
Example: Guide Length = 24.00" LLLLL = 02400		

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.

A representative will discuss action to be taken on the returned items and provide a Returned Goods Authorization number for reference.

There will be a return charge on all new undamaged items returned for credit where Dorner was not at fault. Dorner is not responsible for return freight on such items.

Conveyors and conveyor accessories

Standard catalog conveyors	30%
MPB Series, cleated and specialty belt conveyors	50%
7400 & 7600 Series conveyors	non-returnable items
Engineered special products	case by case
Drives and accessories	30%
Sanitary stand supports	non-returnable items

Parts

Standard stock parts	30%
MPB, cleated and specialty belts	non-returnable items

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 Technical Sales, Catalog Sales and Service Teams 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.



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