

2200 Series Precision Move Conveyors

Installation, Maintenance & Parts Manual





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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 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

Dorner 2200 series conveyors are covered by Patent Numbers 5,174,435, 6,422,382 and corresponding patents and patent applications in other countries.

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

Warnings – General Safety



Product Description

Refer to Figure 1 for typical conveyor components.

- 1 Conveyor
- 2 Guiding & Accessories
- 3 Mounting Brackets
- 4 Support Stand
- 5 Drive End
- 6 Idler/Tension End
- 7 Gearmotor Mounting Package
- 8 Gearmotor
- 9 Center Drive Box (Center Drive Units)



End Drive Conveyor Figure 1



Figure 2

Specifications

Models:

Flat Belt End Drive Conveyor



Cleated Belt End Drive Conveyor



Flat Belt Mid Drive Conveyor



Conveyor Supports:

Maximum Distances:

- 1 = 607 mm**
- 2 = 2438 mm***
- 3 = 457 mm

** For Heavy Load Bottom Mount Package, mount support under gear head.

*** For conveyors longer than 3658 mm, install support at joint.



Specifications

Conveyor Specifications:

Conveyor Width Reference (WW)	01	02	04	06	08	12	18	24
Conveyor Belt Width	25 mm	44 mm	95 mm	152 mm	203 mm	305 mm	457 mm	609 mm
Maximum Conveyor Load* (See NOTE Below)	11 kg	11 kg	25 kg	41 kg	54 kg	82 kg	90 kg	90 kg
Conveyor Startup Torque*	0.5 Nm	0.5 Nm	0.7 Nm	0.9 Nm	1.1 Nm	1.5 Nm	1.7 Nm	2.3 Nm
Belt Travel	120 mm per revolution of pulley							
Maximum Belt Speed*	80.5 m/minute							
Belt Takeup	10 mm of stroke = 19 mm of belt take-up							

NOTE

Maximum conveyor loads based on:

- Non-accumulating product
- Conveyor being mounted horizontal
- Not exceeding 6.8 kg / 305 mm
- Steel cord belt maximum load = 91 kg all widths

* See Ordering and Specifications Catalog for details.

LLLL:

- Minimum = 0150 = 457 mm
- Maximum = 3000 = 9144 mm

NOTE

Conveyor MUST be mounted straight and level within confines of conveyor. Use a level (Figure 4, item 1) for setup.





Installation Component List

Conveyor frame (two sections if longer than 3658 mm Conveyor brackets (4x)

Return rollers (for longer conveyors)

Required Tools

- Hex-key wrenches: 4 mm, 5 mm, 6 mm
- Level
- Torque wrench

Recommended Installation Sequence

- Install support stands (see accessory instructions)
- Assemble conveyor (if required)
- Attach mounting brackets to conveyor
- Attach conveyor to stands
- Install return rollers on conveyor (optional)
- Mount gearmotor mounting package (see accessory instructions)
- Attach guides/accessories. (See "Service Parts" section beginning on page 34 for details.)

Conveyors Up to 3658 mm

No assembly is required. Install mounting brackets and return rollers. Refer to "2200 Series Mounting Brackets" on page 9 and "Return Rollers" on page 10.

Conveyors Longer Than 3658 mm

1. Locate and arrange conveyor sections by section labels (Figure 5, item 1).



Figure 5

2. On tension end of the conveyor, identified with

a label (Figure 6, item 1), push in headplate assembly (Figure 6, item 2): On both sides of conveyor, loosen fastening screws (Figure 6, item 3) and push headplate assembly inward.



Figure 6

3. Roll out conveyor belt and place conveyor frame sections (Figure 7, item 1) into belt loop.



Figure 7

2200 Series Precision Move Conveyors



 Join conveyor sections and install frame connector plates (Figure 8, item 1) or connector/mount brackets (Figure 8, item 2) and screws (Figure 8, item 3) on both sides as indicated. Tighten screws to 7 Nm.



Figure 8

 With a 5 mm hex-key wrench, rotate pinion gear (Figure 9, item 1) to tension the conveyor belt. Tighten fastening screws (Figure 9, item 2) on both sides of conveyor to 9 Nm. For proper tensioning, refer to "Conveyor Belt Tensioning" on page 20".



Figure 9

6. Install mounting brackets and return rollers. Refer to "2200 Series Mounting Brackets" on page 9 and "Return Rollers" on page 10.

2200 Series Mounting Brackets

1. Locate brackets. Exploded view shown in Figure 10.



Figure 10

- Remove screws (Figure 10, item 1 & 2), washers (Figure 10, item 3), nuts (Figure 10, item 4) and T-bars (Figure 10, item 5) from brackets.
- Insert T-bars (Figure 10, item 5) into conveyor side slots (Figure 11, item 1). Fasten brackets (Figure 11, item 2) to conveyor with mounting screws (Figure 11, item 3).



Figure 11



- 4. Fasten brackets to support stand with mounting screws (Figure 11, item 4), washers (Figure 11, item 5) and nuts (Figure 11, item 6).
- 5. Tighten screws (Figure 11, item 3 & 4) to 7 Nm.

Return Rollers

Cleated Belt and 44–152 mm Wide Flat Belt Conveyors

 Locate return rollers. Exploded views shown in Figure 12 & Figure 13.



Figure 12



Figure 13

Remove screws (Figure 12, item 1) & (Figure 13, item 1) and clips (Figure 12, item 2) and (Figure 13, item 2) from roller assembly.

3. Install roller assemblies (Figure 14, item 1) as shown. Tighten screws (Figure 14, item 2) to 7 Nm.



Figure 14

203–610 mm Wide Flat Belt Conveyors

1. Locate return rollers. Exploded view shown in Figure 15.



Figure 15

- 2. Remove screws (Figure 15, item 1) and clips (Figure 15, item 2) from roller assembly.
- 3. Install roller assembly as shown (Figure 16, item 1). Tighten screws (Figure 16, item 2) to 7 Nm.



Figure 16

Slave Drive Installation



 Install slave drive plate (Figure 17, item 1) onto drive end of driven conveyor.

guards or performing maintenance.



Figure 17

- 2. Install washer and screw (Figure 17, item 2). Do not tighten.
- 3. Install washer and screw (Figure 17, item 3). Do not tighten.
- 4. Install cam knob (Figure 17, item 4) with screw (Figure 17, item 5). Do not tighten.
- 5. Install drive conveyor tension end (Figure 18, item 1) onto slave drive plate (Figure 18, item 2).



Figure 18

6. Install slave drive plate on opposite side, and install screws and washers from steps 2 and 3.

7. Install screw (Figure 19, item 1). Adjust conveyor angle and tighten. Repeat on opposite side.



Figure 19

 Install washer and screw (Figure 19, item 2) from slave drive plate (Figure 19, item 3). Repeat on opposite side.
Install two keys (Figure 20, item 1).



Figure 20

- 10. Install belt (Figure 20, item 2) and both pulleys (Figure 20, item 3).
- 11. Be certain both pulleys are flush with shaft and tighten set screws (Figure 21, item 1) onto pulleys.



Figure 21

2200 Series Precision Move Conveyors

12. Rotate cam knob (Figure 22, item 1) to obtain 3-6 mm belt deflection at center of belt (Figure 22, item 2) with approximately 1360-2268 grams of force.



Figure 22

13. Tighten screw (Figure 23, item 1) in cam to lock belt tension.



Figure 23

- 14. Tighten screw (Figure 23, item 2) to 7 Nm to secure position.
- 15. Tighten remaining hardware to 7 Nm.
- Install cover (Figure 24, item 1) and two screws (Figure 24, item 2). Tighten screws enough to secure cover.

Common Drive Installation



NOTE

Ensure driven conveyor is not rigidly mounted to allow tie tube to align conveyors.

1. Install tie tube (Figure 25, item 1) between conveyor belts (Figure 25, item 2).



Figure 25



Figure 24

17. Install conveyor belt. See "Conveyor Belt Replacement" section on page 17.

2. Install screw (Figure 26, item 1) onto spindle plate (Figure 26, item 2).



Figure 26

- 3. Install screw (Figure 26, item 3) to secure front side of plate. Repeat on opposite side.
- 4. Tighten screws to 7 Nm.
- 5. Separate and install outer portion of 3-jaw coupling (Figure 27, item 1) onto shaft portion of each end of conveyor.

NOTE

When securing inner portion of 3-jaw coupling (Figure 27, item 1), maintain 8 - 18 mm clearance from headplates (Figure 27, item 2).



Figure 27

Install inner portion of 3-jaw coupling (Figure 28, item 1) onto center shaft (Figure 28, item 2).



Figure 28

- 9. Install center shaft assembly into end of each 3-jaw spider (Figure 28, item 3).
- Slide both ends of inner portion of 3-jaw coupling (Figure 29, item 1) onto mating surface of outer 3-jaw coupling (Figure 29, item 2) and secure with clamp screws (Figure 29, item 3). Tighten screws to 2 Nm.



Figure 29

- 6. Tighten clamp screws (Figure 27, item 3) to 2 Nm to secure outer portion position of 3-jaw coupler.
- 7. Install 3-jaw spider (Figure 27, item 4) into each end of outer portion of 3-jaw coupling.

 Install guard plate (Figure 30, item 1) pin into hole (Figure 30, item 2) on each side of tie tube (Figure 30, item 3).

IMPORTANT

Install guard plate (Figure 30, item 1) with offset angle (Figure 30, item 4) facing tie tube (Figure 30, item 3).



Figure 30

12. Install top guard and bottom guard (Figure 31, item 1) over shaft and 3-jaw couplers.



Figure 31

Secure top and bottom guards with weld nut (Figure 32, item 1) and screw (Figure 32, item 2) on each side of assembly. Repeat on bottom side.



Figure 32

- 14. Tighten screws (Figure 32, item 2).
- 15. Secure remaining stand mounts on conveyor ensuring alignment is not disturbed.

Guide Clips

1. Install guide clip assembly (Figure 33, item 1) into conveyor t-slot (Figure 33, item 2) as shown.





2. Tighten screw (Figure 34, item 1) making sure t-bar (Figure 34, item 2) rotates and engages inside of t-slot.



Figure 34

2200 Series Precision Move Conveyors

Adjustable Guides

1. Install guide bracket assembly (Figure 35, item 1) into the conveyor t-slot (Figure 35, item 2).



Figure 35

 Tighten screws (Figure 36, item 1) making sure t-nut (Figure 36, item 2) rotates and engages inside of the tslot.



Figure 36

3. Loosen screw (Figure 37, item 1) on end of shaft (Figure 37, item 2) to remove clip (Figure 38, item 1).



Figure 37



Figure 38

4. Snap clip (Figure 39, item 1) onto guide rail (Figure 39, item 2).



Figure 39

 Reassemble clip (Figure 40, item 1) and attach to shaft (Figure 40, item 2). Tighten screw (Figure 37, item 1) on end of shaft.



Figure 40

6. Adjust rail width with top screw (Figure 41, item 1).



Figure 41

7. Adjust rail height with lower screw (Figure 42, item 1).



Figure 42

Required Tools

Standard Tools

- Hex-key wrenches: 2.5 mm, 4 mm, 5 mm, 6 mm
- Arbor press

Special Tools

- 807–1716 Bearing Puller Tool (or equivalent)
- 450293 Bearing Installation Tool (Bearing Pusher)
- 456063 Bearing Removal Tool

Checklist

- Keep service parts on hand (see "Service Parts" section for recommendations)
- Keep supply of belt cleaner
- Clean entire conveyor while disassembled
- Replace worn or damaged parts

Lubrication

No lubrication is required. Replace bearings if worn.

Maintaining Conveyor Belt

Troubleshooting

Inspect conveyor belt for:

- Surface cuts or wear
- Stalling or slipping

Surface cuts and wear indicate:

- Sharp or heavy parts impacting belt
- Jammed parts
- Foreign material inside the conveyor
- Improperly positioned accessories
- Bolt-on guiding is pinching belt

Stalling or slipping indicates:

- · Excessive load on belt
- Conveyor belt or drive timing belt are not properly tensioned
- Impacted dirt on drive pulley
- Intermittent jamming or drive train problems

Cleaning

Use mild soap and water to clean the belt and conveyor. Do not soak the belt.

Conveyor Belt Replacement



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

Conveyor Belt Replacement Sequence

Remove old conveyor belt:

- Conveyor without Stands or Gearmotor Mounting Package
- Conveyor with Stands and Gearmotor Mounting Package
- Install new conveyor belt
- Tension conveyor belt

Belt Removal for Conveyor Without Stands or Gearmotor Mounting Package

- 1. If equipped, remove return rollers and guiding and accessories from one side of conveyor.
- 2. On tension end of the conveyor, identified with a

Label (Figure 43, item 1), push in headplate assembly (Figure 43, item 2): On both sides of conveyor, loosen fastening screws (Figure 43, item 3) and push headplate assembly inward.





3. Remove conveyor belt.

Belt Removal for Conveyor With Stands and Gearmotor Mounting Package



1. Place temporary support stands (Figure 44, item 1) at both ends of the conveyor. Place an additional support stand under the drive motor (Figure 44, item 2), if equipped. See WARNING.



Figure 44

- Remove mounting brackets (Figure 44, item 3) from one side of conveyor. (Reverse steps 3 & 4 of "2200 Series Mounting Brackets" section beginning on page 9.) If equipped with heavy load drive package, remove brackets from side opposite drive cover (Figure 45, item 1).
- 3. If equipped, remove return rollers, guiding and accessories from side opposite drive cover (Figure 45, item 1).



Figure 45

- 4. If equipped with heavy load drive package, remove drive support bracket (Figure 45, item 2): Remove bracket screws (Figure 45, item 3) then remove bracket (Figure 45, item 2).
- 5. On tension end of the conveyor, identified with

a label (Figure 46, item 1), push in headplate assembly (Figure 46, item 2): On both sides of conveyor, loosen fastening screws (Figure 46, item 3) and push headplate assembly inward.



Figure 46

6. Remove belt (Figure 47, item 1) from conveyor.



Figure 47

Belt Removal for 25 mm Tip Up

1. Remove screw (Figure 48, item 1) on both sides of the conveyor.



Figure 48

2. Tip headplate assembly (Figure 49, item 1) up and remove belt (Figure 49, item 2).



Figure 49

Belt Installation for Conveyor Without Stands or Gearmotor Mounting Package

1. Orient belt so splice leading fingers (Figure 50, item 1) point in the direction of belt travel as identified by the conveyor directional label (Figure 50, item 2).



Figure 50

- 2. Slide belt onto the conveyor frame assembly.
- 3. Tension belt. Refer to "Conveyor Belt Tensioning" on page 20.
- 4. If equipped, install return rollers and guiding.

Belt Installation for Conveyor With Stands and Gearmotor Mounting Package



- Ensure temporary support stands (Figure 44, item 1) are placed at both ends of the conveyor. Place an additional support stand under the drive motor (Figure 44, item 2), if equipped. See WARNING.
- 2. Orient belt so splice leading fingers (Figure 50, item 1) point in the direction of belt travel as identified by the conveyor directional label (Figure 50, item 2).

3. Install belt (Figure 51, item 1) on conveyor. Lift conveyor slightly to avoid pinching belt on temporary support stands.



Figure 51

- 4. Re-install conveyor mounting brackets. Refer "2200 Series Mounting Brackets" beginning on page 9, steps 3 through 5.
- 5. If equipped with a heavy load drive package, re-install drive support bracket (Figure 45, item 2).
- 6. Tension belt. Refer to "Conveyor Belt Tensioning" on page 20
- 7. If equipped, re-install return rollers and guiding.

Mid Drive Belt Replacement



- Remove belt tension. See "Conveyor Belt Tensioning" steps 1 & 2 section on page 20.
- 2. Remove screw (Figure 52, item 1) from each side of mid drive assembly (Figure 52, item 2).



3. Lower and remove mid drive assembly (Figure 53, item 1) from belt (Figure 53, item 2).



Figure 53

4. Remove belt.

Conveyor Belt Tensioning



guards or performing maintenance.
On tension end of the conveyor, identified with a

Label (Figure 54, item 1), adjust headplate assembly (Figure 54, item 2): On both sides of conveyor, loosen fastening screws (Figure 54, item 3) and rotate pinion gear (Figure 54, item 4) to adjust headplate assembly.



Figure 54

2200 Series Precision Move Conveyors

2. Adjust headplate assembly so end of conveyor frame aligns with or between the headplate tensioning marks (Figure 55, item 1 & 2). Replace belt if proper tensioning can not be obtained while aligning the end of the conveyor frame with or between the tensioning marks. See NOTE.



Figure 55

NOTE

On pinion gear, do not exceed a torque of 2.8 Nm for 44 – 305 mm wide conveyors and 4.5 Nm for 457 – 610 mm wide conveyors. Over tensioning the conveyor belt could cause excessive pulley bearing load and early failure.

3. After adjusting proper tensioning, tighten fastening screws (Figure 54, item 3) on both sides of conveyor to 7 Nm.

Pulley Removal



Unless instructed otherwise, leave belt in place to remove the desired pulley. Follow the corresponding instructions below:

- A Idler Pulley Removal
- B 25 mm Wide Idler Pulley Removal
- C Drive Pulley Removal
- D 25 mm Wide Drive Pulley Removal

A – Idler Pulley Removal

- 1. Remove belt tension.
- On one side of the conveyor, remove screw (Figure 2. 56, item 1) and remove dust cover (Figure 56, item 2), if installed.

NOTE

To prevent damage to the headplates, be sure to remove them slowly because they are not attached to pulley.



- Remove two fastening screws (Figure 56, item 3).
- 3. Remove the headplate (Figure 57, item 1) from the 4. conveyor frame, holding spindle in place.



Figure 57

- 5. Slide spindle out of the belt loop.
- To replace the idler tail pulley, reverse the removal 6. procedure.
- 7. Re-install belt on end of conveyor, then tension the belt. See "Conveyor Belt Tensioning" on page 20.

B – 25 mm Wide Idler Pulley Removal

- 1. Remove belt. See "Belt Removal for 25 mm Tip Up" on page 19.
- 2. Loosen screw (Figure 58, item 1) on both sides of conveyor. Remove idler tail (Figure 58, item 2) from conveyor.





- 3. Remove fastening screw (Figure 58, item 3).
- 4. Remove the headplate (Figure 59, item 1) and remove the spindle (Figure 59, item 2).

NOTE

To prevent damage to the headplates, be sure to remove them slowly because they are not attached to pulley.



Figure 59

- 5. To replace the idler tail pulley, reverse the removal procedure.
- 6. Re-install belt on end of conveyor. Tension the belt by reversing the steps in "Belt Removal for 25 mm Tip Up" on page 19.

C – Drive Pulley Removal

- 1. Remove belt tension.
- On one side of the conveyor, remove screw (Figure 60, item 1) and remove dust cover (Figure 60, item 2), if installed.

NOTE

To prevent damage to the headplates, be sure to remove them slowly because they are not attached to pulley.



Figure 60

3. Remove two fastening screws (Figure 60, item 3).



4. Remove the headplate (Figure 61, item 1) from the conveyor frame, holding spindle in place.



Figure 61

- 5. Slide the drive pulley out of the belt loop.
- 6. To replace the drive tail pulley, reverse the removal procedure.
- 7. Re-install belt on end of conveyor, then tension the belt. See "Conveyor Belt Tensioning" on page 20.

D – 25 mm Wide Drive Pulley Removal

- 1. Remove belt. See "Belt Removal for 25 mm Tip Up" on page 19.
- 2. Loosen two screws (Figure 62, item 1) on both sides of conveyor. Remove drive tail (Figure 62, item 2) from conveyor.



Figure 62

3. Remove fastening screw (Figure 63, item 1).



Figure 63

4. Remove the headplate (Figure 64, item 1) and remove the spindle (Figure 64, item 2).

NOTE

To prevent damage to the headplates, be sure to remove them slowly because they are not attached to pulley.



Figure 64

- 5. To replace the idler tail pulley, reverse the removal procedure.
- 6. Re-install belt on end of conveyor. Tension the belt by reversing the steps in "Belt Removal for 25 mm Tip Up" on page 19.

Bearing Removal & Replacement

Removal

IMPORTANT

Do not use any removed bearings. Replace them.

Place bearing removal tool part #456063 (Figure 65, item 1) below bearing (Figure 65, item 2) with lip (Figure 65, item 3) located in gap (Figure 65, item 4) between bearing and spindle hub (Figure 65, item 5) as shown.





Figure 65

2. Using puller part #807–1716 (Figure 66, item 1), remove and discard bearing.



Figure 66

Replacement

Inspect the headplates bearing seating surface (Figure 67, item 1). If they are worn or damaged, replace. See "Service Parts" on page 34.



Figure 67

- 2. Inspect spindle (Figure 68, item 1). Replace if worn.
- 3. Slide bearing (Figure 68, item 2) onto spindle.



Figure 68

4. Using an arbor press or similar device, press bearing onto pulley shaft (Figure 69).

A WARNING

Be certain that bearing and shaft is set onto press completely flush with press cylinder plate. If not, damage to bearing or shaft could result.

Keep hands and fingers away from press and components during procedure.



Figure 69

5. Repeat steps 1 through 4 for each bearing.

2200 Series Precision Move Conveyors

Drive Pulley and Idler Pulley Installation

Drive Pulley Installation

- 1. With opposite headplate installed, position the drive pulley through the loop of the belt, into the opposite headplate.
- 2. Add spring washer (Figure 70, item 1) to headplate spindle bore (Figure 70, item 2) opposite motor drive side with fingers (Figure 70, item 3) toward headplate spindle bore.



Figure 70

3. Install the headplate over the drive pulley and attach the headplate to the conveyor frame with three screws (Figure 71, item 1). Tighten screws to 7 Nm.



Idler Pulley Installation

- 1. With opposite headplate installed, position the idler pulley through the loop of the belt, into the opposite headplate.
- 2. Install the headplate over the drive pulley and attach the headplate to the conveyor frame with three screws (Figure 72, item 1). Tighten screws to 7 Nm.



Figure 72

Upper Wear Strip Replacement



- 1. Remove conveyor belt. See "Conveyor Belt Replacement" section on page 17.
- 2. With a putty knife (Figure 73, item 1), start by raising edge of wear strip (Figure 73, item 2).



Figure 73

3. Remove old wear strip with a pliers (Figure 74, item 1).



Figure 74

- 4. Clean conveyor surface with isopropyl alcohol and allow to fully dry.
- 5. Install new wear strip (Figure 75, item 1).





Figure 75

6. Using a utility knife (Figure 75, item 2), cut out notch in each corner (Figure 75, item 3).

Slave Drive Belt Replacement



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

1. Remove two screws (Figure 76, item 1) and cover (Figure 76, item 2).



Figure 76

2. Loosen set screws (Figure 77, item 1) on pulleys.



Figure 77

3. Loosen screws (Figure 78, item 1, 2, and 3) from both sides of conveyor. Turn cam knob (Figure 78, item 4) to remove belt tension.



Figure 78

4. Remove both pulleys (Figure 79, item 1) and belt (Figure 79, item 2).



Figure 79

- 5. Be certain two keys (Figure 79, item 3) are installed onto each shaft.
- 6. Install new belt (Figure 79, item 2) and both pulleys (Figure 79, item 1).
- 7. Be certain both pulleys are flush with shaft and tighten set screws (Figure 80, item 1) onto pulleys.



Figure 80

8. Rotate cam knob (Figure 81, item 1) to obtain 3-6 mm belt deflection at center of belt (Figure 81, item 2) with approximately 1360-2268 grams of force.



Figure 81

9. Tighten low head capscrew (Figure 82, item 1) in cam to lock belt tension.



Figure 82

- 10. Tighten screw (Figure 82, item 2) to 7 Nm to secure position.
- 11. Tighten remaining hardware to 7 Nm.
- Install cover (Figure 83, item 1) and two screws (Figure 83, item 2). Tighten screws enough to secure cover.



2200 Series Precision Move Conveyors

Mid Drive Spindle Replacement

- 1. Remove belt. See "Conveyor Belt Replacement" on page 17.
- 2. Remove two screws (Figure 84, item 1) from each side of mounting block (Figure 84, item 2).



Figure 84

 Lower center spindle assembly (Figure 85, item 1) clamp block (Figure 85, item 2) from conveyor channel (Figure 85, item 3) on each side of conveyor frame.



Figure 85

4. Separate mounting blocks (Figure 86, item 1) from spindle (Figure 86, item 2).



Figure 86

- 5. Replace spindle.
- 6. Install mounting block (Figure 87, item 1) onto spindle (Figure 87, item 2).



Figure 87

7. Raise center spindle assembly (Figure 88, item 1) tracking clamp block (Figure 88, item 2) onto conveyor channel (Figure 88, item 3) on each side of conveyor frame.



Figure 88

8. Secure center spindle assembly (Figure 89, item 1) with two screws (Figure 89, item 2) on each side of mounting block. Do not tighten.



Figure 89

9. Raise mid drive assembly (Figure 90, item 1) onto belt (Figure 90, item 2).



Figure 90

10. Secure mid drive assembly (Figure 91, item 1) with screw (Figure 91, item 2) on each side of assembly. Tighten screw to 7 Nm.



Figure 91

- 11. Tighten socket head screws (Figure 89, item 2) to 7 Nm.
- 12. Tension conveyor belt. See "Conveyor Belt Tensioning" on page 20.

Tail Plate Shaft Knockout Removal

- 1. Determine which tail plate or plates require the removal of the hole knockout slug for the drive shaft.
 - Position A or B = 205370-LH
 - Position C or D = 205370-RH
- 2. Set tail plate (Figure 92, item 1) flat side down over washer (Figure 92, item 2) or hole in workbench that has a minimum diameter of 16 mm.



Figure 92

 Use a hammer and punch (6 mm - 13 mm diameter) (Figure 93, item 1) or long bolt to knock out slug (Figure 94, item 1) for shaft backing up tail plate with washer.



Figure 93



Figure 94

4. Repeat the same operation to knockout (Figure 96, item 1) for alignment screw hole using 3 mm - 5 mm punch (Figure 95, item 1) or M5 - M6 bolt.



Figure 95



Figure 96

Pinion Replacement

- 1. Remove conveyor belt. See "Conveyor Belt Replacement" section on page 17.
- 2. Remove idler tail (Figure 97, item 1) by sliding off of the conveyor (Figure 97, item 2).



Figure 97

3. Pry pinion assembly (Figure 98, item 1) from conveyor frame by alternating sides.



Figure 98

4. Replace worn components.



Figure 99

To reassemble, make sure that the lines (Figure 100, item 1) on the pinion end gears (Figure 100, item 2) are aligned.



Figure 100

6. Slide on retaining plates (Figure 101, item 1).



Figure 101

7. Insert pinion assembly (Figure 102, item 1) into conveyor frame.



Figure 102

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8. Tap alternating retaining plates (Figure 103, item 1) and (Figure 104, item 1) with a hammer until fully assembled onto conveyor frame.

ACAUTION

Do not hit pinion gear with hammer. It may cause damage to the pinion teeth.



Figure 103



Figure 104

9. Insert both gear racks (Figure 105, item 1) into conveyor frame.



Figure 105



Make sure the bent end (Figure 106, item 1) of the gear rack is NOT assembled into the conveyor frame.



Figure 106

10. Rotate pinion (Figure 107, item 1) with hex wrench until gear racks (Figure 107, item 2) are fully collapsed.



Figure 107

- NOTE

 The gear racks must be aligned with each other, as shown above. Example of misaligned gear racks shown below.

 Statistical of the state of the state

 - Figure 108

11. Reinstall idler tail by sliding tail assembly (Figure 109, item 1) fully back onto conveyor frame.



Figure 109

12. Reinstall belt on end of conveyor, then tension the belt. See "Conveyor Belt Tensioning" on page 20.

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.

Drive Tail for 25 mm wide Conveyor



2200 Series Precision Move Conveyors

Dorner Mfg. Corp.

Service Parts

Drive Tail for 44 mm wide or wider Conveyor



ltem	Part Number	Description
1	807-2108	Spring Disk
2	205370-LH	Headplate, Left Hand
3	205370-RH	Headplate, Right Hand
4	202514- <u>WW</u>	Spindle Assembly (One Keyed Shaft)
	202517- <u>WW</u>	Spindle Assembly (Two Keyed Shafts)
	202516- <u>WW</u>	Spindle Assembly - Common Drive (Keyed Shaft & Stub Shaft)
	202518- <u>WW</u>	Spindle Assembly - Mid Common Drive (Two Stub Shafts)
	202515- <u>WW</u>	Spindle Assembly - End Common Drive (One Stub Shaft)
5	206006	Tail Nut Bar
6	930614M	Flat Head Screw, M6-1.00 x 14 mm
7	980428M	Square Key 4 mm x 28 mm

ltem	Part Number	Description
8	22BK2	Bearing Kit (2 pack)
	22BK4	Bearing Kit (4 pack)
9	22PMDS-WW	Spindle Tail Kit (Includes Items 1 - 4)
D	22PMDDS- <u>WW</u>	Dual Shaft Spindle Tail Kit (Includes Items 1 - 4)
	22PMDSC- <u>WW</u>	Common Drive Spindle Tail Kit (Includes Items 1 - 4)
	22PMDDC- <u>WW</u>	Mid Common Drive Spindle Tail Kit (Includes Items 1 - 4)
	22PMDC- <u>WW</u>	End Common Drive Spindle Tail Kit (Includes Items 1 - 4)
*WW =	= Conveyor width re	ference: 02, 04, 06, 08, 12, 18, 24

* See page 7 for cross-reference to width reference and conveyor width.

Service Parts

Idler Tail for 25 mm wide Conveyor



0	220210-01	and 6)		
	22V2TM-01	Idler Tail Kit with Magnet (Includes Items 1, 2, 4, 6, 7 and 8)		
	22PMTC-01	Idler Tail Kit with Stub Shaft (Includes Items 1, 2, 4, and 6)		
	22PMTS-01	Idler Tail Kit with Auxiliary Shaft (Includes Items 1, 2, 4, and 6)		

2200 Series Precision Move Conveyors

808-020

450226SSP

7

8

Keyed Shaft

Magnet (Optional)

Magnet Sleeve (Optional)
Idler Tail for 44 mm wide or wider Conveyor



Item	Part Number	Description
1	205370-LH	Headplate, Left Hand
2	205370-RH	Headplate, Right Hand
3	206006	Tail Nut Bar
4	201273- <u>WW</u>	Standard Spindle Assembly
	202515- <u>WW</u>	Spindle Assembly with One Stub Shaft
	202514- <u>WW</u>	Spindle Assembly with Auxiliary Keyed Shaft
5	808-020	Magnet (Optional)
6	930614M	Flat Head Screw, M6-1.00 x 10.7 mm
7	450226SSP	Magnet Sleeve (Optional)
8	807-2108	Disc Spring with Auxiliary Shaft Spindle Only

ltem	Part Number	Description	
9	22V2TO- <u>WW</u>	Standard Idler Spindle Kit (Includes Items 1, 2, 4, and 6)	
	22V2TM- <u>WW</u>	Idler Tail Kit with Magnet (Includes Items 1, 2, 4, 5, 6, and 7)	
	22PMDC- <u>WW</u>	Idler Tail Kit with Stub Shaft (Includes Items 1, 2, 4, and 6)	
	22PMDS- <u>WW</u>	Idler Tail Kit with Auxiliary Shaft (Includes Items 1, 2, 4, and 6)	
10	22BK2	Bearing Kit (2 Pack)	
	22BK4	Bearing Kit (4 Pack)	
* <u>WW</u> =	* <u>WW</u> = Conveyor width reference: 02, 04, 06, 08, 12, 18, 24		

* See page 7 for cross-reference to width reference and conveyor width.

Frame



ltem	Part Number	Description		
1	205469- <u>WW</u>	Hex Pinion, for 04 - 24 wide		
		Conveyors		
2	207145	Pinion Gear, for 02 wide		
		Conveyors		
	205383	Pinion End Gear, for 04 - 24 wide conveyors		
3	205450	Retaining Plate, for 02 - 24 wide conveyors		
4	203595	Gear Rack, for 02 - 24 wide conveyors		
5	207144	Lead In for 01 wide conveyor		
	207148- <u>WW</u>	Lead In for 02 wide and wider		
		conveyor		
6	914-005	Rivet for 01 wide conveyors		
7	203629- <u>WW</u> - <u>LLLLL</u>	Single Piece Frame, for 01 - 12 wide conveyors		
8	205395- <u>LLLLL</u>	Outside Frame, for Multi Piece 18 and 24 wide conveyors (Qty. 2)		
9	205396- <u>LLLLL</u>	Mid Frame, for Multi Piece 18 wide conveyors		
	205398- <u>LLLLL</u>	Mid Frame, for Multi Piece 24 wide conveyors		
10	920622M	Socket Head Screw, M6-1.00 x 22 mm, for 02 - 24 wide conveyors		
11	206505- <u>LLLLL</u>	Upper Connecting Strip		
		for 18 and 24 wide conveyors		
12	206506- <u>LLLLL</u>	Lower Connecting Strip for 18 and 24 wide conveyors		
13	205449- <u>LLLLL</u>	Center Guide Extrusion, for 02 - 24 wide conveyors		
14	807-2869	UHMW Tape 6 mm wide		
	807-2870	UHMW Tape 16 mm wide		
	807-2871	UHMW Tape 26 mm wide		
	807-2872	UHMW Tape 79 mm wide		
	807-2054	UHMW Tape 146 mm wide		
* <u>WW</u> =	= Conveyor width refere	nce: 01, 02, 04, 06, 08, 12, 18, 24		
LLLLL	LLLLL = Part length in inches with 2 decimal places			
Length	Length Example: Length = 35.25 inches LLLLL = 03525			

* See page 7 for cross-reference to width reference and conveyor width.

Mid Drive Module



ltem	Part Number	Description
1	203980	Idler Roller Assembly
		for 01 wide conveyors
	463040	Idler Roller Assembly
		for 02 wide conveyors
	463042	Idler Roller Assembly
		for 04 wide conveyors
	203635- <u>WW</u>	Idler Roller Assembly
		for 06 wide and wider conveyors
2	202447- <u>WW</u>	Spindle Assembly
	202335- <u>WW</u>	Drive Pulley for 02 - 06 wide Gang
		Drive Conveyors
	202332- <u>WW</u>	Drive Pulley for 08 - 24 wide Gang
		Drive Conveyors
3	202353	Clamp Block
4	202354	Mounting Block

Item	Part Number	Description	
5	202455- <u>WW</u>	Bottom Guard	
6	202355	Side Plate	
7	708180P	Trilobe Screw, M6-1.00 x 25 mm	
8	920625M	Socket Head Screw,	
		M6-1.00 x 25 mm	
9	980428M	Square Key 4 mm x 28 mm	
10	22PMMD- <u>WW</u>	Spindle Kit (Includes items 1 & 2)	
	22PMGMD- <u>WW</u>	Gang Drive Spindle Kit	
		(Includes items 1 & 2)	
* <u>WW</u> =	* <u>WW</u> = Conveyor width reference: 01, 02, 04, 06, 08, 12, 18, 24		

* See page 7 for cross-reference to width reference and conveyor width.

Slave Drive



Item	Part Number	Description
1	801-144	Bearing
2	202361	Cam Knob
3	202362	Slave Drive Plate
4	202482	Guard Box
5	814-421	Timing Belt, 215 mm Long
	814-080	Timing Belt, 200 mm Long
6	202497	Pulley 16 Tooth
	452366MP	Pulley 22 Tooth
	450367MP	Pulley 28 Tooth
	450368MP	Pulley 32 Tooth

ltem	Part Number	Description
7	605279P	Washer
8	920460M	Socket Head Screw, M470 x 60 mm
9	920695M	Low Head Cap Screw, M6-1.00 x 25 mm
10	960625MSS	Hex Head Cap Screw, M6-1.00 x 25 mm

Slave Drive Belt and Pulley Chart

Ratio	Belt	Drive Pulley	Driven Pulley	Pulley Kit
0.50	814-421	202497	450368MP	16:32
0.57	814-080	202497	450367MP	16:28
0.79	814-421	452366MP	450367MP	22:28
1.00	814-080	452366MP	450366MP	22:22
1.27	814-421	452367MP	450366MP	28:22
1.75	814-080	452367MP	202497	28:16
2.00	814-421	452368MP	202497	32:16

Common Drive



Item	Part Number	Description
1	807-2005	Weld Nut M6-1.00
2	807-2095	3 Jaw Coupling
3	202438- <u>LLLLL</u>	Shaft
4	202494	Alignment Block
5	202501	Guard Plate Assembly
6	202498- <u>LLLLL</u>	Tie Tube
7	242526- <u>LLLLL</u>	Guard
8	920512M	Socket Head Screw, M580 x 12 mm
9	920695M	Low Head Cap Screw,
		M6-1.00 x 25 mm

Item	Part Number	Description	
10	930620M	Flat head Screw,	
		M6-1.00 x 20 mm	
11	22PMCD	Coupling Kit	
LLLLL	<u>LLLLL</u> = Part length in inches with 2 decimal places.		
Length	Length Example: Length = 35.25 inches LLLLL = 03525		

2200 Series Precision Move Conveyors

Dorner Mfg. Corp.

#04 Profile - 76 mm Aluminum Side



Item	Part Number	Description	
1	206503	Guide Clip	
2	807-2878	Low Head Cap Screw, M6-1.00 x 16 mm	
3	206685	T-Nut	
4	206514- <u>LLLLL</u>	76 mm Guides	
	GTB04A04	76 mm Guides 1219 mm long	
	GTB04A08	76 mm Guides 2438 mm long	
5	203661	Guide Clip Assembly (Includes items 1, 2, and 3)	
LLLLL	LLLLL = part length in inches with 2 decimal places		
Length	Length Example: Length = 35.25 inches LLLLL = 03525		

#05 Profile - 38 mm Aluminum Side



Item	Part Number	Description
1	206503	Guide Clip
2	807-2878	Low Head Cap Screw, M6-1.00 x 16 mm
3	206685	T-Nut
4	206513- <u>LLLLL</u>	38 mm Guides
	GTB05A04	38 mm Guides 1219 mm long
	GTB05A08	38 mm Guides 2438 mm long
5	203661	Guide Clip Assembly (Includes items 1, 2, and 3)
LLLLL = part length in inches with 2 decimal places		
Length Example: Length = 35.25 inches LLLLL = 03525		

#09 Profile - 13 mm Low to High Side



ltem	Part Number	Description			
1	206503	Guide Clip			
2	807-2878	Low Head Cap Screw,			
		M6-1.00 x 16 mm			
3	206685	T-Nut			
4	206512- <u>LLLLL</u>	13 mm Guides			
	GTB09A04	13 mm Guides 1219 mm long			
	GTB09A08	13 mm Guides 2438 mm long			
5	203661	Guide Clip Assembly (Includes items			
		1, 2, and 3)			
LLLLL	LLLLL = part length in inches with 2 decimal places				
Length	Length Example: Length = 35.25 inches LLLLL = 03525				

#13, 33 & 43 Profile - Adjustable Guiding



Item	Part Number	Description			
1	206380	Base			
2	206381	Base Clamp			
3	206382	Insert Clamp			
4	206383	Guide Ring			
5	206385	Tube			
6	206397	Clip			
7	206685	T-Nut			
8	206692	Guide Tube			
9	807-2859	Nylon Cap Screw, N6 x 16 mm			
10	807-920	Square Nut, M6-1.0			
11	911-710	Washer			
12	920616M	Socket Head Screw,			
		M6-1.00 x 16 mm			
13	9206150M	Socket Head Screw,			
		M6-1.00 x 150 mm			
14	990601M	Hex Nut			

ltem	Part Number	Description			
15	834-238- <u>LLLLL</u>	Guide Rail			
	GTB13A04	Guide Rail 1219 mm long			
	GTB13A08	Guide Rail 2438 mm long			
16	834-241	33 mm UHMW Guiding (per 305 mm)			
	GTB13B04	33 mm UHMW Guiding 1219 mm long			
	GTB13B08	33 mm UHMW Guiding 2438 mm long			
	206683	51 mm UHMW Guiding (per 305 mm)			
	GTB13C04	51 mm UHMW Guiding 1219 mm long			
	GTB13C08	51 mm UHMW Guiding 2438 mm long			
17	206686	Adjustable Bracket Assembly			
		(Includes Items 1 through 14)			
LLLLL	= part length in inc	hes with 2 decimal places			
Length	Example: Length :	= 35.25 inches <u>LLLLL</u> = 03525			

#14, 34 & 44 Profile - Tool-Less Adjustable Guiding



ltem	Part Number	Description		
1	206380	Base		
2	206381	Base Clamp		
3	206382	Insert Clamp		
4	206383	Guide Ring		
5	206385	Tube		
6	206397	Clip		
7	206685	T-Nut		
8	206692	Guide Tube		
9	807-2859	Nylon Cap Screw, N6 x 16 mm		
10	807-920	Square Nut, M6-1.0		
11	911-710	Washer		
12	206698	Knob, 12 mm		
13	206697	Knob, 150 mm		
14	990601M	Hex Nut		

ltem	Part Number	Description
15	834-238- <u>LLLLL</u>	Guide Rail
	GTB13A04	Guide Rail 1219 mm long
	GTB13A08	Guide Rail 2438 mm long
16	834-241	33 mm UHMW Guiding (per 305 mm)
	GTB13B04	33 mm UHMW Guiding 1219 mm long
	GTB13B08	33 mm UHMW Guiding 2438 mm long
	206683	51 mm UHMW Guiding (per 305 mm)
	GTB13C04	51 mm UHMW Guiding 1219 mm long
	GTB13C08	51 mm UHMW Guiding 2438 mm long
17	206687	Tool-Less Adjustable Bracket
		Assembly (Includes Items 1 through
		14)
LLLLL	= part length in inc	hes with 2 decimal places
Length	n Example: Length =	= 35.25 inches <u>LLLLL</u> = 03525

#2 Cleated Profile - 25 mm High Side



ltem	Part Number	Description			
1	350177	Clamping Block			
2	807-2121	Set Screw			
3	639971M	Drop-In Tee Bar			
4	950630M	Low Head Cap Screw,			
4		M6-1.00 x 30 mm			
5	350182A- <u>LLLLL</u>	25 mm Cleated Guiding, Drive Side,			
		Motor in the A position, Single Piece			
		Guides for 01 - 08 wide Conveyors			
	350183B- <u>LLLLL</u>	25 mm Cleated Guiding, Drive Side, Motor in the B position, Single Piece Guides for 01 - 08 wide Conveyors			
	350182C- <u>LLLLL</u>	25 mm Cleated Guiding, Drive Side, Motor in the C position, Single Piece Guides for 01 - 08 wide Conveyors			
	350183D- <u>LLLLL</u>	25 mm Cleated Guiding, Drive Side, Motor in the D position, Single Piece Guides for 01 - 08 wide Conveyors			
	204602A- <u>LLLLL</u>	25 mm Cleated Guiding, Drive Side,			
		Motor in the A position, Single Piece Guides for 12 - 24 wide Conveyors			
	204603B- <u>LLLLL</u>	25 mm Cleated Guiding, Drive Side, Motor in the B position, Single Piece Guides for 12 - 24 wide Conveyors			
	204602C- <u>LLLLL</u>	25 mm Cleated Guiding, Drive Side, Motor in the C position, Single Piece Guides for 12 - 24 wide Conveyors			
	204603D- <u>LLLLL</u>	25 mm Cleated Guiding, Drive Side, Motor in the D position, Single Piece Guides for 12 - 24 wide Conveyors			
6	350183Z- <u>LLLLL</u>	25 mm Cleated Guiding, Non-Drive Side, Motor in the A or C positions, Single Piece Guides for 01 - 08 wide Conveyors			
	350182Z- <u>LLLLL</u>	25 mm Cleated Guiding, Non-Drive Side, Motor in the D or B positions, Single Piece Guides for 01 - 08 wide Conveyors			
	204603- <u>LLLLL</u>	25 mm Cleated Guiding, Non-Drive Side, Motor in the A or C positions, Single Piece Guides for 12 - 24 wide Conveyors			
	204602- <u>LLLLL</u>	25 mm Cleated Guiding, Non-Drive Side, Motor in the D or B positions, Single Piece Guides for 12 - 24 wide Conveyors			
7	350181A- <u>LLLLL</u>	25 mm Cleated Guiding, Drive Side, Discharge End, Motor in the A position, Multi Piece Guides for 01 - 08 wide Conveyors			
	350181Z- <u>LLLLL</u>	25 mm Cleated Guiding, Non-Drive Side, Discharge End, Multi Piece Guides for 01 - 08 wide Conveyors			
	204601A- <u>LLLLL</u>	25 mm Cleated Guiding, Drive Side, Discharge End, Motor in the A position, Multi Piece Guides for 12 - 24 wide Conveyors			
	204601- <u>LLLLL</u>	25 mm Cleated Guiding, Non-Drive Side, Discharge End, Multi Piece Guides for 12 - 24 wide Conveyors			

ltem	Part Number	Description
8	350181D- <u>LLLLL</u>	25 mm Cleated Guiding, Drive Side, Discharge End, Motor in the D position, Multi Piece Guides for 01 - 08 wide Conveyors
	350181Z- <u>LLLLL</u>	25 mm Cleated Guiding, Non-Drive Side, Discharge End, Multi Piece Guides for 01 - 08 wide Conveyors
	204601D- <u>LLLLL</u>	25 mm Cleated Guiding, Drive Side, Discharge End, Motor in the D position, Multi Piece Guides for 12 - 24 wide Conveyors
	204601- <u>LLLLL</u>	25 mm Cleated Guiding, Non-Drive Side, Discharge End, Multi Piece Guides for 12 - 24 wide Conveyors
9	350181Z- <u>LLLLL</u>	25 mm Cleated Guiding, Intermediate Section, Multi Piece Guides for 01 - 08 wide Conveyors
	204601- <u>LLLLL</u>	25 mm Cleated Guiding, Intermediate Section, Multi Piece Guides for 12 - 24 wide Conveyors
10	350182C- <u>LLLLL</u>	25 mm Cleated Guiding, Drive Side, Infeed End, Motor in the C position, Multi Piece Guides for 01 - 08 wide Conveyors
	350182Z- <u>LLLLL</u>	25 mm Cleated Guiding, Non-Drive Side, Infeed End, Multi Piece Guides for 01 - 08 wide Conveyors
	204602C- <u>LLLLL</u>	25 mm Cleated Guiding, Drive Side, Infeed End, Motor in the C position, Multi Piece Guides for 12 - 24 wide Conveyors
	204602- <u>LLLLL</u>	25 mm Cleated Guiding, Non-Drive Side, Infeed End, Multi Piece Guides for 12 - 24 wide Conveyors
11	350183B- <u>LLLLL</u>	25 mm Cleated Guiding, Drive Side, Infeed End, Motor in the B position, Multi Piece Guides for 01 - 08 wide Conveyors
	350183Z- <u>LLLLL</u>	25 mm Cleated Guiding, Non-Drive Side, Infeed End, Multi Piece Guides for 01 - 08 wide Conveyors
	204603B- <u>LLLLL</u>	25 mm Cleated Guiding, Drive Side, Infeed End, Motor in the B position, Multi Piece Guides for 12 - 24 wide Conveyors
	204603- <u>LLLLL</u>	25 mm Cleated Guiding, Non-Drive Side, Infeed End, Multi Piece Guides for 12 - 24 wide Conveyors
		es with 2 decimal places
Length	n Example: Length =	35.25 inches <u>LLLLL</u> = 03525

#3 Cleated Profile - 51 mm High Side



ltem	Part Number	Description		
1	350177	Clamping Block		
2	807-2121	Set Screw		
3	639971M	Drop-In Tee Bar		
4	950630M	Low Head Cap Screw,		
-		M6-1.00 x 30 mm		
5	205002A- <u>LLLLL</u>	51 mm Cleated Guiding, Drive Side,		
		Motor in the A position, Single Piece		
		Guides for 01 - 08 wide Conveyors		
	205003B- <u>LLLLL</u>	51 mm Cleated Guiding, Drive Side, Motor in the B position, Single Piece Guides for 01 - 08 wide Conveyors		
	205002C- <u>LLLLL</u>	51 mm Cleated Guiding, Drive Side, Motor in the C position, Single Piece Guides for 01 - 08 wide Conveyors		
	205003D- <u>LLLLL</u>	51 mm Cleated Guiding, Drive Side, Motor in the D position, Single Piece Guides for 01 - 08 wide Conveyors		
	2091024 1111	51 mm Cleated Guiding, Drive Side,		
	208102A- <u>LLLLL</u>	Motor in the A position, Single Piece Guides for 12 - 24 wide Conveyors		
	208103B- <u>LLLLL</u>	51 mm Cleated Guiding, Drive Side, Motor in the B position, Single Piece		
		Guides for 12 - 24 wide Conveyors		
	208102C- <u>LLLLL</u>	51 mm Cleated Guiding, Drive Side,		
		Motor in the C position, Single Piece Guides for 12 - 24 wide Conveyors		
	208103D-LLLLL	51 mm Cleated Guiding, Drive Side,		
		Motor in the D position, Single Piece Guides for 12 - 24 wide Conveyors		
6	205003- <u>LLLLL</u>	51 mm Cleated Guiding, Non-Drive Side, Motor in the A or C positions, Single Piece Guides for 01 - 08 wide Conveyors		
	205002- <u>LLLLL</u>	51 mm Cleated Guiding, Non-Drive Side, Motor in the D or B positions, Single Piece Guides for 01 - 08 wide Conveyors		
	208103- <u>LLLLL</u>	51 mm Cleated Guiding, Non-Drive Side, Motor in the A or C positions, Single Piece Guides for 12 - 24 wide Conveyors		
	208102- <u>LLLLL</u>	51 mm Cleated Guiding, Non-Drive Side, Motor in the D or B positions, Single Piece Guides for 12 - 24 wide Conveyors		
7	205001A- <u>LLLLL</u>	51 mm Cleated Guiding, Drive Side, Discharge End, Motor in the A position, Multi Piece Guides for 01 - 08 wide Conveyors		
	205001- <u>LLLLL</u>	51 mm Cleated Guiding, Non-Drive Side, Discharge End, Multi Piece Guides for 01 - 08 wide Conveyors		
	208101A- <u>LLLLL</u>	51 mm Cleated Guiding, Drive Side, Discharge End, Motor in the A position, Multi Piece Guides for 12 - 24 wide Conveyors		
	208101- <u>LLLLL</u>	51 mm Cleated Guiding, Non-Drive Side, Discharge End, Multi Piece Guides for 12 - 24 wide Conveyors		

ltem	Part Number	Description
8	205001D- <u>LLLLL</u>	51 mm Cleated Guiding, Drive Side, Discharge End, Motor in the D position, Multi Piece Guides for 01 - 08 wide Conveyors
	205001- <u>LLLLL</u>	51 mm Cleated Guiding, Non-Drive Side, Discharge End, Multi Piece Guides for 01 - 08 wide Conveyors
	208101D- <u>LLLLL</u>	51 mm Cleated Guiding, Drive Side, Discharge End, Motor in the D position, Multi Piece Guides for 10 - 24 wide Conveyors
	208101- <u>LLLLL</u>	51 mm Cleated Guiding, Non-Drive Side, Discharge End, Multi Piece Guides for 10 - 24 wide Conveyors
9	205001- <u>LLLLL</u>	51 mm Cleated Guiding, Intermediate Section, Multi Piece Guides for 01 - 08 wide Conveyors
	208101- <u>LLLLL</u>	51 mm Cleated Guiding, Intermediate Section, Multi Piece Guides for 10 - 24 wide Conveyors
10	205002C- <u>LLLLL</u>	51 mm Cleated Guiding, Drive Side, Infeed End, Motor in the C position, Multi Piece Guides for 01 - 08 wide Conveyors
	205002- <u>LLLLL</u>	51 mm Cleated Guiding, Non-Drive Side, Infeed End, Multi Piece Guides for 01 - 08 wide Conveyors
	208102C- <u>LLLLL</u>	51 mm Cleated Guiding, Drive Side, Infeed End, Motor in the C position, Multi Piece Guides for 10 - 24 wide Conveyors
	208102- <u>LLLLL</u>	51 mm Cleated Guiding, Non-Drive Side, Infeed End, Multi Piece Guides for 10 - 24 wide Conveyors
11	205003B- <u>LLLLL</u>	51 mm Cleated Guiding, Drive Side, Infeed End, Motor in the B position, Multi Piece Guides for 01 - 08 wide Conveyors
	205003- <u>LLLLL</u>	51 mm Cleated Guiding, Non-Drive Side, Infeed End, Multi Piece Guides for 01 - 08 wide Conveyors
	208103B- <u>LLLLL</u>	51 mm Cleated Guiding, Drive Side, Infeed End, Motor in the B position, Multi Piece Guides for 10 - 24 wide Conveyors
	208103- <u>LLLLL</u>	51 mm Cleated Guiding, Non-Drive Side, Infeed End, Multi Piece Guides for 10 - 24 wide Conveyors
		es with 2 decimal places
Length	Example: Length =	35.25 inches <u>LLLLL</u> = 03525

Flat Belt Mounting Brackets



Item	Part Number	Description			
1	240831	Stand Mount			
2	300150MK4	Drop–In Tee Bar (x4)			
3	605279P	Washer			
4	807–920	Square Nut M6			

ltem	Part Number	Description
5	920620M	Socket Head Screw M6 x 20 mm
6	950616M	Low Head Cap Screw M6 x 16 mm
7	207375	Flat Belt Stand Mount Assembly for 01 wide Conveyors
	240839	Flat Belt Stand Mount Assembly for 02 wide or wider Conveyors

Cleated Belt Mounting Brackets



ltem	Part Number	Description	Item	Part Number	Description
1	240836	Cleated Mount Assembly	5	920620M	Socket Head Screw M6 x 20 mm
2	300150MK4	Drop-In Tee Bar (x4)	6	950616M	Low Head Cap Screw M6x16 mm
3	605279P	Washer	7	240838	Cleated Stand Mount Assembly
4	807–920	Square Nut M6			

2200 Series Precision Move Conveyors

Dorner Mfg. Corp.

Flat Belt Mounting Brackets for Short Conveyors

Item	Part Number	Description		ltem	Part Number	Description
1	240833	Stand Mount, Left Hand (610 mm)		7	950616M	Low Head Cap Screw M6 x 16 mm
2	240834	Stand Mount, Right Hand (610 mm)		8	207376	Flat Belt Stand Mount Assembly for 01
3	605279P	Washer				wide Short Conveyors, Left Hand
4	639971MK10	Drop–In Tee Bar (x10)			207377	Flat Belt Stand Mount Assembly for 01 wide Short Conveyors, Right Hand
5	807–920	Square Nut M6				
6	920620M	Socket Head Screw M6 x 20 mm			240847	Flat Belt Stand Mount Assembly for 02 wide or wider Short Conveyors

Cleated Belt Mounting Brackets for Short Conveyors

 - Itom Bart Number	Description

Item	Part Number	Description	Item	Part Number	Description
1	240852	Cleated Stand Bracket Assembly,	5	807–920	Square Nut M6
		Left Hand for 610 mm Conveyor	6	920620M	Socket Head Screw M6 x 20 mm
2	240853	Cleated Stand Bracket Assembly, Right Hand for 610 mm Conveyor	7	950616M	Low Head Cap Screw M6 x 16 mm
			8	240851	Cleated Belt Stand Mount Assembly
3	605279P	Washer			for 610 mm Conveyors
4	639971MK10	Drop–In Tee Bar (x10)		•	

Flat Belt Mounting Brackets Assembled to the Tail



Item	Part Number	Description	Item	Part Number	Description
1	240850	Stand Mount	4	639971MK10	Drop-In Tee Bar (x10)
2	605279P	Washer	5	920620M	Socket Head Screw M6 x 20 mm
3	950620M	Socket Low Head Screw M6 x 20 mm	6	240854	Flat Belt Stand Mount Assembly for
					Tail Mounts

Connecting Assembly without Stand Mount



Item	Part Number	Description		ltem	Part Number	Description
1	206520	Connecting Bar		3	920614M	Socket Head Screw, M6-1.00 x 14 mm
2	240859	Plate		4	206519	Connecting Assembly

Flat Belt Connecting Assembly with Stand Mount



ltem	Part Number	Description
1	206520	Connecting Bar
2	240831	Stand Mount
3	605279P	Washer
4	807-920	Square Nut M6

Item	Part Number	Description
5	920614M	Socket Head Screw, M6-1.00 x 14 mm
6	920620M	Socket Head Screw, M6-1.00 x 20 mm
7	240859	Plate (for 01 wide only)
8	207378	Connecting Assembly for 01 wide Conveyors
	206518	Connecting Assembly for 02 wide or wider Conveyors

Cleated Belt Connecting Assembly with Stand Mount



Item	Part Number	Description	Item	Part Number	Description
1	206520	Connecting Bar	5	920614M	Socket Head Screw, M6-1.00 x 14 mm
2	240836	Cleated Stand Mount Assembly	6	920620M	Socket Head Screw, M6-1.00 x 20 mm
3	605279P	Washer	7	240929	Connecting Assembly
4	807-920	Square Nut M6			

44 mm to 152 mm Flat Belt Return Roller



206522

6

203 mm	to	610 mm	Flat Be	elt Return	Roller
	ιU			ποιατη	NOTICE

Bearing

Dowel Pin

802-027

913-100

3

4



Item	Part Number	Description
1	205978	Flat Return Roller Clip
2	240826	Return Roller
3	2410 <u>WW</u>	Return Roller Rod
4	2436 <u>WW</u>	Return Roller Guard
5	950616M	Low Head Cap Screw, M6-1.00 x 16 mm

ltem	Part Number	Description				
6	206523- <u>WW</u>	Return Roller Assembly				
* <u>WW</u>	* <u>WW</u> = Conveyor width reference: 08, 12, 18, & 24					

Return Roller Assembly

* See page 7 for cross-reference to width reference and conveyor width.

2200 Series Precision Move Conveyors

Dorner Mfg. Corp.

Cleated Belt Return Roller

Item	Part Number	OF SOL	Item	Part Number	Description				
Item	Part Number 240825		ltem 5	Part Number 950616M	Low Head Cap Screw				
		Description							

Conveyor Belt Part Number Configuration

Bearing

Dowel Pin



Figure 110

Flat Belt Part Number Configuration

Refer to Dorner patent plate (Figure 110). From the model number, determine conveyor width ("WW"), length ("LLLL") and belt type ("BB"). Use data to configure belt part number as indicated below.

22T - WW LLLL / BB

802-027

913-100

3

4

22T/
(Fill In)

24T - <u>WW LLLL</u>	<u>C SSSS</u>	
	24T –	/
		(Fill In)

Refer to Dorner patent plate (Figure 110). From the model number, width ("WW"), length ("LLLL"), cleat type ("C") and cleat spacing ("SSSS"). Use data to configure belt part number as indicated below.

Cleated Belt Part Number Configuration

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. Include part serial number if available.

A representative will discuss action to be taken on the returned items and provide a Returned Materials 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	Туре				
	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 & Spec. Fabric	Spare Belts - Plastic Chain	All equipment and parts	
1100 Series		•						•		
2200 Series	1	30% re	turn fee fo	or all products	excent:					
3200 Series	50% return fee for conveyors with modular belt, cleated belt or speciality belts									
Pallet Systems										
FlexMove/SmartFlex										
GAL Series	All Electrical items are assigned original manufacturers return policy.					case-by-case				
All Electrical	non-returnable						unable	case-by-case		
7100 Series										
7200/7300 Series	1									
AquaGard 7350 Series Version 2	50% return fee for all products									
GES Series										
AquaGard 7350/7360 Series	non-returnable									
AquaPruf Series										

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 Dorner, an authorized sales channel or visit our website: www.dorner.com.

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

www.dorner.com





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