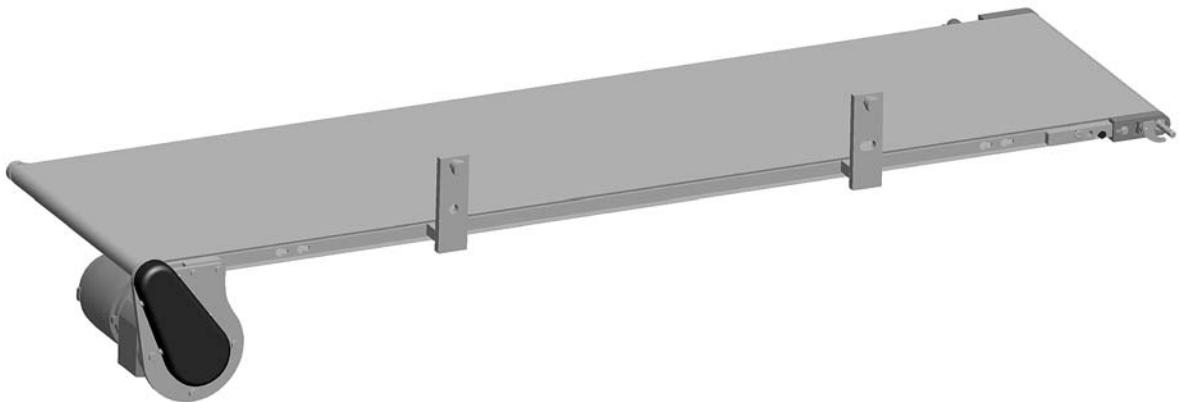




Allegro 18" Integral Conveyor

Maintenance & Parts Manual



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www.dorner.com/service_manuals.asp

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Introduction

IMPORTANT

<i>Some illustrations may show guards removed. DO NOT operate equipment without guards.</i>

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.

Warnings – General Safety

WARNING

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

DANGER



Climbing, sitting, walking or riding on conveyor will cause severe injury. **KEEP OFF CONVEYORS.**

DANGER



DO NOT OPERATE CONVEYORS IN AN EXPLOSIVE ENVIRONMENT.

WARNING



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

WARNING



Gearmotors may be **HOT**.
DO NOT TOUCH Gearmotors.

WARNING



Dorner cannot control the physical installation and application of conveyors. Taking protective measures is the responsibility of the user.

When conveyors are used in conjunction with other equipment or as part of a multiple conveyor system, **CHECK FOR POTENTIAL PINCH POINTS** and other mechanical hazards before system start-up.

WARNING



Loosening stand height or angle adjustment screws may cause conveyor sections to drop down, causing severe injury.

SUPPORT CONVEYOR SECTIONS PRIOR TO LOOSENING STAND HEIGHT OR ANGLE ADJUSTMENT SCREWS.

Product Description

Refer to **Figure 1** for typical components.

1	Drive End
2	Gearmotor Mounting Package
3	Idler/Tension End
4	Conveyor
5	Mounting Brackets

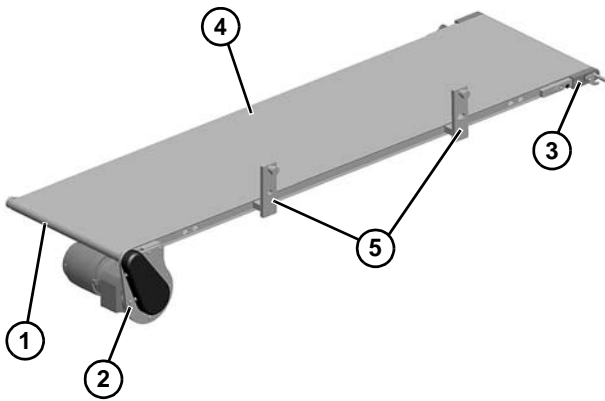



Figure 1

Preventive Maintenance and Adjustment

Conveyor Belt Replacement

⚠ WARNING

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

1. Unlock spring plunger (**Figure 2, item 1**) by rotating 90 degrees. Pull spring plunger out and tip up the idler tail (**Figure 2, item 2**).

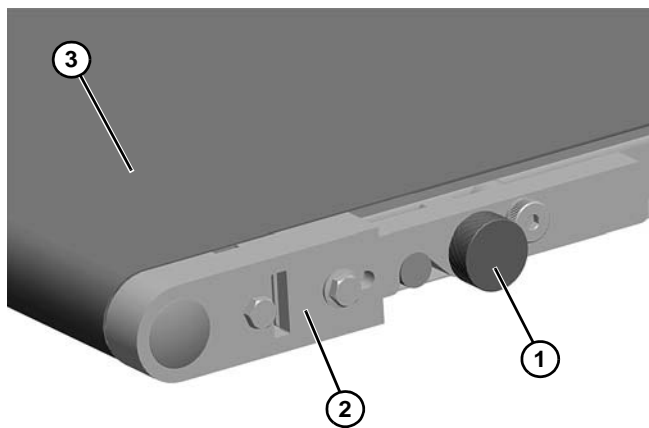



Figure 2

2. Remove the belt (**Figure 2, item 3**) from the idler tail and drive tail.
3. Install new belt.
4. Tip down idler tail (**Figure 2, item 2**) to the run position. Pull spring plunger (**Figure 2, item 1**) out to lock the idler tail into final position. Rotate the spring plunger 90 degrees to lock.

Conveyor Belt Tensioning/Tracking

⚠ WARNING

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

1. Confirm that the belt is on, the idler tail is in the down position, and that the spring plunger has locked down the idler tail.
2. Using an M10 wrench, loosen the M6 screw (**Figure 3, item 1**) on both sides of the conveyor to allow for tensioning and tracking of the belt.

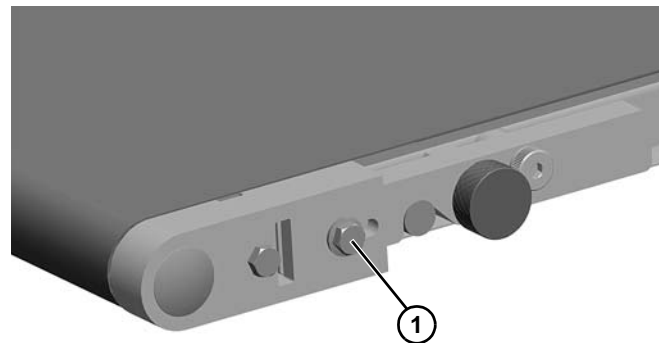


Figure 3

3. Using an M8 wrench, loosen (back out) the M5 screw (**Figure 4, item 1**) on both sides of the conveyor to tension the belt.

NOTE

During first installation, make sure that the M5 screws are backed out equally on each side.

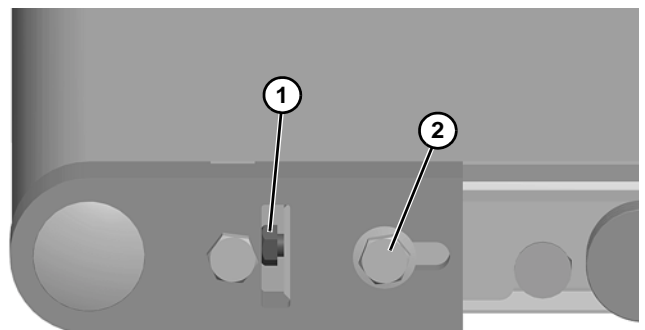


Figure 4

4. Tighten the M6 screws (**Figure 4, item 2**) on both sides of the conveyor.

Preventive Maintenance and Adjustment

NOTE

Tracking adjustment should be minimal as the belt is v-guided on the edge of the frame.

5. Turn on the conveyor, set at a slow speed, and check belt tracking.
6. If necessary, loosen the M6 screw (**Figure 4, item 2**) and back out the M5 screw (**Figure 4, item 1**) as needed to track the belt.

Idler Pulley Removal

⚠ WARNING



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

1. Remove conveyor belt. See “Conveyor Belt Replacement” on page 5.
2. On one side of the conveyor, using a wrench to hold the hex bar (**Figure 5, item 1**) underneath, remove the shoulder screw (**Figure 5, item 2**) and spacer (**Figure 5, item 3**).

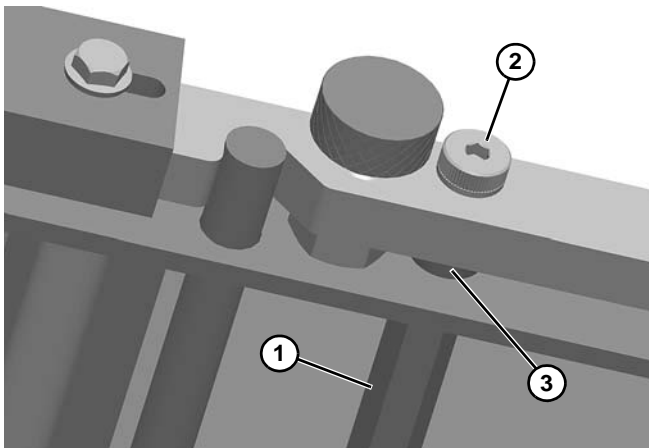


Figure 5

3. On the same side of the conveyor, using a wrench to hold the hex bar (**Figure 6, item 1**) underneath, remove the M6 screw (**Figure 6, item 2**).

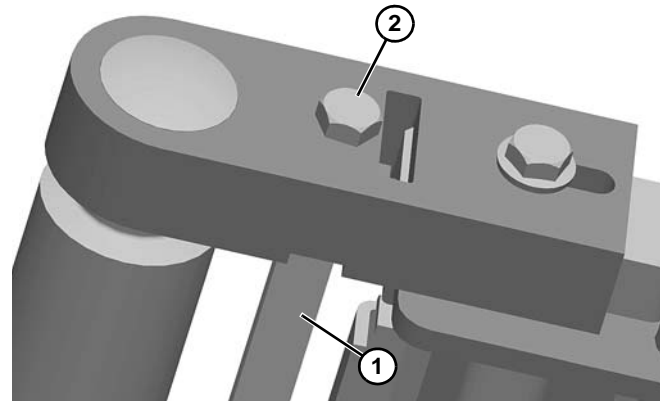


Figure 6

4. Remove the head plate (**Figure 7, item 1**) from the conveyor frame, holding spindle in place.

NOTE

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

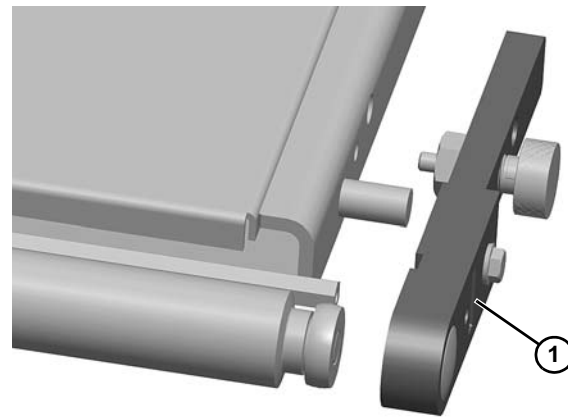



Figure 7

5. Slide the spindle out.
6. To replace the idler tail pulley, reverse the removal procedure.
7. Install belt on the conveyor, then tension the belt. See “Conveyor Belt Tensioning/Tracking” on page 5.

Preventive Maintenance and Adjustment

Drive Pulley Removal

⚠ WARNING

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

1. Remove conveyor belt. See “Conveyor Belt Replacement” on page 5.
2. On drive side of the conveyor, loosen four screws (**Figure 8, item 1**) and remove timing belt covers (**Figure 8, item 2**).

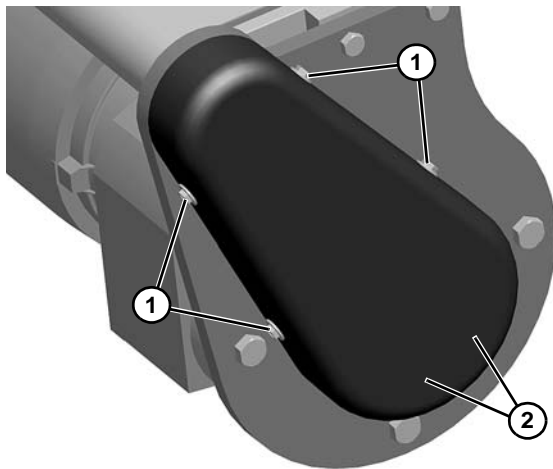


Figure 8

3. Remove tension on timing belt (**Figure 9, item 1**) by loosening tensioner screw (**Figure 9, item 2**).

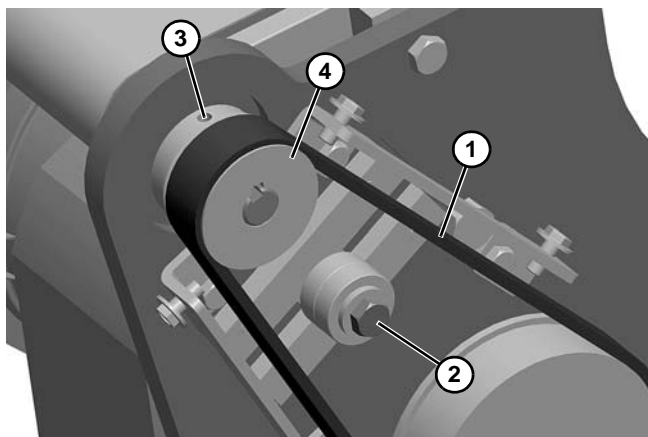


Figure 9

⚠ WARNING

Drive shaft keyway may be sharp. HANDLE WITH CARE.

4. Loosen set screw (**Figure 9, item 3**) on driven pulley (**Figure 9, item 4**). Remove driven pulley and timing belt.
5. On the opposite drive side of the conveyor, using a wrench to hold the hex bars (**Figure 10, item 1**) underneath, remove the two M6 screws (**Figure 10, item 2**).

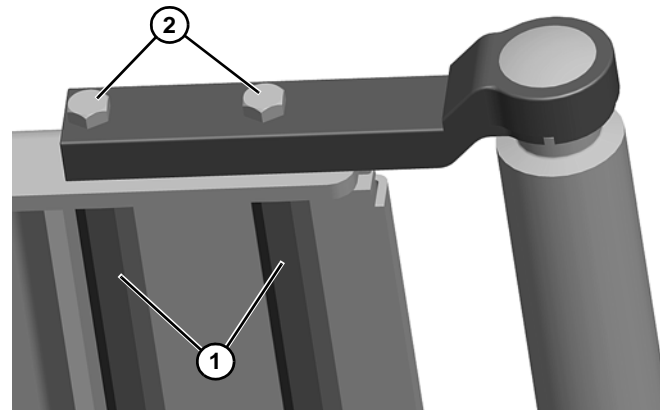


Figure 10

6. Remove the head plate (**Figure 11, item 1**) from the conveyor frame, holding spindle in place.

NOTE
<i>To prevent damage to the head plates, be sure to remove them slowly because they are not attached to pulley.</i>

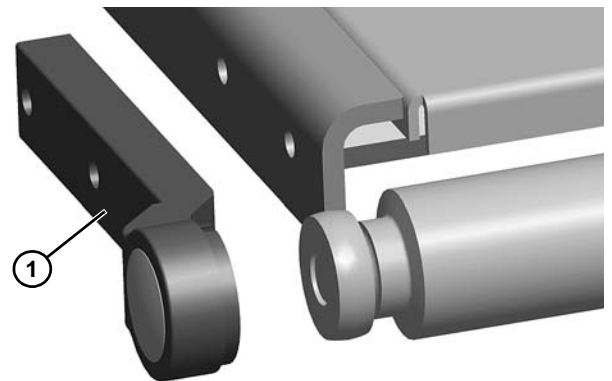


Figure 11

7. Slide the spindle out.

Preventive Maintenance and Adjustment

- To replace the drive tail pulley, reverse the removal procedure.
- Install belt on the conveyor, then tension the belt. See "Conveyor Belt Tensioning/Tracking" on page 5.

Bearing Removal & Replacement

Removal

IMPORTANT

Do not use any removed bearings. Replace them.

- Place bearing removal tool part #456063 (**Figure 12, item 1**) below bearing (**Figure 12, item 2**) with lip (**Figure 12, item 3**) located in gap (**Figure 12, item 4**) between bearing and spindle hub (**Figure 12, item 5**) as shown.

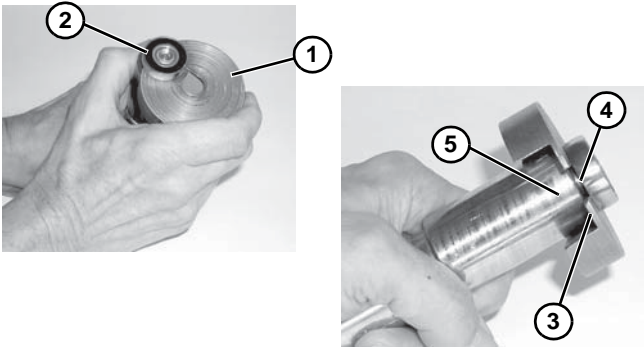


Figure 12

- Using puller part #807-1716 (**Figure 13, item 1**), remove and discard bearing.

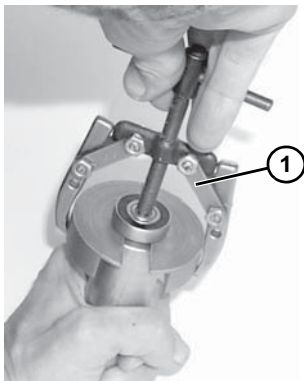


Figure 13

Replacement

- Inspect the head plates bearing seating surface (**Figure 14, item 1**). If they are worn or damaged, replace. See "Service Parts" on page 14.

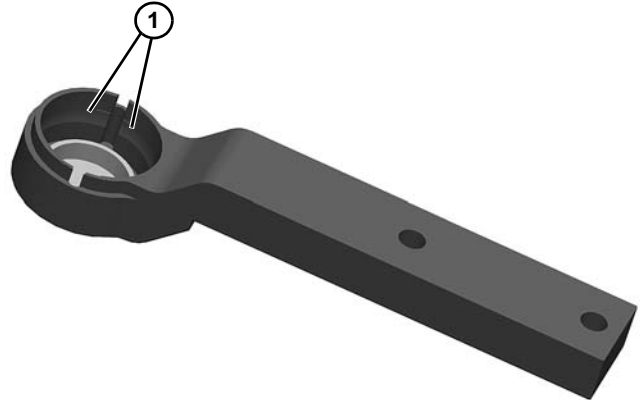


Figure 14

- Inspect spindle (**Figure 15, item 1**). Replace if worn.
- Slide bearing (**Figure 15, item 2**) onto spindle.

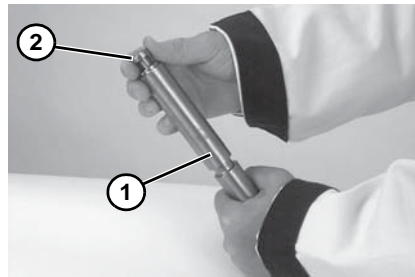


Figure 15

- Slide sleeve (**Figure 16, item 1**) of tool (part #456085) over bearing.

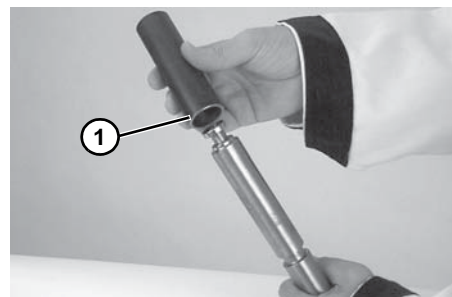


Figure 16

Preventive Maintenance and Adjustment

- Place open end of pusher (**Figure 17, item 1**) into sleeve.

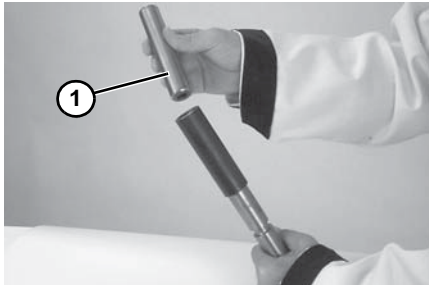


Figure 17

- Using an arbor press or similar device, press bearing onto pulley shaft (**Figure 18**).



Figure 18

- Repeat steps 1 through 5 for each bearing.

Gearmotor Mounting Package Removal

⚠ WARNING
<p>Exposed moving parts can cause severe injury. LOCK OUT POWER before removing guards or performing maintenance.</p>

- Remove conveyor belt. See “Conveyor Belt Replacement” on page 5.

- Loosen four screws (**Figure 19, item 1**) and remove timing belt covers (**Figure 19, item 2**).

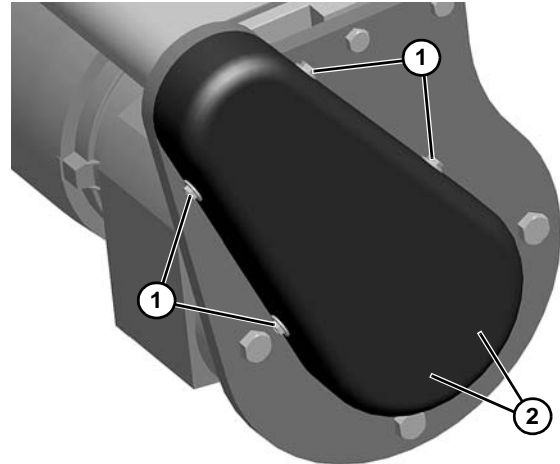


Figure 19

- Remove tension on timing belt (**Figure 20, item 1**) by loosening tensioner screw (**Figure 20, item 2**).

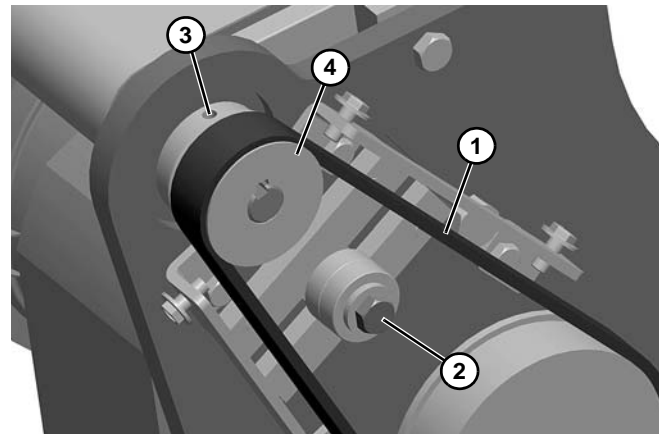


Figure 20

⚠ WARNING
<p>Drive shaft keyway may be sharp. HANDLE WITH CARE.</p>

- Loosen set screw (**Figure 20, item 3**) on driven pulley (**Figure 20, item 4**). Remove driven pulley and timing belt.

Preventive Maintenance and Adjustment

5. Loosen set screw on drive pulley (**Figure 21, item 1**). Remove pulley.

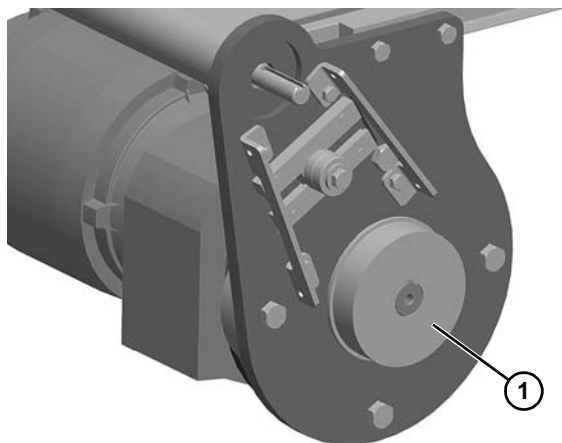


Figure 21

7. Remove four screws (**Figure 23, item 1**) and drive mounting plate (**Figure 23, item 2**).

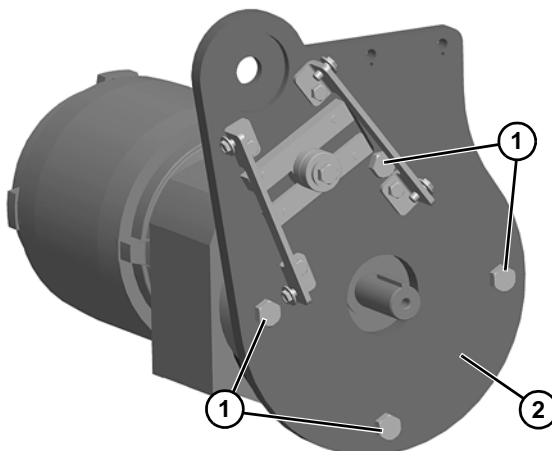


Figure 23

6. Using a wrench to hold the hex bars underneath, remove two M6 screws (**Figure 22, item 1**). Remove whole gearmotor mounting package (**Figure 22, item 2**) and spacer (**Figure 22, item 3**).

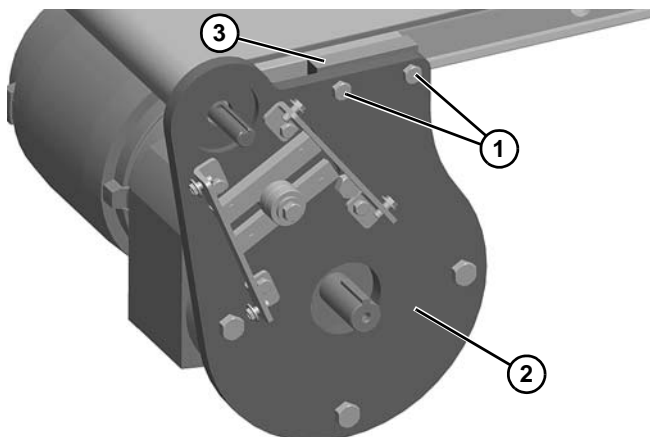


Figure 22

8. Remove four screws (**Figure 24, item 1**) from gearmotor and mount plates (**Figure 24, item 2**).

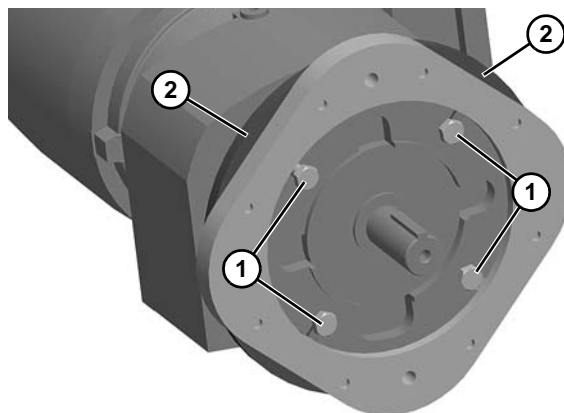


Figure 24

9. Remove eight screws (**Figure 25, item 1**). Remove gearmotor (**Figure 25, item 2**) and mount plates (**Figure 25, item 3**) from motor mount plate (**Figure 25, item 4**).

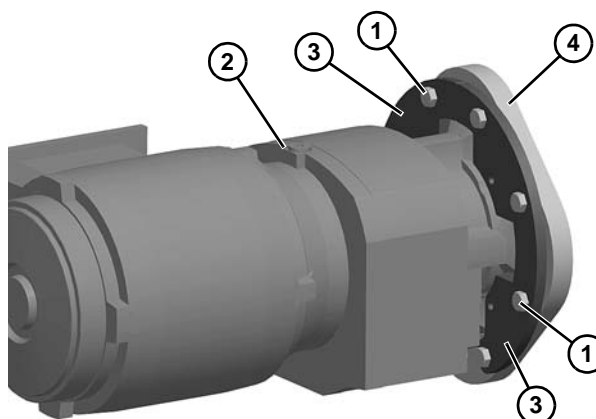



Figure 25

Preventive Maintenance and Adjustment

Timing Belt Tensioning

⚠ WARNING

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

1. Loosen four screws (**Figure 26, item 1**) and remove timing belt covers (**Figure 26, item 2**).

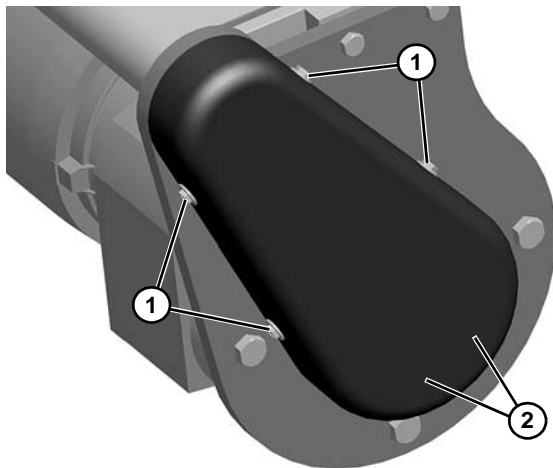


Figure 26

2. Loosen screw (**Figure 27, item 1**). Add tension against timing belt (**Figure 27, item 2**) by moving bearing (**Figure 27, item 3**). Tighten screw.

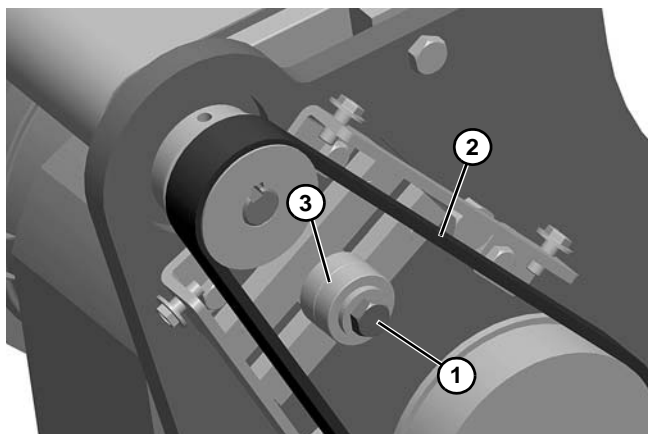



Figure 27


3. Install timing belt covers and tighten four screws.

Timing Belt Replacement

⚠ WARNING

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

1. Complete steps 2-3 of “Gearmotor Mounting Package Removal” on page 9.
2. Install new timing belt and place driven pulley back on spindle. Tighten set screw.
3. Add tension against timing belt (**Figure 27, item 2**) by moving bearing (**Figure 27, item 3**). Tighten screw.
4. Install timing belt covers (**Figure 26, item 2**) and tighten four screws (**Figure 26, item 1**).


Drive or Driven Timing Pulley Replacement


⚠ WARNING

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

1. Complete steps 2-5 of “Gearmotor Mounting Package Removal” on page 9.
2. Replace drive or driven pulley. Tighten set screws.
3. Complete steps 2-4 of “Timing Belt Replacement” on page 11.

Preventive Maintenance and Adjustment

Gearmotor Replacement

⚠ WARNING

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

⚠ DANGER

Hazardous voltage will cause severe injury or death. LOCKOUT POWER BEFORE before wiring.

1. For single phase motor, unplug power cord from outlet.
2. For variable speed motor, unplug cord at disconnect (Figure 28, item 1).

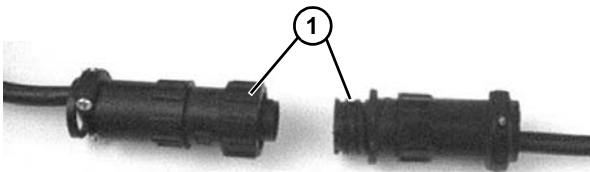



Figure 28

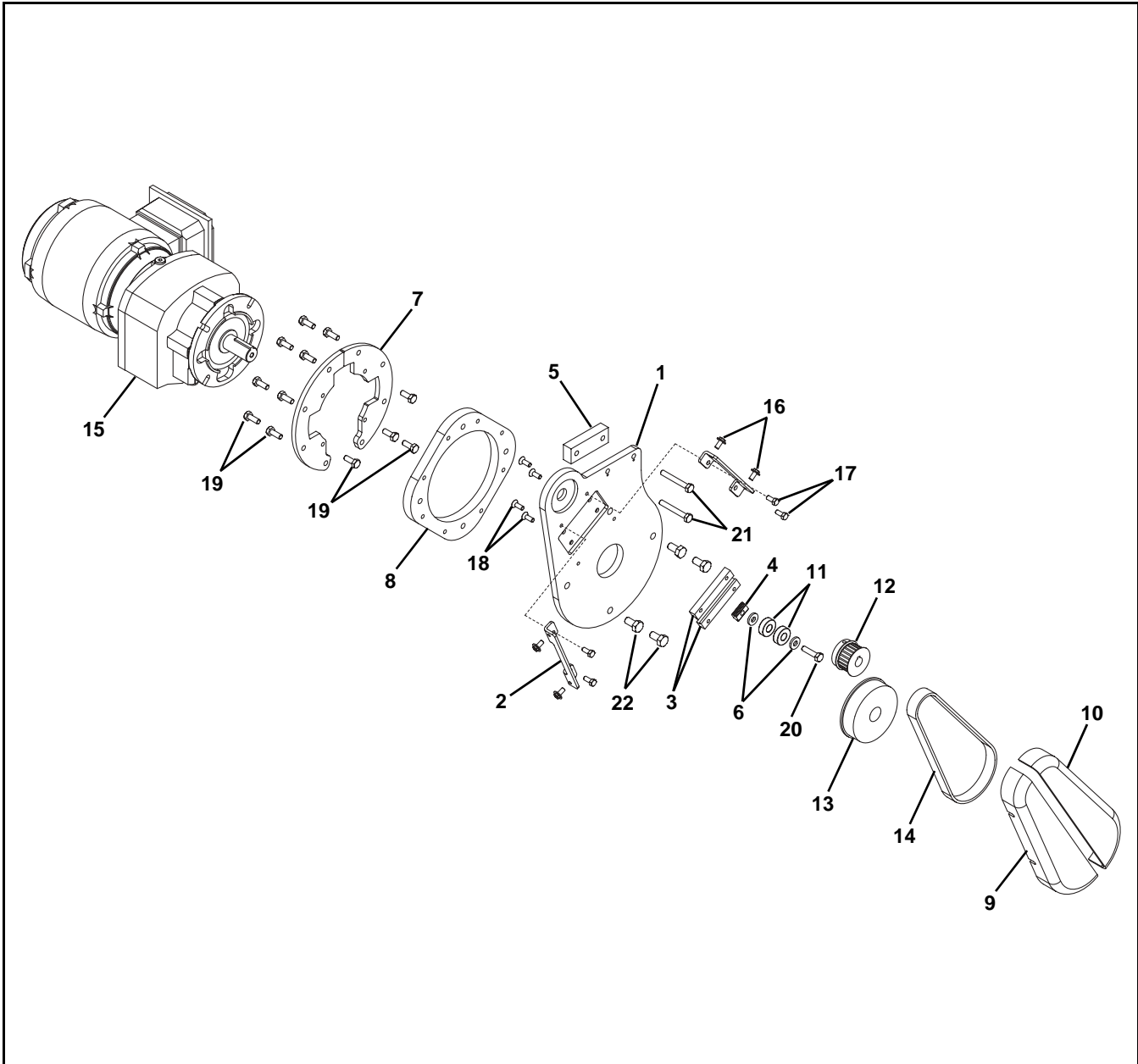
3. Replace gearmotor. See “Gearmotor Mounting Package Removal” on page 9.

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.

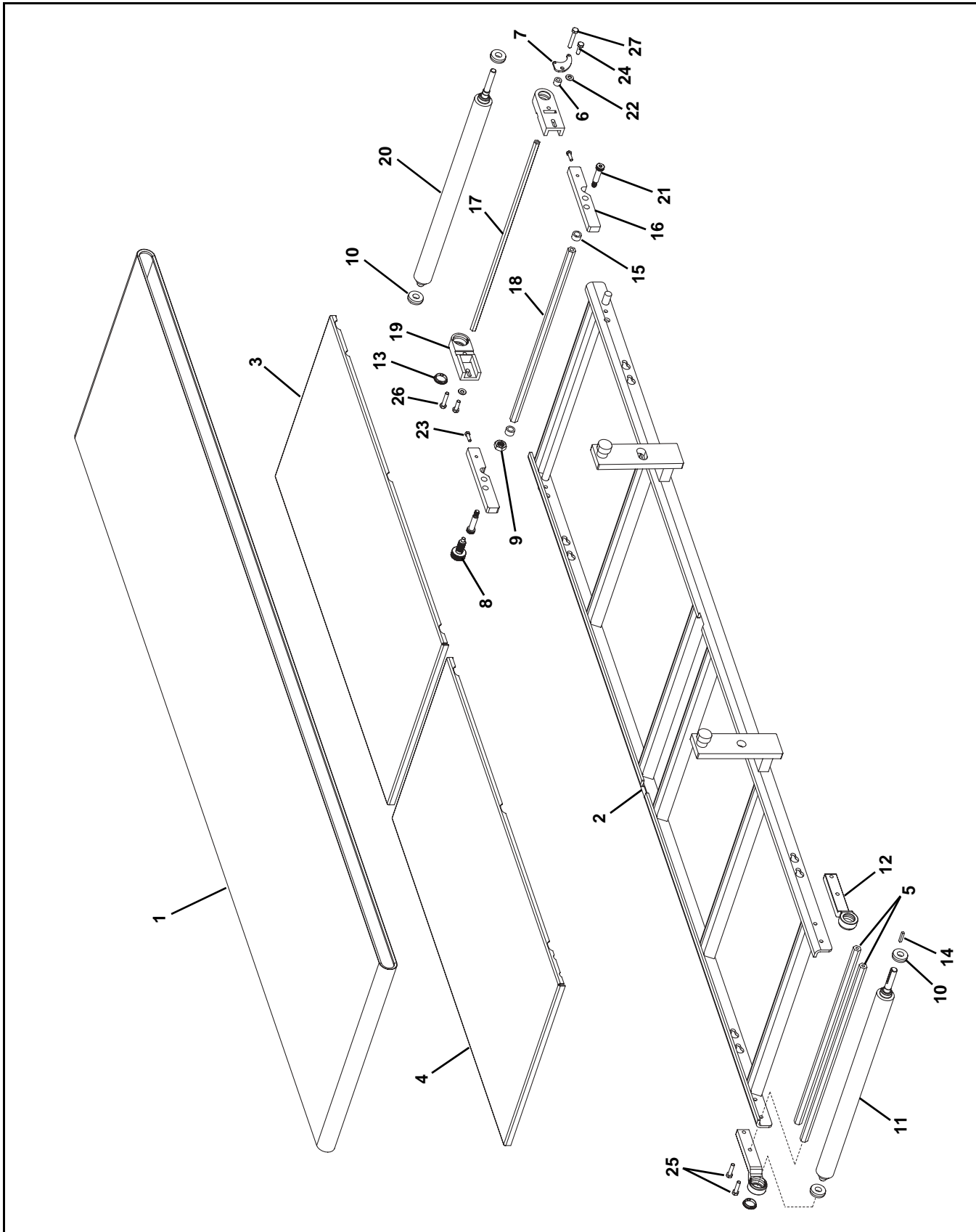
Drive Package and Gearmotor



Item	Part Number	Description
1	75052608	Drive Mounting Plate
2	75052609	Cover Bracket
3	450178MSS	Slide Bar
4	639971MSS	Drop-In Tee Bar
5	75060573	Spacer Plate
6	911-201	Washer
7	75052611	Mount Plate
8	75052610	Motor Mount Plate
9	75052614	Washdown Cover
10	75052615	Washdown Cover
11	802-123	Bearing
12	450102	Pulley, 22 Tooth
13	807-2784	Pulley, 48 Tooth
14	814-101	Timing Belt
15	820-823	Gearmotor
16	807-968	Hex Flange Screw, M5-0.80 x 10 mm
17	960512MSS	Hex Head Cap Screw, M5-0.80 x 12 mm
18	930514MSS	Hex Head Cap Screw, M5-0.80 x 14 mm
19	960616MSS	Hex Head Cap Screw, M6-1.00 x 16 mm
20	960625MSS	Hex Head Cap Screw, M6-1.00 x 25 mm
21	960645MSS	Hex Head Cap Screw, M6-1.00 x 45 mm
22	960816MSS	Hex Head Cap Screw, M8-1.25 x 16 mm

Service Parts

Frame Assembly



Allegro 18" Integral Conveyor

Service Parts

Item	Part Number	Description
1	75054102	Belt
2	75063841	Frame Weldment
3	75063836	Infeed Bedplate
4	75063837	Bedplate
5	75063835	Hex Post
6	75057111	Encoder Mount Spacer
7	75057110	Encoder Mount Plate
8	75066686	Spring Plunger
9	75066687	Thin Nut
10	240338	Bearing
11	75052586	Drive Spindle
12	75054099	Head Plate
13	807-1263	Plug
14	980422MSS	Square Key
15	75053385	Spacer
16	75057027	Tip Up Tail Mount Bar
17	75057030	Hex Crossmember
18	75057033	Tip Up Post
19	75057107	Head Plate
20	75057113	Idler Spindle
21	807-2781	Socket Head Shoulder Screw
22	911-708	Washer
23	960516MSS	Hex Head Cap Screw, M5-0.80 x 16 mm
24	960620MSS	Hex Head Cap Screw, M6-1.00 x 20 mm
25	960625MSS	Hex Head Cap Screw, M6-1.00 x 25 mm
26	960630MSS	Hex Head Cap Screw, M6-1.00 x 30 mm
27	960640MSS	Hex Head Cap Screw, M6-1.00 x 40 mm

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 (if available, part serial number).

A representative will discuss action to be taken on the returned items and provide a Returned Goods 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 Type									
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 & Specialty Fabric	Spare Belts - Plastic Chain	All equipment and parts
1100	30% return fee for all products except: 50% return fee for conveyors with modular belt, cleated belt or specialty belts						non-returnable		case-by-case
2200									
2200 Modular Belt									
2200 Precision Move									
2300									
2300 Modular Belt									
3200									
3200 LPZ									
3200 Precision Move									
4100									
5200									
5300									
6200									
Controls									
7200 / 7300	50% return fee for all products								
7350	non-returnable								
7360									
7400									
7600									

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 factory, distributor, service center or visit our website at www.dorner.com.

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

 <p>Dorner Mfg. Corp. reserves the right to change or discontinue products without notice. All products and services are covered in accordance with our standard warranty. All rights reserved. © Dorner Mfg. Corp. 2013</p>	<p>DORNER MFG. CORP. 975 Cottonwood Ave., PO Box 20 Hartland, WI 53029-0020 USA TEL 1-800-397-8664 (USA) FAX 1-800-369-2440 (USA) Internet: www.dorner.com</p>	<p>Outside the USA: TEL 1-262-367-7600 FAX 1-262-367-5827</p>
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