

# 2100, 2200, 4100, 6200 and MPB Series Top Mount Drive Package for Light Load 60 Hz Gearmotors

**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 2100 Series conveyors are covered by the following patent numbers: 5,131,529, 5,174,435, and corresponding patents and patent applications in other countries.

Dorner 2200 and MPB Series conveyors are covered by patent number 5,174,435, 6,422,382 and corresponding patents and patent applications in other countries.

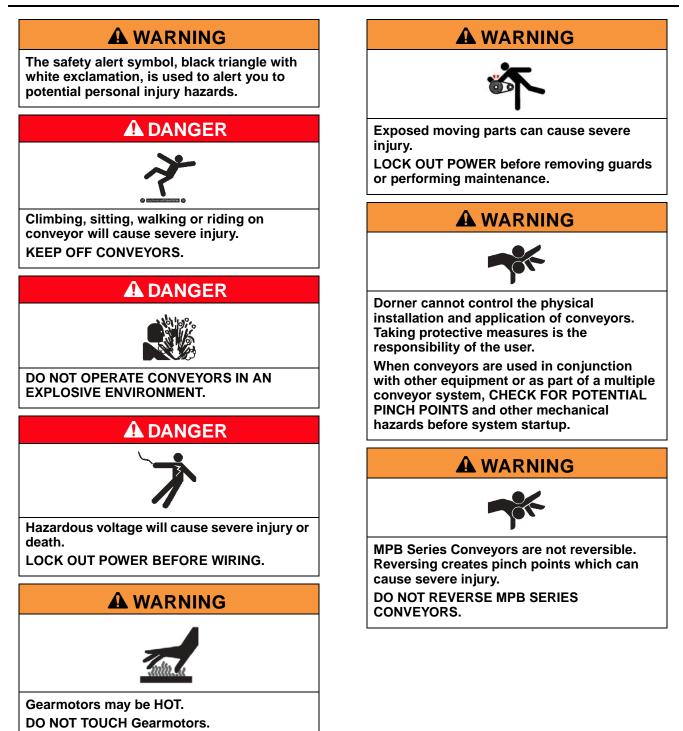
Dorner 4100 Series conveyors are covered by patent number 3,923,148, 5,131,529 and corresponding patents and patent applications in other countries.

Dorner 6200 Series conveyors are covered by patent number 6,685,009, 5,174,435, 6,109,427, 6,298,981 and corresponding patents and patent applications in other countries.

Dorner's Limited Warranty applies.

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 components.

- 2 Drive Pulley
- 3 Mounting Bracket
- 4 Cover
- 5 Conveyor
- 6 Driven Pulley
- 7 Timing Belt
- 8 Belt Tensioner

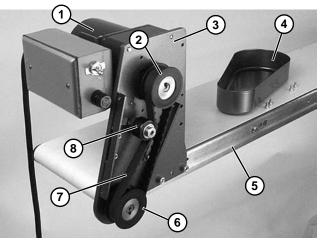
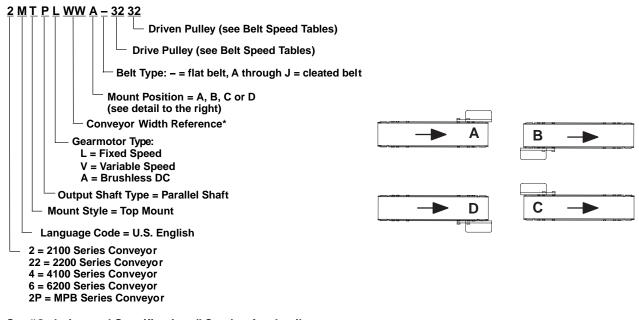


Figure 1

### **Specifications**

### **Gearmotor Mounting Package Models:**

#### **Example:**



\* See "Ordering and Specifications" Catalog for details.

\* See "Ordering and Specifications" Catalog for details.

### **Table 1: Gearmotor Specifications**

|                   | Single Phase       | DC Variable Speed | Brushless DC        |
|-------------------|--------------------|-------------------|---------------------|
| Output Power      | 0.03 hp (0.025 kw) | 0.06 hp (0.04 kw) | 0.083 hp (0.06 kw)  |
| Input Voltage     | 115 Volts A.C.     | 130 Volts D.C.    | *115/230 Volts D.C. |
| Input Frequency   | 60 Hz              | N/A               | 60 Hz               |
| Full Load Amperes | 0.49 Amperes       | 0.48 Amperes      | 4.5/1.5 Amperes     |
| Gearmotor Ratios  | 15:1 and 36:1      | 18:1 and 60:1     | 15:1, 20:1 and 50:1 |

\* Controller Inputs

2100, 2200, 4100, 6200 and MPB Series Top Mount Drive Package for Light Load 60 Hz Gearmotors Dorner Mfg. Corp. 4 851-261 Rev. L

#### Table 2: RPM/Torque for Light Load Fixed Speed Parallel Shaft 60 Hz Gearmotors

| Gearmotors*                          |      |     |    |     |
|--------------------------------------|------|-----|----|-----|
| Part Number Gear Ratio RPM In-lb N-m |      |     |    |     |
| 62M036PL4FN                          | 36:1 | 42  | 36 | 4.1 |
| 62M015PL4FN                          | 15:1 | 100 | 15 | 1.7 |

\* 115V, 1 phase, non-reversing

# Table 3: RPM/Torque for Light Load Variable Speed Parallel Shaft DC Gearmotors

| Gearmotors*                          |      |        |    |     |
|--------------------------------------|------|--------|----|-----|
| Part Number Gear Ratio RPM In-Ib N-n |      |        |    |     |
| 62M060PLD3DEN                        | 60:1 | 5-42   | 65 | 7.4 |
| 62M018PLD3DEN                        | 18:1 | 17-139 | 21 | 2.4 |

\* 130VDC

### Table 4: RPM/Torque for Light Load Brushless DC Gearmotors

| Gearmotors*   |            |       |       |     |  |
|---------------|------------|-------|-------|-----|--|
| Part Number   | Gear Ratio | RPM   | In-lb | N-m |  |
| 62M050PLBDDEN | 50:1       | 2-60  | 76    | 8.6 |  |
| 62M020PLBDDEN | 20:1       | 5-150 | 31    | 3.6 |  |
| 62M015PLBDDEN | 15:1       | 7-200 | 23    | 2.7 |  |

\* 130VDC

# **Specifications**

### Table 5: Pulley Ratio/Timing Belt Number

| Motor                      | Conveyor                    |                 | Timin           | g Belt        |
|----------------------------|-----------------------------|-----------------|-----------------|---------------|
| (Drive)<br>Pulley<br>Teeth | (Driven)<br>Pulley<br>Teeth | Pulley<br>Ratio | 2200/MB/<br>MPB | 4100/<br>6200 |
| 19                         | 32                          | 0.59            | N/A             | 814-104       |
| 22                         | 32                          | 0.69            | N/A             | 814-105       |
| 28                         | 22                          | 1.27            | N/A             | 814-104       |
| 28                         | 28                          | 1.00            | 814-105         | N/A           |
| 28                         | 32                          | 0.88            | 814-105         | 814-065       |
| 32                         | 19                          | 1.68            | 814-104         | 814-104       |
| 32                         | 22                          | 1.45            | 814-104         | 814-105       |
| 32                         | 28                          | 1.14            | 814-105         | 814-065       |
| 44                         | 19                          | 2.32            | 814-065         | 814-101       |
| 44                         | 22                          | 2.00            | 814-101         | 814-101       |
| 44                         | 28                          | 1.57            | 814-101         | 814-101       |
| 44                         | 32                          | 1.38            | N/A             | 814-064       |

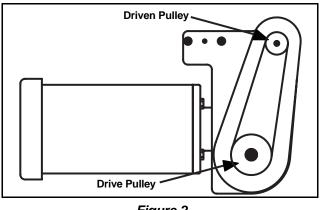


Figure 2

### **Table 6: Conveyor Belt Speed Factor**

| Series                    | Ft/revolution | M/revolution |
|---------------------------|---------------|--------------|
| 2200 / 2300               | 0.350         | 0.107        |
| 2100 / 4100 / 6100 / 6200 | 0.278         | 0.085        |
| 2200 MPB                  | 0.590         | 0.180        |
| 2200 Precision Move       | 0.394         | 0.120        |
| 2200 / 2300 Modular Belt  | 0.394         | 0.120        |

### **Belt Speed Calculation:**

#### How to Calculate Belt Speed

- 1. Determine gearmotor RPM from tables 2-4.
- 2. Determine the pulley kit ratio. Count the number of teeth on the drive and driven pulleys following figure 2. Using table 5, look up pulley ratio based on pulley combinations.
- 3. Determine conveyor speed factor using table 6. Based on your conveyor type, select the appropriate factor.
- 4. Calculate belt speed:

Example: Belt Speed = Gearmotor RPM (tables 2-4) x Pulley Kit Ratio (table 5) x Conveyor Speed Factor (table 6)

2200 Series light load variable speed 60:1 gearmotor with 22 tooth sprocket on gearmotor (Drive) and 32 tooth sprocket on the conveyor output shaft (Driven).

| Gearmotor =          | 62M060PL3DEN        | = 5 - 42 RPM           |
|----------------------|---------------------|------------------------|
| Pulley Kit =         | 22 t mtr 32 t conv. | = 0.69                 |
| Speed Factor =       | 2200 Series         | = 0.350 ft/min per RPM |
| Minimum Belt Speed = | 5 x 0.69 x 0.350    | = 1.2 Ft/min           |
| Maximum Belt Speed = | 42 x 0.69 x 0.350   | = 10.1 Ft/min          |

### Installation

### **Required Tools**

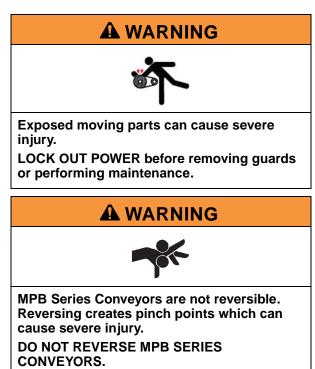
- Hex key wrenches: 2.5 mm, 3 mm, 5 mm
- Torque wrench

#### **Installation Component List:**

#### Cover 1

- 2 **Top Mount Assembly**
- 3 M6 Socket Head Screws (2x)
- 4 **Driven Pulley**
- 5 Key
- 6 **Timing Belt**
- 7 M4 Socket Head Screws (4x)

### Mounting



1. Typical components (Figure 3)

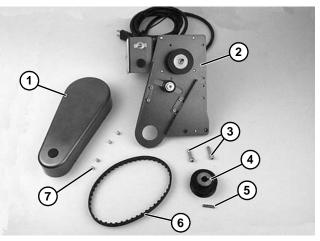


Figure 3

#### NOTE

6200 conveyor shown, other Series similar.

2. Locate drive output shaft (Figure 4, item 1) and remove two screws (Figure 4, item 2).

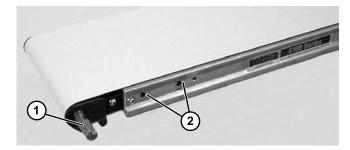
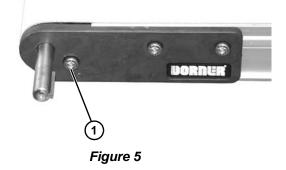


Figure 4

3. Install M6x8 socket head screw (Figure 5, item 1) and washer.



# Installation

4. For your reference, the following five figures show the attachment area of complete mounting packages for various conveyor series.

Gearmotor is mounted to Head Plate



ad

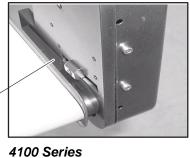


Gearmotor is mounted to Drive Spacer <sup>2</sup>



6100 Series Figure 7

Gearmotor is mounted to Drive Adapter Plate



100 Serie: Figure 8

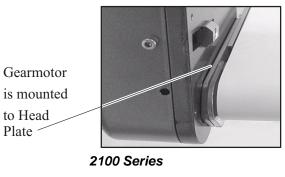


Figure 9

Gearmotor is mounted to Head Plate



MPB Series Figure 10

5. Attach mount assembly (Figure 11, item 1) with two screws (Figure 11, item 2). Tighten screws to 80 in-lb (9 Nm).

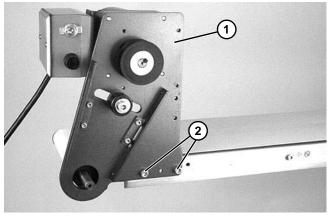


Figure 11

### Installation



Drive shaft keyway may be sharp. HANDLE WITH CARE.

6. Install key (Figure 12, item 1).

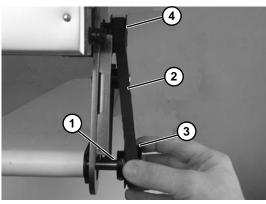
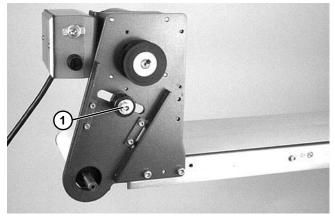


Figure 12

- 7. Wrap timing belt (Figure 12, item 2) around driven pulley (Figure 12, item 3) and drive pulley (Figure 12, item 4). Install driven pulley (Figure 12, item 3) onto conveyor shaft.
- 8. Remove cam bearing and spacer (Figure 14, item 1).



#### Figure 13

9. Place the cam bearing and spacer (Figure 14, item 1) next to the driven pulley (Figure 14, item 1). Ensure the flanges of the driven pulley are aligned with the cam bearing. Tighten set screws on driven pulley (J). This will allow for proper belt alignment while conveyor is in use. Install cam bearing and spacer (U).

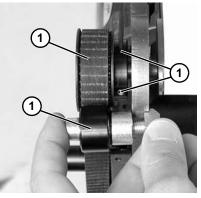


Figure 14

10. Depending on direction of conveyor belt travel (1 or 2 of Figure 15), position timing belt tensioner (Figure **15, item 3)** as shown. Tension timing belt to obtain 1/8" (3 mm) deflection for 1 lb (456 grams) of force at timing belt mid-point (Figure 15, item 4). Tighten tensioner screw to 106 in-lb (12 Nm).

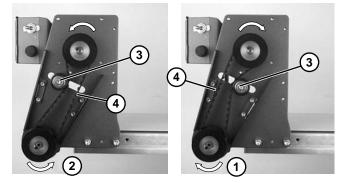


Figure 15

11. Install cover (Figure 16, item 1) with four (4) screws (Figure 16, item 2). Tighten to 35 in-lb (4 Nm).

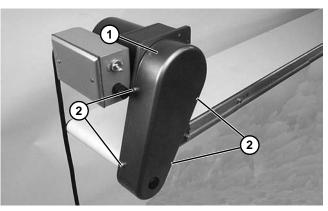


Figure 16

### **Required Tools**

- Hex key wrenches: 2.5 mm, 3 mm, 5 mm
- Screwdriver (for terminal box screws)
- Torque wrench

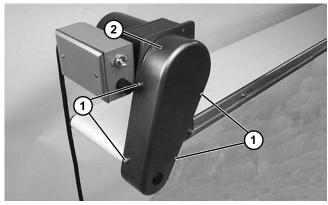
### **Timing Belt Tensioning**



Exposed moving parts can cause severe injury.

LOCK OUT POWER before removing guards or performing maintenance.

1. Remove four screws (Figure 17, item 1) and remove cover (Figure 17, item 2).



*Figure 17* 2. Loosen tensioner (Figure 18, item 1).

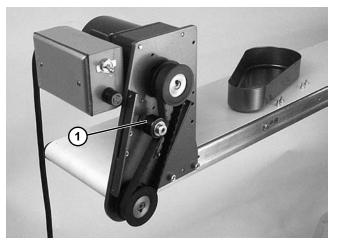


Figure 18

Depending on direction of conveyor belt travel (1 or 2 of Figure 19), position timing belt tensioner (Figure 19, item 3) as shown. Tension timing belt to obtain 1/8" (3 mm) deflection for 1 lb (456) grams of force at timing belt mid-point (Figure 19, item 4). Tighten tensioner screw to 106 in-lb (12 Nm).

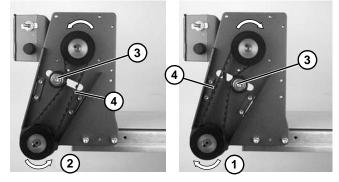


Figure 19

4. Install cover (Figure 17, item 2) with four (4) screws (Figure 17, item 1). Tighten screws to 35 in-lb (4 Nm).

### **Timing Belt Replacement**



- 1. Remove four (4) screws (Figure 17, item 1) and remove cover (Figure 17, item 2).
- 2. Loosen tensioner (Figure 18, item 1).

3. Remove timing belt (Figure 20, item 1).

#### NOTE

If timing belt does not slide over driven pulley flange (Figure 20, item 2), loosen driven pulley set screws (Figure 20, item 3) and remove pulley with belt. For re-installation, see steps 6 through 9 on page 9.

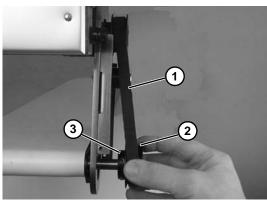
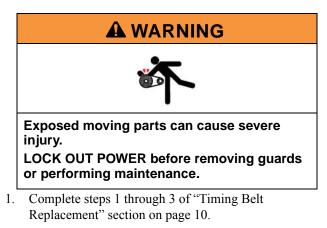


Figure 20

- 4. Install new timing belt.
- Depending on direction of conveyor belt travel (1 or 2 5. of Figure 19), position timing belt tensioner (Figure 19, item 3) as shown. Tension timing belt to obtain 1/8" (3 mm) deflection for 1 lb (456 grams) of force at timing belt mid-point (Figure 19, item 4). Tighten tensioner screw to 106 in-lb (12 Nm).
- 6. Install cover (Figure 17, item 2) with four (4) screws (Figure 17, item 1). Tighten screws to 35 in-lb (4 Nm).

### **Drive or Driven Pulley Replacement**



2. Loosen set screws and remove drive or driven pulley.

#### NOTE

If drive pulley (Figure 21, item 1) is replaced, wrap timing belt (Figure 21, item 2) around drive pulley and complete step 3.

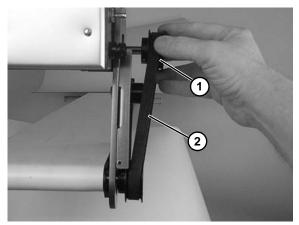
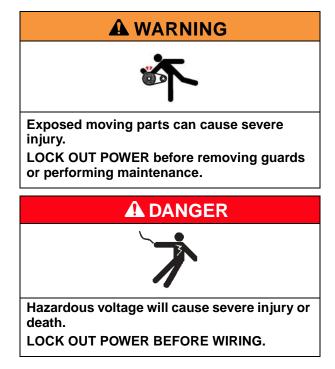


Figure 21

3. Complete steps 6 through 9 of "Installation" section on page 9.

### **Gearmotor Replacement**



#### **Single Phase Motor**

1. Unplug power cord from outlet.

#### **DC Variable Speed Motor**

1. For DC variable speed motor, unplug motor cord at disconnect (Figure 22, item 1).

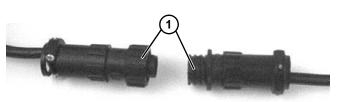


Figure 22

#### **Brushless DC Motor**

1. Twist covers (Figure 23, item 1) apart.

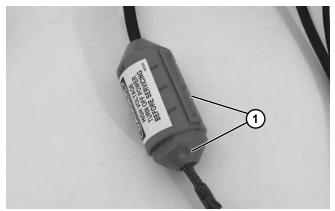


Figure 23

2. Remove outer cord cover (Figure 24, item 1) from inner cord cover (Figure 24, item 2).

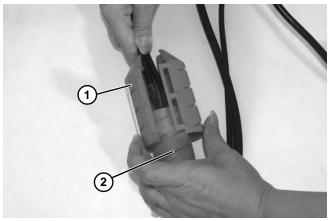


Figure 24

3. Open inner cord cover (Figure 25, item 1).

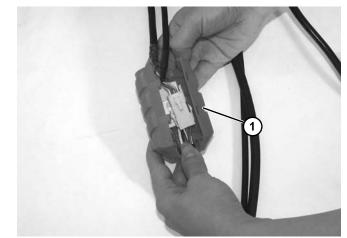


Figure 25

4. Unplug motor cord connectors (Figure 26, item 1) and signal cable connectors (Figure 26, item 2).

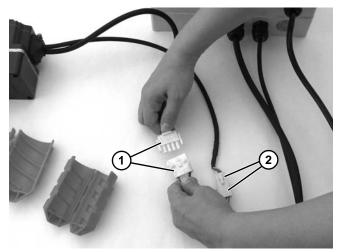


Figure 26

#### All Models

1. Remove four (4) screws (Figure 27, item 1) and remove cover (Figure 27, item 2).

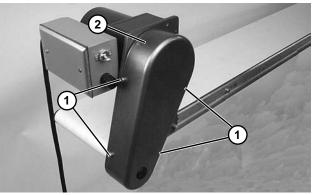


Figure 27

2. Loosen tensioner (Figure 28, item 1).

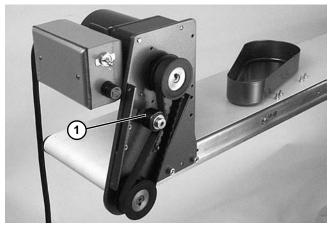


Figure 28

3. Remove timing belt (Figure 29, item 1).

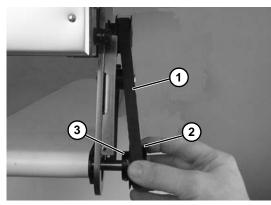


Figure 29

#### NOTE

If timing belt does not slide over drive pulley flange (Figure 29, item 2), loosen driven pulley set screws (Figure 29, item 3) and remove pulley with belt (Figure 29, item 1). For re-installation, see steps 6 through 9 on page 9. 4. Loosen two (2) set screws (Figure 30, item 1). Remove drive pulley (Figure 30, item 2).

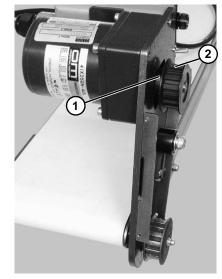


Figure 30

5. Remove four (4) screws (Figure 31, item 1) and detach gearmotor.

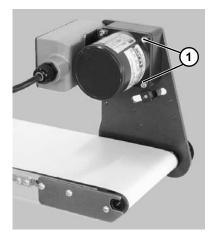


Figure 31

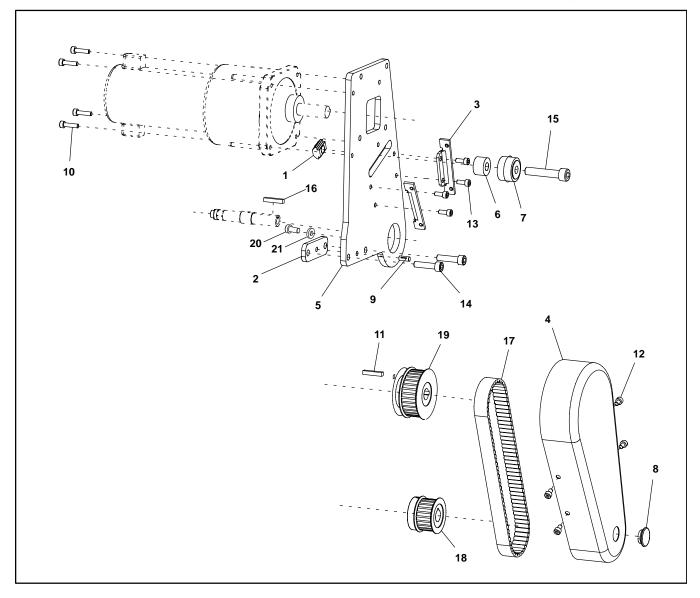
- 6. Mount new gearmotor with four (4) screws (Figure **31, item 1**). Tighten to 45 in-lb (5 Nm).
- 7. Replace drive pulley (Figure 30, item 2) and tighten set screws (Figure 30, item 1).
- 8. Complete steps 6 through 9 of "Installation" section on page 9.
- 9. Replace wiring:
- For a single phase motor, reverse step 1 in "Single Phase Motor" on page 11.
- For a DC variable speed motor, reverse step 1 on "DC Variable Speed Motor" on page 12.
- For a brushless motor, reverse steps 1-2 on "Brushless DC Motor" on page 12.

### **Service Parts**

### NOTE

For replacement parts other than those shown in this section, contact an authorized Dorner Service Center or the factory.

### 2100, 2200, 4100, 6200 and MPB Series Top Mount Drive Package



# **Service Parts**

| Item | Part Number | Description  |  |  |
|------|-------------|--|--|--|
| 1    | 202390M     | Nut, Cam Follower  |  |  |
| 2    | 450027M     | Drive Spacer (2100, 6200 Only)   |  |  |
|      | 450377M     | Drive Spacer (4100 Only)   |  |  |
| 3    | 450375M     | Cover Mounting Bracket   |  |  |
| 4    | 450376M     | Drive Guard  |  |  |
| 5    | 450026M     | Light Duty Motor Mount Plate   |  |  |
| 6    | 450445      | Spacer, Cam Follower (Fixed Speed<br>Gearmotors only)                        |  |  |
|      | 450195      | Spacer, Cam Follower (Variable Speed<br>Gearmotors only)                     |  |  |
| 7    | 802–046     | Bearing  |  |  |
| 8    | 807–226     | Snap-out Plastic Plug  |  |  |
| 9    | 807–952     | Groove Pin (2100, 4100, 6200 Only)   |  |  |
| 10   | 920545M     | Socket Head Screw M5x45mm – 15:1<br>Gearhead (Fixed Speed Gearmotor<br>Only) |  |  |
|      | 920555M     | Socket Head Screw M5x55mm – 36:1<br>Gearhead (Fixed Speed Gearmotor<br>Only) |  |  |
|      | 920416M     | Socket Head Cap Screw M4x16mm<br>(Variable Speed Gearmotor Only)             |  |  |
|      | 920560M     | Socket Head Cap Screw M5x60mm  |  |  |
|      |             | (Brushless DC Gearmotor Only)  |  |  |
| 11   | 980422M     | Square Key, 0.4mm x 22mm (Fixed Speed Gearmotor Only)                        |  |  |
|      | 912–084     | Square Key, 0.125" x 0.75" (Variable Speed Gearmotor Only)                   |  |  |
| 12   | 920481M     | Socket Head Screw M4 x 8mm   |  |  |
| 13   | 920408M     | Socket Head Screw M4 x 8mm   |  |  |
| 14   | 920625M     | Socket Head Screw M6 x 25mm (2100)   |  |  |
|      | 920622M     | Socket Head Screw M6 x 22mm (2200)   |  |  |
|      | 920618M     | Socket Head Screw M6 x 18mm(4100)  |  |  |
|      | 920630M     | Socket Head Screw M6 x 30mm (6200)   |  |  |
| 15   | 920840M     | Socket Head Screw M8 x 40mm  |  |  |
| 16   | 980422M     | Square Key 4mm x 22mm  |  |  |
|      | 912–084     | Square Key, 0.125" x 0.75"(1" Wide<br>Conveyor – 4100 Only)                  |  |  |
| 17   | 814-105     | Timing Belt, 15mm W x 460mm L  |  |  |
|      | 814-065     | Timing Belt, 15mm W x 475mm L  |  |  |
|      | 814-101     | Timing Belt, 15mm W x 500mm L  |  |  |
|      | 814-108     | Timing Belt, 15mm W x 520mm L  |  |  |
| 18   | 450366MP    | Driven Pulley, 22Tooth, 12mm bore  |  |  |
|      | 450367MP    | Driven Pulley, 28Tooth, 12mm bore  |  |  |
|      | 450368MP    | Driven Pulley,32Tooth, 12mm bore   |  |  |
| 19   | 450384MP    | Drive Pulley, 22Tooth, 10mm bore   |  |  |
|      | 450385MP    | Drive Pulley, 28Tooth, 10mm bore   |  |  |
|      | 450386MP    | Drive Pulley, 32Tooth, 10mm bore   |  |  |
|      | 450387MP    | Drive Pulley, 44Tooth, 10mm bore   |  |  |
|      | 450556P     | Drive Pulley, 22Tooth, 0.5" bore   |  |  |
|      | 450556P     | Drive Pulley, 28Tooth, 0.5" bore   |  |  |
|      | 450556P     | Drive Pulley, 32Tooth, 0.5" bore   |  |  |
|      | 450556P     | Drive Pulley, 44Tooth, 0.5" bore   |  |  |
|      | 450405MP    | Drive Pulley, 28Tooth, 15mm bore   |  |  |
|      | 450406MP    | Drive Pulley, 44Tooth, 15mm bore   |  |  |
| 20   | 920608M     | Socket Head Screw, M6-1.00 x 8 mm  |  |  |
| 21   | 807-2092    | Washer   |  |  |

### Pulley Ratio/Timing Belt Combinations

| Motor                      | Conveyor                    |                 | Timir           | ng Belt   |
|----------------------------|-----------------------------|-----------------|-----------------|-----------|
| (Drive)<br>Pulley<br>Teeth | (Driven)<br>Pulley<br>Teeth | Pulley<br>Ratio | 2200/MB/<br>MPB | 4100/6200 |
| 19                         | 32                          | 0.59            | N/A             | 814-104   |
| 22                         | 32                          | 0.69            | N/A             | 814-105   |
| 28                         | 22                          | 1.27            | N/A             | 814-104   |
| 28                         | 28                          | 1.00            | 814-105         | N/A       |
| 28                         | 32                          | 0.88            | 814-105         | 814-065   |
| 32                         | 19                          | 1.68            | 814-104         | 814-104   |
| 32                         | 22                          | 1.45            | 814-104         | 814-105   |
| 32                         | 28                          | 1.14            | 814-105         | 814-065   |
| 44                         | 19                          | 2.32            | 814-065         | 814-101   |
| 44                         | 22                          | 2.00            | 814-101         | 814-101   |
| 44                         | 28                          | 1.57            | 814-101         | 814-101   |
| 44                         | 32                          | 1.38            | N/A             | 814-064   |

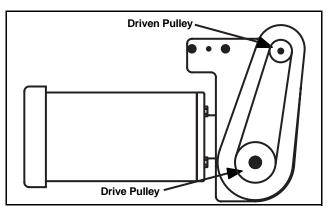
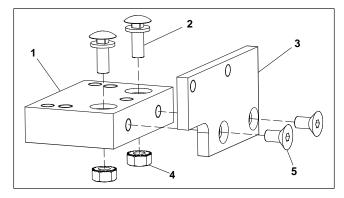


Figure 32

2100, 2200, 4100, 6200 and MPB Series Top Mount Drive Package for Light Load 60 Hz Gearmotors

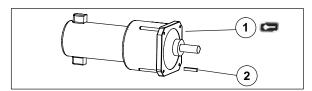
# Service Parts

#### 4100 Series Adapter Package



| ltem | Part Number | Description                 |
|------|-------------|-----------------------------|
| 1    | 609486      | Mounting Block 1" (25mm)    |
|      | 609487      | Mounting Block 2" (51mm)    |
|      | 609488      | Mounting Block 3" (76mm)    |
|      | 609479      | Mounting Block 4" (102mm)   |
|      | 609480      | Mounting Block 5" (127mm)   |
|      | 609481      | Mounting Block 6" (152mm)   |
|      | 609482      | Mounting Block 7" (178mm)   |
|      | 609483      | Mounting Block 8" (203mm)   |
|      | 609484      | Mounting Block 10" (254mm)  |
|      | 609485      | Mounting Block 12" (305mm)  |
| 2    | 613602P     | Bolt & Flat Washer Assembly |
| 3    | 450374      | Drive Adapter Plate         |
| 4    | 910–126     | Hex Nut with Lock Washer    |
| 5    | 930612M     | Flat Head Screw, M6 x 12mm  |

#### Gearmotors



| Item | Part Number   | Part Description  |
|------|---------------|---|
| 1 0  | 62M036PL411FN | Gearmotor, 0.03 hp, 115 Volts,42<br>RPM, 60 Hz, 1-Phase, 36:1       |
|      | 62M015PL411FN | Gearmotor, 0.03 hp, 115 Volts, 100<br>RPM, 60 Hz, 1-Phase, 15:1     |
|      | 62M060PLD3DEN | Gearmotor, 0.06 hp, 130 Volts, 42<br>RPM, DC, 60:1                  |
|      | 62M018PLD3DEN | Gearmotor, 0.06 hp, 130 Volts, 139<br>RPM, DC, 18:1                 |
|      | 62M036PL423FN | Gearmotor, 0.03 hp, 230 Volts, 42<br>RPM, 60 Hz, 3-Phase, 36:1      |
|      | 62M015PL423FN | Gearmotor, 0.03 hp, 230 Volts, 100<br>RPM, 60 Hz, 3-Phase, 15:1     |
|      | 62M036PL423EN | Gearmotor, 0.03 hp, 230 Volts, 7-42<br>RPM, 60 Hz, 3-Phase, 36:1    |
|      | 62M015PL423EN | Gearmotor, 0.03 hp, 230 Volts, 17-<br>100 RPM, 60 Hz, 3-Phase, 15:1 |
|      | 62M050PLBDDEN | Gearmotor, 0.083 hp, 60 RPM,<br>Brushless DC, 50:1                  |
|      | 62M020PLBDDEN | Gearmotor, 0.083 hp, 150 RPM,<br>Brushless DC, 20:1                 |
|      | 62M015PLBDDEN | Gearmotor, 0.083 hp, 200 RPM,<br>Brushless DC, 15:1                 |
| 2    | 980422M       | Key, 4mm x 22mm, 10mm Bore  |
|      | 912–052       | Key, 1/8" x 5/8", 1/2" Bore   |

2100, 2200, 4100, 6200 and MPB Series Top Mount Drive Package for Light Load 60 Hz GearmotorsDorner Mfg. Corp.16851-261 Rev. L

### Notes

### **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.

#### Conveyors and conveyor accessories

| Standard catalog conveyors                         | 30%                  |
|--|----------------------|
| MPB, 7200, 7300 Series, cleated and specialty belt | 50%                  |
| AquaGard & AquaPruf Series conveyors               | non-returnable items |
| Engineered to order products                       | case by case         |
| Drives and accessories                             | 30%                  |
| Sanitary stand supports                            | non-returnable items |
|  |                      |

#### Parts

| Standard stock parts                       |
|--|
| Plastic chain, cleated and specialty belts |

30% 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 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.



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. 2012

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