



# **2100, 2200, 4100, 6200, MPB Series Top Mount Drive Package for Standard Load 90° Industrial 60 Hz Gearmotors**

## **Installation, Maintenance & Parts Manual**



DORNER MFG. CORP.  
P.O. Box 20 • 975 Cottonwood Ave.  
Hartland, WI 53029-0020 USA

INSIDE THE USA  
TEL: 1-800-397-8664  
FAX: 1-800-369-2440

OUTSIDE THE USA  
TEL: 262-367-7600  
FAX: 262-367-5827

For other service manuals visit our website at:  
[www.dorner.com/service\\_manuals.asp](http://www.dorner.com/service_manuals.asp)

# Table of Contents

Introduction .....	2	Motor Replacement .....	14
Warnings – General Safety .....	3	Service Parts.....	16
Product Description .....	4	2100, 2200, 4100, 6200 Series and MPB Series	
Specifications .....	4	Flat Belt Conveyors Top Mount Drive Package	
Installation .....	8	for Standard Load 90° Industrial Gearmotors .....	16
Required Tools.....	8	MPB Series Cleated Belt Conveyor Bottom	
Mounting .....	8	Mount Drive Package for Standard Load 90°	
Preventive Maintenance and Adjustment .....	12	Industrial Gearmotors .....	17
Required Tools.....	12	4100 Mounting Package.....	18
Timing Belt Tensioning .....	12	Gearmotors .....	18
Timing Belt Replacement .....	12	Notes .....	19
Drive or Driven Pulley Replacement.....	13	Return Policy.....	20
Gear Reducer Replacement.....	13		

## 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: 5131529, 5174435, and corresponding patents and patent applications in other countries.

Dorner 4100 Series conveyors are covered by patent number 3923148 and corresponding patents and patent applications in other countries.

Dorner 2200, 6200 & MPB Series conveyors are covered by patent number 5174435 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.

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

## Warnings – General Safety

### 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



Exposed moving parts can cause severe injury. **REPLACE ALL GUARDS BEFORE RUNNING CONVEYOR.**

### 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



MPB Series Conveyors are not reversible. Reversing creates pinch points which can cause severe injury.

**DO NOT REVERSE MPB SERIES CONVEYORS.**

# Product Description

Refer to Figure 1 for typical components.

A	Conveyor
B	Mounting Bracket
C	Gearmotor
D	Timing Belt Tensioner
E	Cover
F	Timing Belt
G	Drive Pulley
H	Driven Pulley

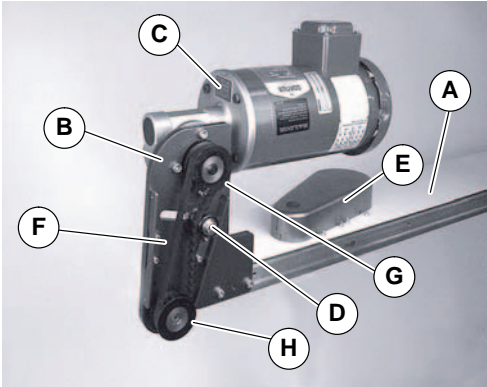


Figure 1

# Specifications

## Gearmotor Mounting Package Models:

### Example:

\* See Ordering and Specifications Catalog for details.

<b>22 M T H S WW A - 32 32</b>	
	Driven Pulley (see Table 2 & 3)
	Drive Pulley (see Table 2 & 3)
	Belt Type: - = flat belt, A through J = cleated
	Mount Position = A, B, C or D (see detail to the right)
	Conveyor Width Reference*
	Gearmotor Type = Standard Load, Industrial
	Output Shaft Type = 90° Industrial
	Mount Style = Top Mount
	Language Code = U.S. English
2	= 2100 Series Conveyor
22	= 2200 & MPB Series Conveyor
4	= 4100 Series Conveyor
6	= 6200 Series Conveyor
2P	= MPB Series Conveyor

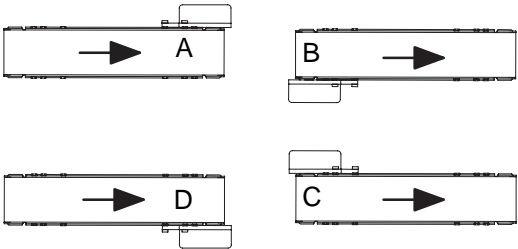


Table 1: Gearmotor Specifications

	Single Phase	Three Phase	DC Variable Speed
Output Power	0.25 hp (0.19 kw)		
Input Voltage	115 Volts A.C.	208 to 230/460 Volts A.C.	130 Volts D.C.
Input Frequency	60 Hz		N/A
Input Current	5.0 Amperes	1.2 /0.6 Amperes	2.2 Amperes
Motor RPM	1725		2500
Gearmotor Ratios	5:1, 10:1, 20:1, 40:1, 60:1		
Frame Size	NEMA 42 CZ		
Motor Type	Totally Enclosed, Fan-cooled		

## NOTE

For belt speed other than those listed in Tables 2 – 7, contact factory for details.

**Table 2: Belt Speeds for Standard Load Fixed Speed 90° 60 Hz Gearmotors on 2200 Series Conveyors**

Gearmotors				Belt Speed		Drive Pulley	Driven Pulley
Part Number	RPM	In-lb	N-m	Ft/min	M/min		
32M060HL4(vp)F(n)	29	226	25.5	6	1.8	19	32
32M060HL4(vp)F(n)	29	226	25.5	10	3.0	28	28
32M060HL4(vp)F(n)	29	226	25.5	16	4.9	44	28
32M040HL4(vp)F(n)	43	237	26.8	15	4.6	28	28
32M040HL4(vp)F(n)	43	237	26.8	24	7.3	44	28
32M020HL4(vp)F(n)	86	142	16.0	30	9.1	28	28
32M020HL4(vp)F(n)	86	142	16.0	48	14.6	44	28
32M010HL4(vp)F(n)	173	78	8.8	61	18.6	28	28
32M010HL4(vp)F(n)	173	78	8.8	95*	29.0*	44	28
32M010HL4(vp)F(n)	173	78	8.8	104*	31.7*	48	28
32M005HL4(vp)F(n)	345	41	4.6	121*	36.9*	28	28
32M005HL4(vp)F(n)	345	41	4.6	138*	42.1*	32	28
32M005HL4(vp)F(n)	345	41	4.6	176*	53.6*	32	22
32M005HL4(vp)F(n)	345	41	4.6	208*	63.4*	48	28
32M005HL4(vp)F(n)	345	41	4.6	242*	73.8*	44	22
32M005HL4(vp)F(n)	345	41	4.6	264*	80.5*	48	22

(vp) = voltage and phase

11 = 115 V, 1-phase

23 = 208–230/460 V, 3-phase

(n) = Reversing Capability

N = No Reversing switch

R = With reversing switch

\* = Nosebar transfers operate at maximum 77 Ft/min (23.5 M/min) belt speed

**Table 3: Belt Speeds for Standard Load Variable Speed 90° DC Gearmotors on 2200 Series Conveyors**

Gearmotors				Belt Speed		Drive Pulley	Driven Pulley
Part Number	RPM	In-lb	N-m	Ft/min	M/min		
32M060HLD3DEN	42	198	22.4	1.8 – 14.0	0.5 – 4.6	28	28
32M060HLD3DEN	42	198	22.4	2.8 – 23.0	0.8 – 7.0	44	28
32M040HLD3DEN	63	163	18.4	2.6 – 22.0	0.8 – 6.7	28	28
32M020HLD3DEN	125	98	11.1	5.3 – 44.0	1.6 – 13.0*	28	28
32M010HLD3DEN	250	54	6.1	10.0 – 88.0*	3.2 – 27.0*	28	28
32M010HLD3DEN	250	54	6.1	17.0 – 138.0*	5.0 – 42.0*	44	28
32M005HLD3DEN	500	28	3.2	21.0 – 176.0*	6.4 – 54.0*	28	28
32M005HLD3DEN	500	28	3.2	33.0 – 276.0*	10.0 – 84.0*	44	28

\* = Nosebar transfers operate at maximum 77 Ft/min (23.5 M/min) belt speed

# Specifications

**Table 4: Belt Speeds for Standard Load Fixed Speed 90° 60 Hz Gearmotors on 2100 4100 & 6200 Series Conveyors**

Gearmotors		Belt Speed		Drive Pulley	Driven Pulley
Part Number	RPM	Ft/min	M/min		
32M060HL4(vp)F(n)	29	6	1.8	19	32
32M060HL4(vp)F(n)	29	10	3.0	28	28
32M060HL4(vp)F(n)	29	16	4.9	44	28
32M040HL4(vp)F(n)	43	15	4.6	28	28
32M040HL4(vp)F(n)	43	24	7.3	44	28
32M020HL4(vp)F(n)	86	30	9.1	28	28
32M020HL4(vp)F(n)	86	48	14.6	44	28
32M010HL4(vp)F(n)	173	61	18.6	28	28
32M010HL4(vp)F(n)	173	95*	29.0*	44	28
32M010HL4(vp)F(n)	173	104*	31.7*	48	28
32M005HL4(vp)F(n)	345	121*	36.9*	28	28
32M005HL4(vp)F(n)	345	138*	42.1*	32	28
32M005HL4(vp)F(n)	345	176*	53.6*	32	22
32M005HL4(vp)F(n)	345	208*	63.4*	48	28
32M005HL4(vp)F(n)	345	242*	73.8*	44	22
32M005HL4(vp)F(n)	345	264*	80.5*	48	22

(vp) = voltage and phase

(n) = Reversing Capability

11 = 115 V, 1-phase

N = No Reversing switch

23 = 208–230/460 V, 3-phase

R = With reversing switch

**Table 5: Belt Speeds for Standard Load Variable Speed 90° DC Gearmotors on 2100 4100 & 6200 Series Conveyors**

Gearmotors				Belt Speed		Drive Pulley	Driven Pulley
Part Number	RPM	In-lb	N-m	Ft/min	M/min		
32M060HLD3DEN	42	198	22.4	1.8 – 14.0	0.5 – 4.6	28	28
32M060HLD3DEN	42	198	22.4	2.8 – 23.0	0.8 – 7.0	44	28
32M040HLD3DEN	63	163	18.4	2.6 – 22.0	0.8 – 6.7	28	28
32M020HLD3DEN	125	98	11.1	5.3 – 44.0	1.6 – 13.0*	28	28
32M010HLD3DEN	250	54	6.1	10.0 – 88.0*	3.2 – 27.0*	28	28
32M010HLD3DEN	250	54	6.1	17.0 – 138.0*	5.0 – 42.0*	44	28
32M005HLD3DEN	500	28	3.2	21.0 – 176.0*	6.4 – 54.0*	28	28
32M005HLD3DEN	500	28	3.2	33.0 – 276.0*	10.0 – 84.0*	44	28

**Table 6: Belt Speeds for Standard Load Fixed Speed 90° 60 Hz Gearmotors on MPB Series Conveyors**

Gearmotors				Belt Speed		Drive Pulley	Driven Pulley
Part Number	RPM	In-lb	N-m	Ft/min	M/min		
32M060HL4(vp)FN	29	226	25.5	25.5	4.1	22	32
32M060HL4(vp)FN	29	226	25.5	25.5	6.0	28	28
32M040HL4(vp)FN	43	237	26.8	26.8	8.9	28	28
32M040HL4(vp)FN	43	237	26.8	26.8	13.4	48	32
32M020HL4(vp)FN	86	142	16.0	16.0	17.9	28	28

(vp) = voltage and phase

N = No Reversing switch

11 = 115 V, 1-phase

R = With reversing switch

23 = 208–230/460 V, 3-phase

(n) = Reversing Capability

**Table 7: Belt Speeds for Standard Load Variable Speed 90° DC Gearmotors on MPB Series Conveyors**

Garmotors				Belt Speed		Drive Pulley	Driven Pulley
Part Number	RPM	In-lb	N-m	Ft/min	M/min		
32M060HLD3DEN	42	198	22.4	2.3–19	0.7–5.9	22	32
32M060HLD3DEN	42	198	22.4	3.4–28	1–8.6	22	32
32M060HLD3DEN	42	198	22.4	5.3–44	1.6–13	44	28
32M040HLD3DEN	63	163	18.4	5.1–42	1.6–12.9	28	28
32M020HLD3DEN	125	98	11.1	10–85	3–26	28	28
32M020HLD3DEN	125	98	11.1	15–127	4.7–39	48	32
32M010HLD3DEN	250	54	6.1	20–170*	6–52*	28	28
32M010HLD3DEN	250	54	6.1	31–255*	9–77*	48	32


\* = Cleated and Sidewall Cleated belts operate at a maximum of 150 ft/min (45.7 m/min)

# Installation

## Required Tools


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

## Mounting




**⚠ WARNING**

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



**⚠ WARNING**

MPB Series Conveyors are not reversible. Reversing creates pinch points which can cause severe injury.  
**DO NOT REVERSE MPB SERIES CONVEYORS.**



**⚠ WARNING**

Gearmotors must be mounted as shown in Figure 2 and Figure 3.  
Failure to do so creates pinch points which can cause severe injury.

**NOTE**

*Gearmotor position on Flat Belt conveyors shown in Figure 2. Gearmotor position on Cleated Belt and MPB Series conveyors shown in Figure 3.*

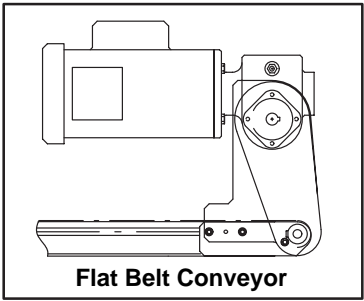


Figure 2

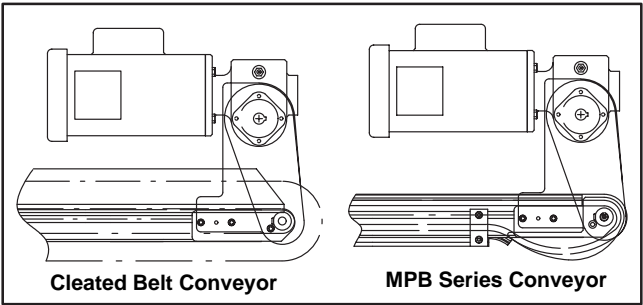


Figure 3

### Installation Component List:

I	Top Mount Assembly
J	Drive Pulley
K	Cover
L	M4 Socket Head Screws (4x)
M	Driven Pulley
N	Key
O	M6 Socket Head Screws (2x)
P	Timing Belt

1. Typical gearmotor components (Figure 4)

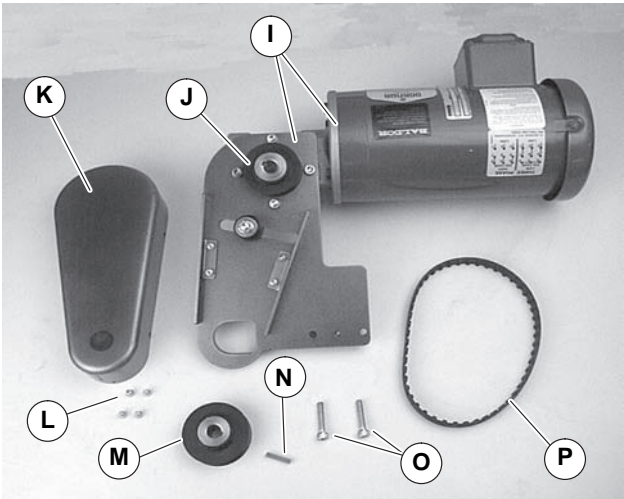


Figure 4

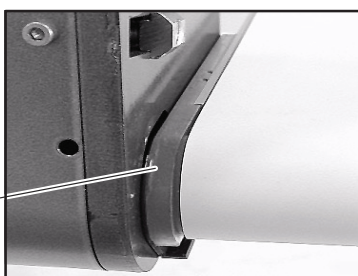


## NOTE

*Flat belt mounting package shown above (Figure 4), cleated belt mounting package similar.*

- For your reference, the following figures show gearmotor mounting configurations for various conveyor series.

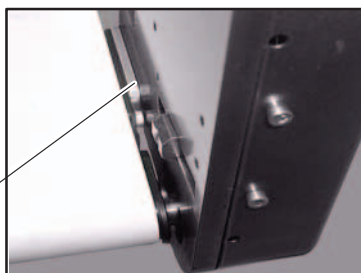
Gearmotor is mounted to Head Plate



**2200 Series**

**Figure 5**

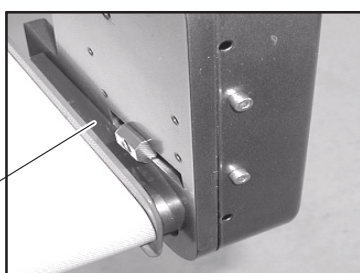
Gearmotor is mounted to Drive Spacer



**6200 Series**

**Figure 6**

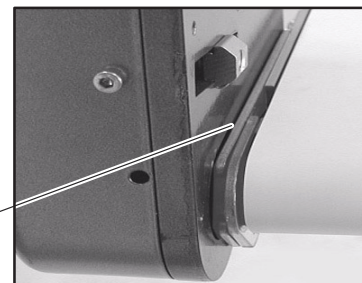
Gearmotor is mounted to Drive Adapter Plate



**4100 Series**

**Figure 7**

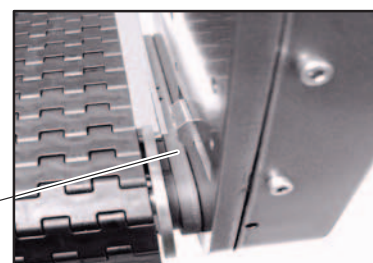
Gearmotor is mounted to Head Plate



**2100 Series**

**Figure 8**

Gearmotor is mounted to Head Plate

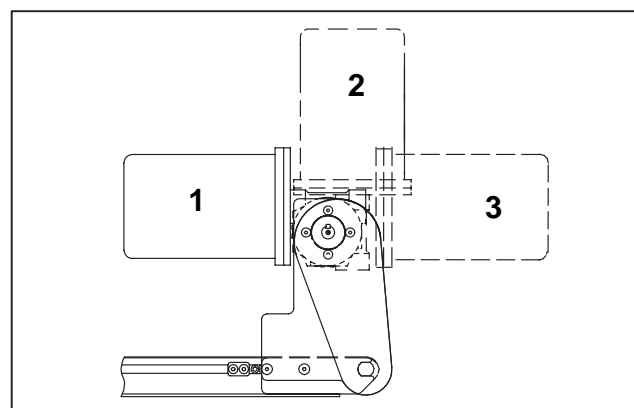


**MPB Series**

**Figure 9**

## NOTE

*Gearmotor may be operated in positions 1, 2 or 3 (Figure 10). Dependent on conveyor belt speed and gearmotor type, position 2 may require a vibration dampening bracket. Order 7018WW for 2200 and MPB conveyors or 7019WW for 2100 and 6200 conveyors. (WW = conveyor width). 4100 conveyors do not require brackets.*



**Figure 10**

# Installation

3. If required, change gearmotor position by removing four (4) screws (Figure 11, item Q). Rotate gearmotor to other position and replace screws (Q). Tighten to 103 in-lb (12 N-m).

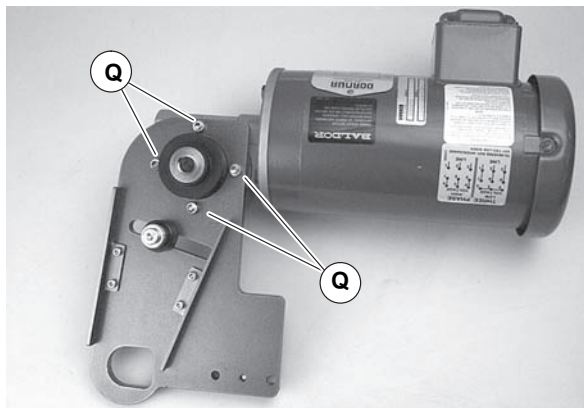


Figure 11

## NOTE

6200 conveyor shown, 2100, 2200, 4100 & MPB similar.

4. Locate drive output shaft (Figure 12, item R) and remove two (2) screws (S).

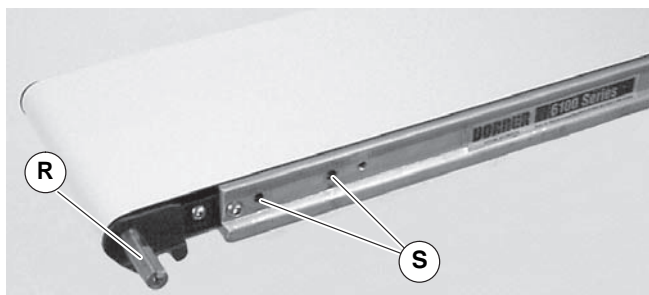


Figure 12

5. Attach mount assembly (Figure 13, item I) with screws (O). Tighten to 80 in-lb (9 N-m).

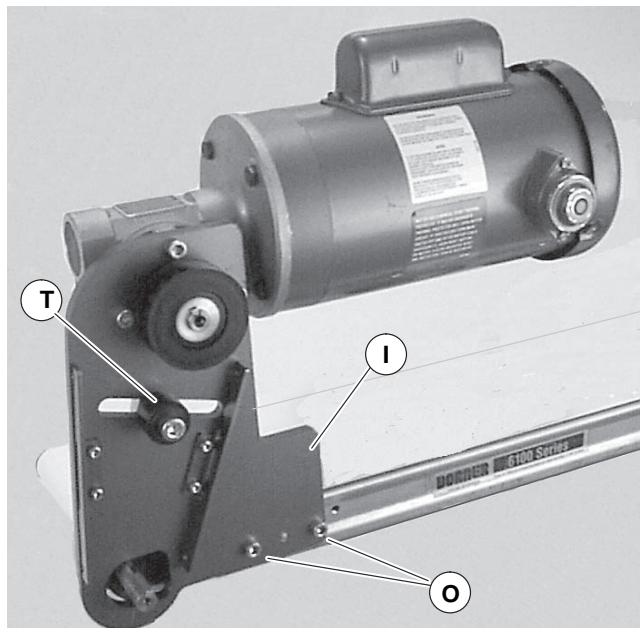


Figure 13

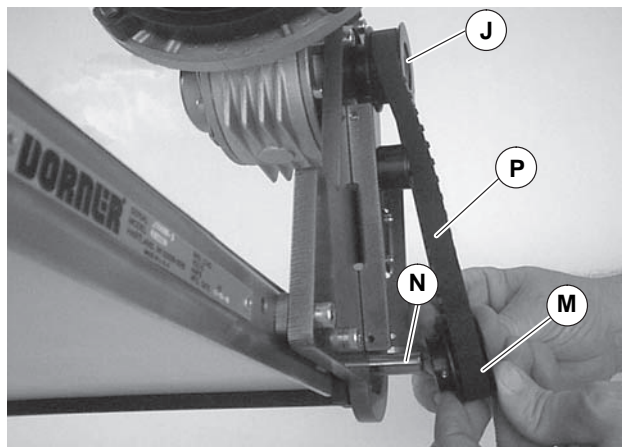
## ⚠ WARNING



Drive shaft keyway may be sharp.  
**HANDLE WITH CARE.**

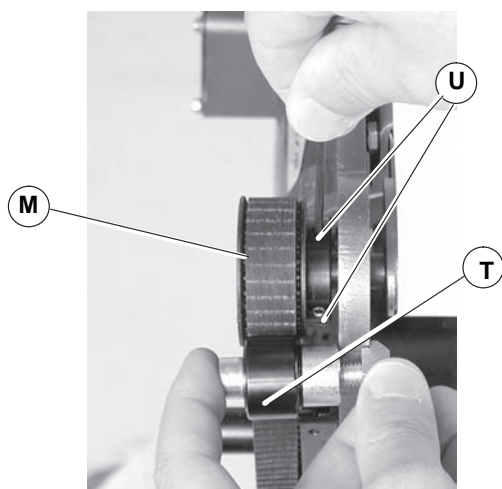
6. Install key (Figure 14, item N).

7. Wrap timing belt (P) around driven pulley (M) and drive pulley (J). Install driven pulley (M) onto conveyor shaft.



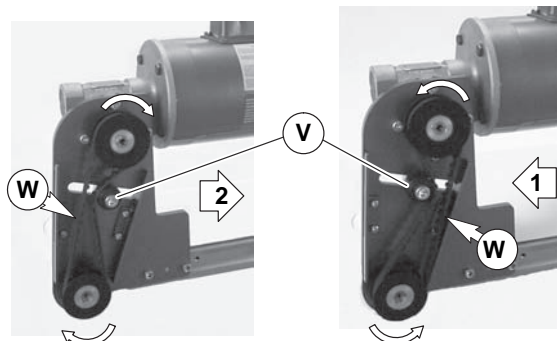
**Figure 14**

8. Remove cam bearing and spacer (Figure 13, item T). Place the cam bearing and spacer (Figure 13, item T) next to the driven pulley (M). Ensure the flanges of the driven pulley are aligned with the cam bearing. Tighten driven pulley set screws (U). This will allow for proper belt alignment while conveyor is in use. Replace cam bearing and spacer (T).



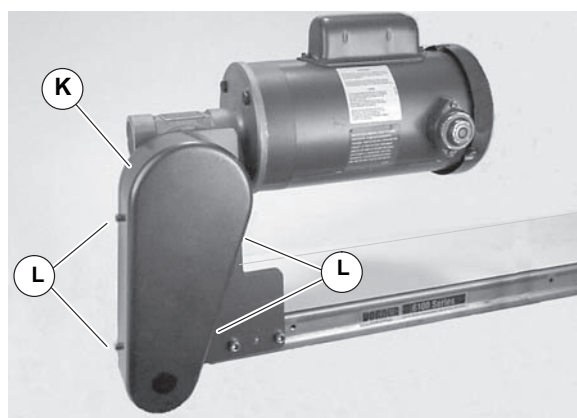
**Figure 15**

9. Depending on conveyor belt travel (direction 1 or 2 on Figure 16), locate timing belt tensioner (Figure 16, item V) as shown. Tension timing belt to obtain 0.125" (3 mm) deflection for 1.0 lb (456 grams) of force at timing belt mid-point (W). Tighten tensioner screw to 103 in-lb (12 N-m).



**Figure 16**

10. Install cover (Figure 17, item K) with four (4) screws (L). Tighten to 35 in-lb (4 N-m).



**Figure 17**

# Preventive Maintenance and Adjustment

## Required Tools

- Hex key wrenches:  
2 mm, 2.5 mm, 3 mm & 5 mm
- Adjustable wrench (for hexagon head screws)
- Straight edge
- Torque wrench

## Timing Belt Tensioning

### ⚠ WARNING



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

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

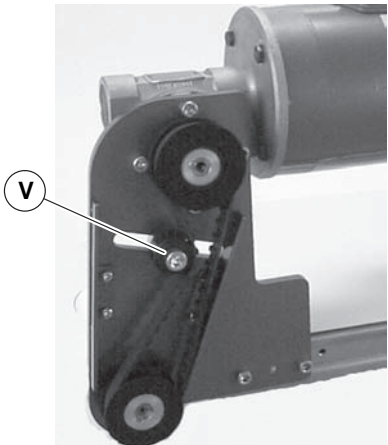


Figure 18

3. Depending on conveyor belt travel (direction 1 or 2 on Figure 16), locate timing belt tensioner (Figure 16, item V) as shown. Tension timing belt to obtain 0.125" (3 mm) deflection for 1.0 lb (456 grams) of force at timing belt mid-point (W). Tighten tensioner screw to 103 in-lb (12 N-m).
4. Install cover (Figure 17, item K) with four (4) screws (L). Tighten to 35 in-lb (4 N-m).

## Timing Belt Replacement

### ⚠ WARNING



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

1. Remove four (4) screws (Figure 17, item L) and remove cover (K).
2. Loosen tensioner (Figure 18, item V).
3. Remove timing belt (Figure 19, item P).

### NOTE

*If timing belt does not slide over pulley flange, loosen driven pulley set screws (Figure 19, item U) and remove pulley with belt (P). For re-installation, see steps 7 and 8 on page 11.*

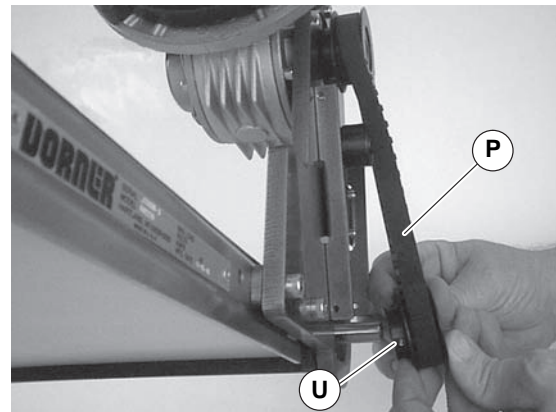


Figure 19

4. Install new timing belt.
5. Depending on conveyor belt travel (direction 1 or 2 on Figure 16), locate timing belt tensioner (Figure 16, item V) as shown. Tension timing belt to obtain 0.125" (3 mm) deflection for 1.0 lb (456 grams) of force at timing belt mid-point (W). Tighten tensioner screw to 103 in-lb (12 N-m).
6. Install cover (Figure 17, item K) with four (4) screws (L). Tighten to 35 in-lb (4 N-m).



# Preventive Maintenance and Adjustment

## Drive or Driven Pulley Replacement

### ⚠ WARNING



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

1. Complete steps 1 through 3 of “Timing Belt Replacement” section on page 12.
2. Loosen set screws and remove drive or driven pulley.

### NOTE

*If drive pulley (Figure 20, item J) is replaced, wrap timing belt around drive pulley and complete step 3.*

3. Complete steps 7 through 10 of “Installation” section on page 11.

## Gear Reducer Replacement

### ⚠ WARNING



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

1. Remove four (4) screws (Figure 17, item L) and remove cover (K).
2. Loosen tensioner (Figure 18, item V).
3. Loosen drive pulley set screws (Figure 20, item X). Remove drive pulley (J) and timing belt (P).

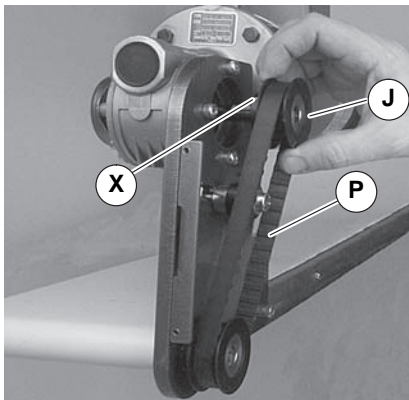


Figure 20

4. Remove four (4) gear reducer mounting screws (Figure 21, item Q). Remove gearmotor.

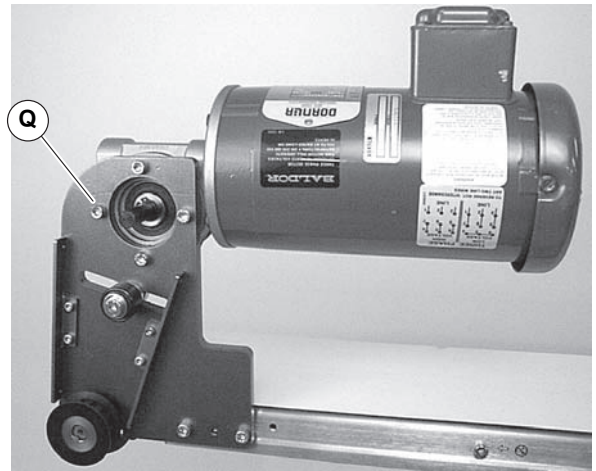


Figure 21

5. Remove four screws (Figure 22, item Y). Detach motor (Z) from gear reducer (AA). Retain motor output shaft key (AB).

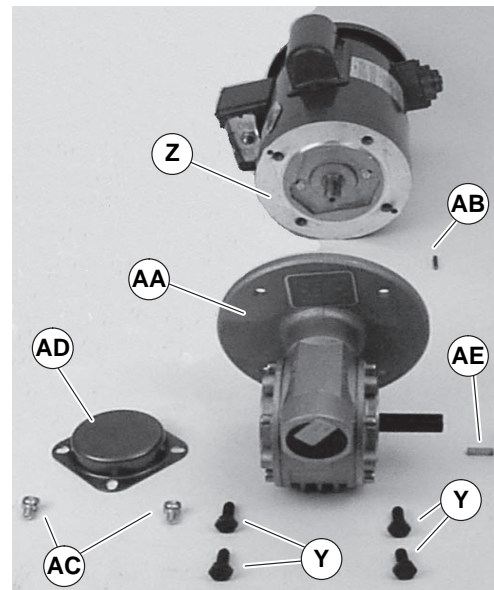
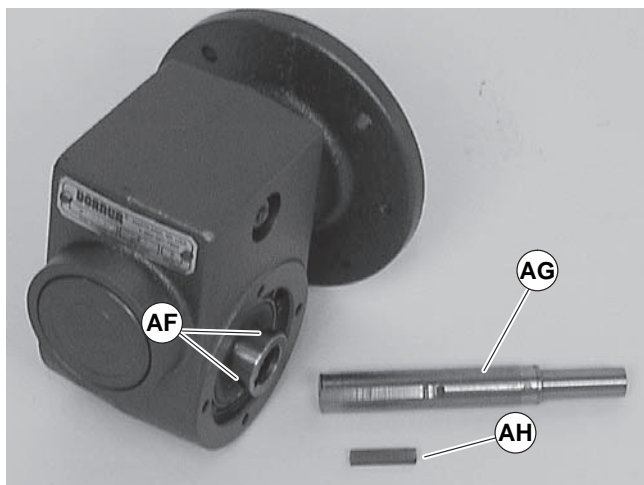


Figure 22

6. Remove two (2) screws (AC) and detach output shaft cover (AD).
7. Remove gear reducer output shaft key (AE).

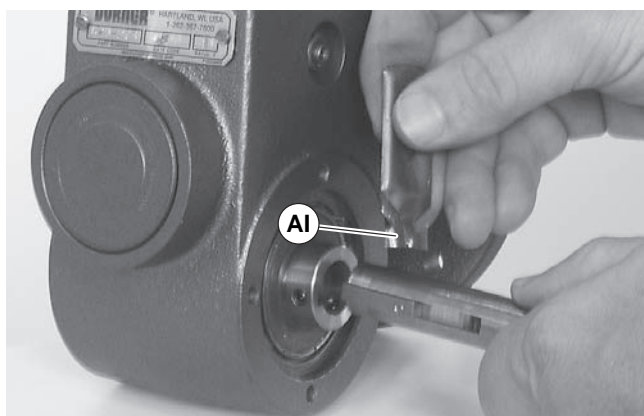
# Preventive Maintenance and Adjustment

8. Loosen six (6) set screws (Figure 23, item AF). Remove drive shaft (AG) and key (AH).



**Figure 23**

9. Apply grease (Figure 24, item AI) to shaft.



**Figure 24**

10. Replace the original shaft components into new gear reducer (see Figure 23).

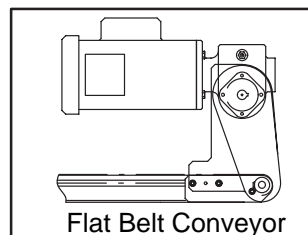
## IMPORTANT

*Be extremely careful when coupling motor to gear reducer. Avoid misalignment and forcing the connection causing possible permanent gear reducer seal damage.*

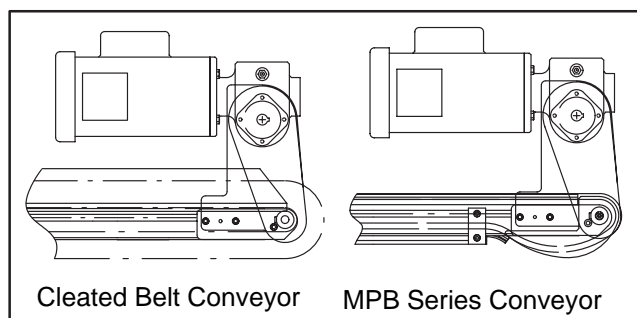
11. With key (Figure 22, item AE) in keyway, slide motor (Z) and gear reducer (AA) together. Install screws (Y) and tighten.

## NOTE

*Gearmotor position on Flat Belt conveyors shown in Figure 25. Gearmotor position on Cleated Belt and MPB Series conveyors shown in Figure 26.*



**Figure 25**



**Figure 26**

12. Install gearmotor to mounting bracket and tighten screws (Figure 21, item Q) to 103 in-lb (12 N-m).

## NOTE

*Drive pulley (Figure 20, item J) is removed. Wrap timing belt around drive pulley and complete step 13.*

13. Complete steps 7 through 10 of "Installation" section on page 11.

## Motor Replacement

### ⚠ WARNING



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

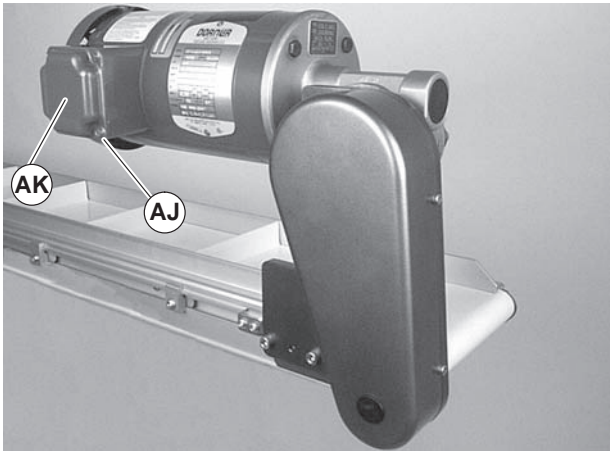
### ⚠ DANGER



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

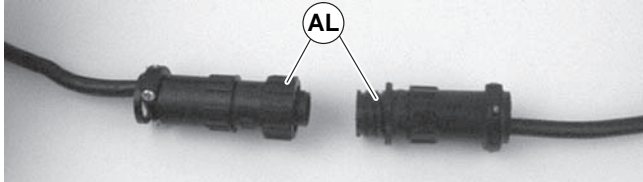
# Preventive Maintenance and Adjustment

1. For single phase motor, unplug power cord from outlet.
2. For three phase motor:
  - a. Loosen terminal box screws (Figure 27, item AJ) and remove cover (AK).



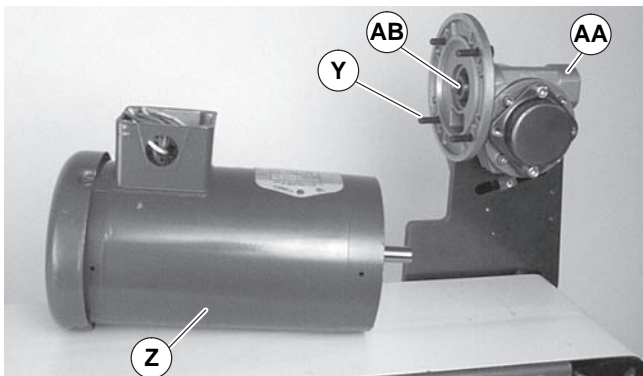
**Figure 27**

- b. Record wire colors connecting to wires 1, 2 and 3. Loosen wire nuts and remove wires 1, 2 and 3.
  - c. Loosen cord grip and remove cord.
3. For DC variable speed motor, unplug motor cord at disconnect (Figure 28, item AL).



**Figure 28**

4. Remove four screws (Figure 29, item Y). Detach motor (Z) from gear reducer (AA). Retain motor output shaft key (AB).

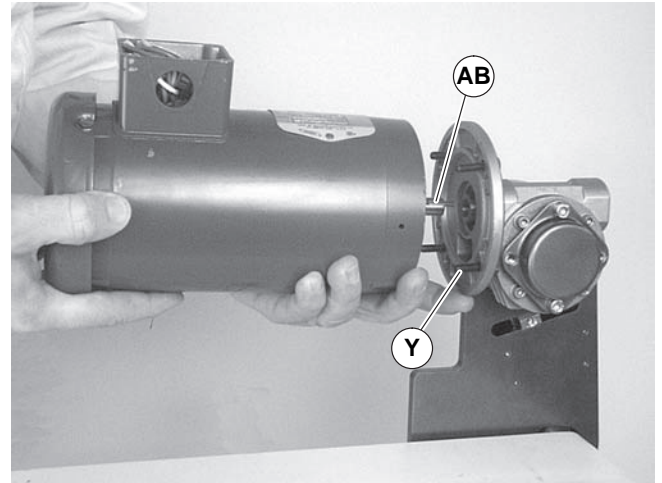


**Figure 29**

## IMPORTANT

*Be extremely careful when coupling motor to gear reducer. Avoid misalignment and forcing the connection causing possible permanent gear reducer seal damage.*

5. With key (Figure 30, item AB) in keyway, slide motor and gear reducer together. Install screws (Y) and tighten.




**Figure 30**

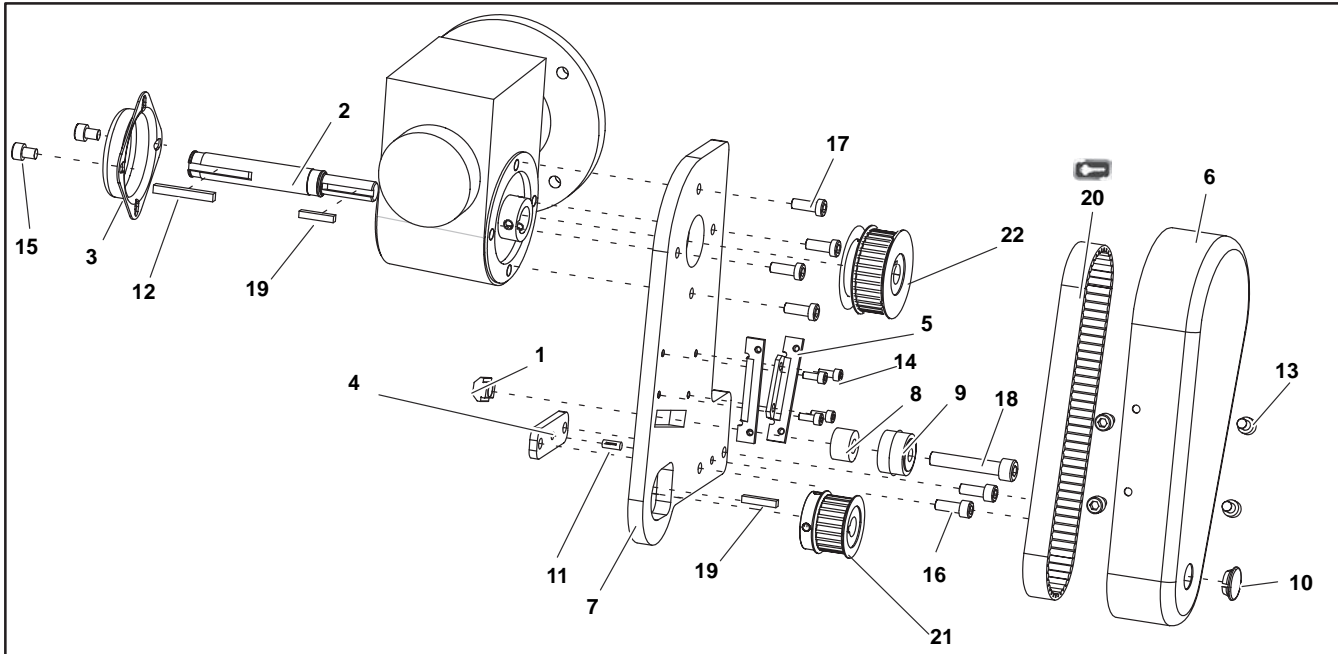
6. Replace wiring:
  - For a single phase motor, reverse step 1 on page 15
  - For a three phase motor, reverse step 2 on page 15.
  - For a DC variable speed motor, reverse step 3 on page 15.

# 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.

## 2100, 2200, 4100, 6200 Series and MPB Series Flat Belt Conveyors Top Mount Drive Package for Standard Load 90° Industrial Gearmotors

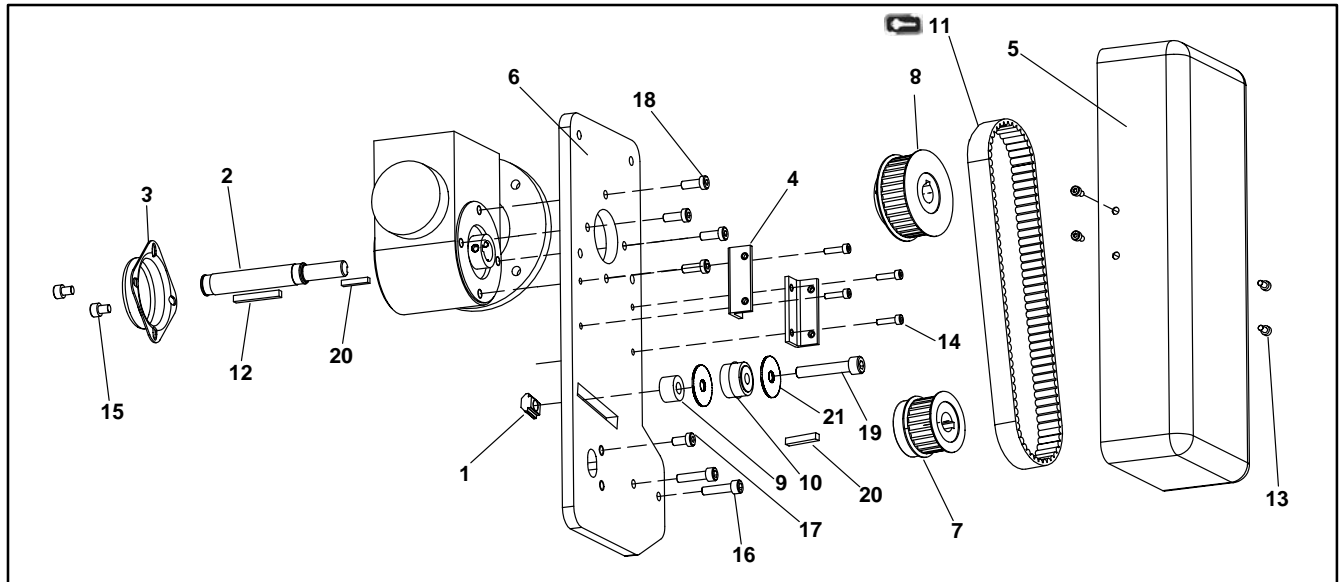


Item	Part Number	Description
1	202390M	Nut, Follower Cam
2	450444M	Output Shaft 12mm
3	300139	Drive Bearing Shaft Cover
4	450027M	Drive Spacer (6200 Conveyor)
5	450375M	Mounting Bracket Cover
6	450376M	Drive Guard
7	450443M	Mounting Plate
8	450445	Spacer
9	802-046	Bearing
10	807-226	Snap-out Plastic Plug
11	807-952	Groove Pin (6200 Conveyor)
12	912-084	Square Key, 0.188" x 1.50"
13	920406M	Socket Head Screw, M4 x 6mm
14	920410M	Socket Head Screw, M4 x 10mm
15	920608M	Socket Head Screw, M6 x 8mm
16	920616M	Socket Head Screw, M6 x 16mm (4100 Conveyors)
	920625M	Socket Head Screw, M6 x 25mm (2100 & 2200 Conveyors)
	920630M	Socket Head Screw, M6 x 30mm (6100 Conveyors)
17	920693M	Socket Head Screw, M6 x 16mm
	920694M	Socket Head Screw, M6 x 20mm (4100 Conveyors)
18	920845M	Socket Head Screw, M8 x 45mm

Item	Part Number	Description
19	980422M	Square Key, 4mm x 22mm
	814-104	Timing Belt, 15mm W x 450mm L
	814-105	Timing Belt, 15mm W x 460mm L
	814-065	Timing Belt, 15mm W x 475mm L
	814-112	Timing Belt, 15mm W x 495mm L
	814-101	Timing Belt, 15mm W x 500mm L
	814-108	Timing Belt, 15mm W x 520mm L
	814-064	Timing Belt, 15mm W x 535mm L
	814-099	Timing Belt, 15mm W x 565mm L
21	450365MP	Driven Pulley, 19Tooth
	450366MP	Driven Pulley, 22Tooth
	450367MP	Driven Pulley, 28Tooth
	450368MP	Driven Pulley, 32Tooth
22	450365MP	Drive Pulley, 19Tooth
	450366MP	Drive Pulley, 22Tooth
	450367MP	Drive Pulley, 28Tooth
	450368MP	Drive Pulley, 32Tooth
	450369MP	Drive Pulley, 44Tooth
	450370MP	Drive Pulley, 48Tooth
	450371MP	Drive Pulley, 60Tooth



## MPB Series Cleated Belt Conveyor Top Mount Drive Package for Standard Load 90° Industrial Gearmotors

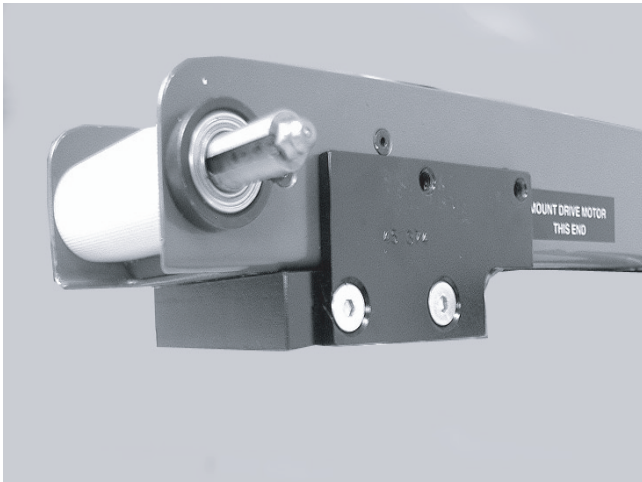
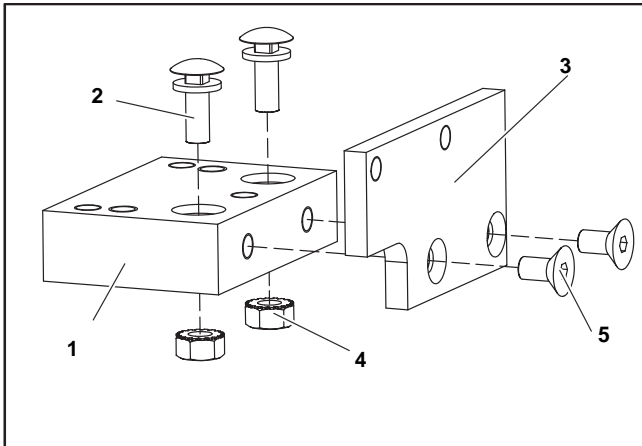


Item	Part Number	Description
1	202390M	Nut Follower Cam
2	450444M	Output Shaft, 12mm
3	300139	Drive Bearing Shaft Cover
4	243402	Mounting Cover Bracket
5	300871M	Drive Guard
6	243401	Mounting Plate
7	450366MP	Driven Pulley, 22Tooth
	450367MP	Driven Pulley, 28Tooth
	450368MP	Driven Pulley, 32Tooth
8	450365MP	Drive Pulley, 19Tooth
	450366MP	Drive Pulley, 22Tooth
	450367MP	Drive Pulley, 28Tooth
	450368MP	Drive Pulley, 32Tooth
	450369MP	Drive Pulley, 44Tooth
	450370MP	Drive Pulley, 48Tooth
	450371MP	Drive Pulley, 60Tooth
9	450445	Spacer
10	802-046	Bearing

Item	Part Number	Description
11	814-101	Timing Belt, 15mm W x 500mm L
	814-108	Timing Belt, 15mm W x 520mm L
	814-064	Timing Belt, 15mm W x 535mm L
	814-099	Timing Belt, 15mm W x 565mm L
	814-109	Timing Belt, 15mm W x 580mm L
	814-115	Timing Belt, 15mm W x 600mm L
	814-110	Timing Belt, 15mm W x 615mm L
12	912-084	Square Key, 0.188" x 1.50"
13	920408M	Socket Head Screw, M4 x 8mm
14	920416M	Socket Head Screw, M4 x 16mm
15	920608M	Socket Head Screw, M6 x 8mm
16	920625M	Socket Head Screw, M6 x 25mm
17	920692M	Stabilization Screw, M6 x 12mm Low Hd
18	920693M	Socket Head Screw, M6 x 16mm
19	920845M	Socket Head Screw, M8 x 45mm
20	980422M	Square Key, 4mm x 22mm
21	807-1133	Washer

# Service Parts

## 4100 Mounting Package

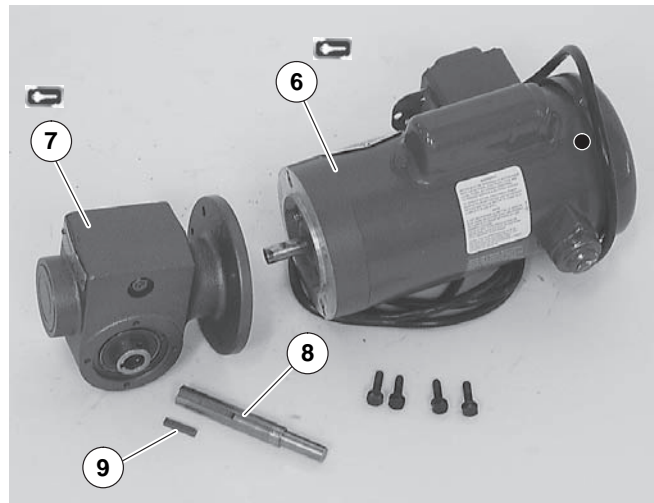


**Figure 31**

Mounting Package attached to a 4100 series conveyor.

Item	Part Number	Part 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
6	62MS411FN	Motor, 0.25 hp (0.19 Kw) 115/230 Volts, 60 Hz, 1-Phase
	62MS411FR	Motor, 0.25 hp (0.19 Kw) 115/230 Volts, 60 Hz, 1-Phase with Reversing
	62MS423	Motor, 0.25 hp (0.19 Kw) 208-230/460 Volts, 60 Hz, 3-Phase
	62MSD3DEN	Motor, 0.25 hp (0.19 Kw) 130 Volts DC
	32MS423EI*	Motor, 0.25 Hp (0.19 Kw) 230/460 Volts DC, 60 Hz, 3-Phase Variable Frequency/Indexing
7	32M005HL	Gear Reducer, 5:1, 42 CZ
	32M010HL	Gear Reducer, 10:1, 42 CZ
	32M020HL	Gear Reducer, 20:1, 42 CZ
	32M040HL	Gear Reducer, 40:1, 42 CZ
	32M060HL	Gear Reducer, 60:1, 42 CZ
	32M005HS	Gear Reducer, 5:1, 56C (for motors with part numbers ending with EI or EN only)
	32M010HS	Gear Reducer, 10:1, 56C (for motors with part numbers ending with EI or EN only)
	32M020HS	Gear Reducer, 20:1, 56C (for motors with part numbers ending with EI or EN only)
	32M040HS	Gear Reducer, 40:1, 56C (for motors with part numbers ending with EI or EN only)
	32M060HS	Gear Reducer, 60:1, 56C (for motors with part numbers ending with EI or EN only)
8	450444M	Gear Reducer Shaft
9	912-084	Key, Square, 0.188" x 1.5" L

\*This motor is rated at 1/2 hp when running as a fixed speed motor at 60 hz or when used as an indexing motor. When used as a variable speed motor, the HP rating is reduced to 1/4 hp.



# 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	30%
Plastic chain, cleated and specialty belts	non-returnable items

Returns will not be accepted after 60 days from original invoice date. The return charge covers inspection, cleaning, disassembly, disposal and reissuing of components to inventory. If a replacement is needed prior to evaluation of returned item, a purchase order must be issued. Credit (if any) is issued only after return and evaluation is complete.

Dorner has representatives throughout the world. Contact Dorner for the name of your local representative. Our 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](http://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. 2010

## 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](http://www.dorner.com)

Outside the USA:  
TEL 1-262-367-7600  
FAX 1-262-367-5827