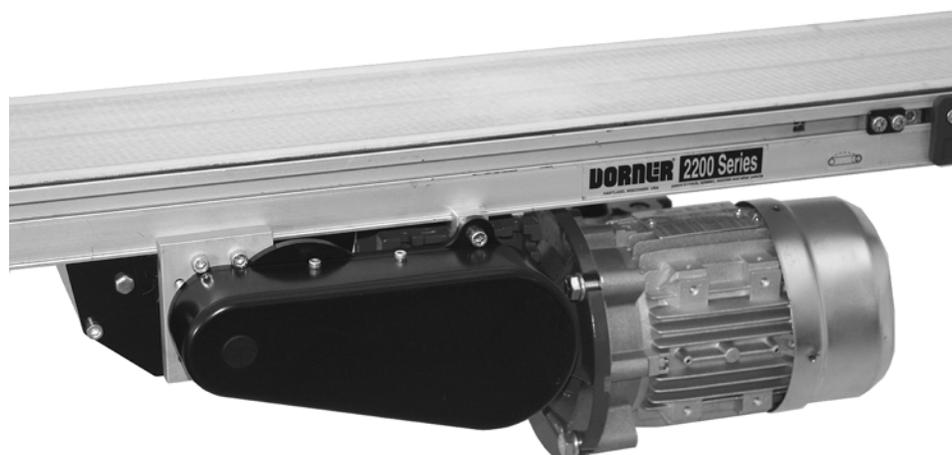




# 2200 and 2300 Series Mid Mount 90° Drive Package for Heavy Load Gearmotors

Installation, Maintenance & Parts Manual



Featuring: **eDrive™** Technology

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

Dorner 2200 and 6200 Series conveyors are covered by patent number 5174435, 6109427, 6298981, 6422382 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.

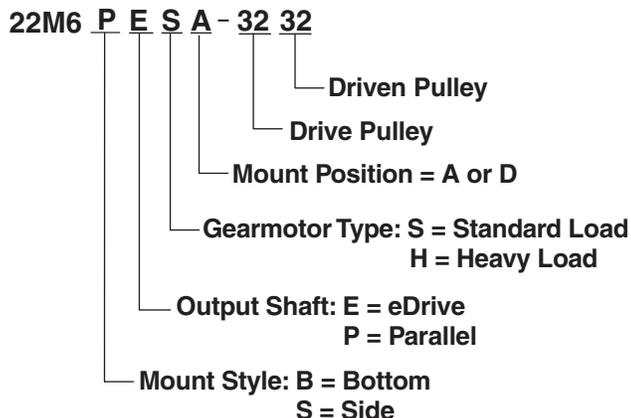
When conveyors are used in conjunction with other equipment or as part of a multiple conveyor system, **CHECK FOR POTENTIAL PINCH POINTS** and other mechanical hazards before system start-up.

# Specifications

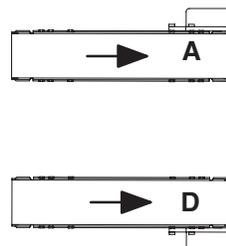
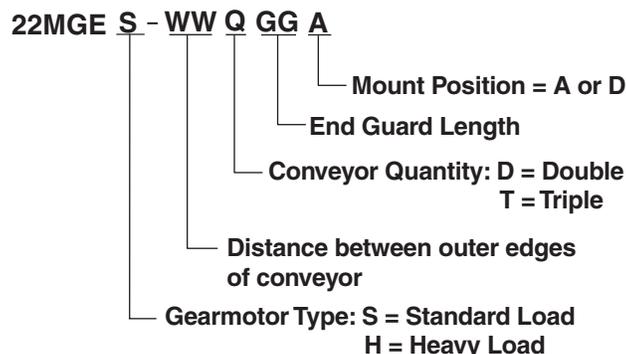
## Gearmotor Mounting Package Models:

### Example:

#### Mid Mount Drive



#### Gang Mid Side Mount Drive



## Table 1: Gearmotor Specifications

### U.S. Version

	Standard Load Gearmotor			Heavy Load Gearmotor			
	Single-Phase	Three Phase	DC Variable Speed	Single-Phase	Three Phase	VFD Variable Speed	DC Variable Speed
Output Power	0.25 hp (0.19 kw)			0.5 hp (0.37 kw)			
Input Voltage	115VAC	208 – 230/460 VAC	130VDC	115VAC	208 – 230/460 VAC	230 VAC	90VDC
Input Frequency	60Hz		N/A	60Hz		10 – 60Hz	N/A
Input Current (Amperes)	5.0	1.2/0.6	2.2	7.4	2.1 – 2/1	1.6	5.0
Gearmotor Ratios	5:1, 10:1, 20:1, 40:1, 60:1			5:1, 10:1, 20:1, 40:1, 60:1			
Frame Size	NEMA 42CZ			NEMA 56C			
Motor Type	Totally enclosed, Fan cooled			Totally enclosed, Fan cooled			

# Specifications

## CE Version

	Single Phase	Three Phase	VFD Variable Speed
Output Power	0.18 kw		
Input Voltage	230 VAC	230/400 VAC	230 VAC
Input Frequency	50Hz		25 to 63 Hz
Input Current	1.6 Amperes	1.4/0.8 Amperes	1.4 Amperes
Gearmotor Ratios	5:1, 10:1, 20:1, 40:1, 60:1		5:1, 10:1, 20:1
Protection Rating	IP55		
Frame Size	IEC 63 B5		IEC 71 B5

**Table 2: Belt Speeds for Standard & Heavy Load Fixed Speed 90° Gearmotors**

### U.S. Version (60 Hz Gearmotors)

Standard Load Gearmotors				Heavy Load Gearmotors			
Part Number	RPM	In-lb	N-m	Part Number	RPM	In-lb	N-m
32M060EL4(vp)F(n)	29	226	25.5	32M060HS4(vp)F(n)	29	226	25.5
32M040EL4(vp)F(n)	43	237	26.8	32M040HS4(vp)F(n)	43	247	27.9
32M020EL4(vp)F(n)	86	142	16	32M020HS4(vp)F(n)	86	248	27.9
32M010EL4(vp)F(n)	173	78	8.8	32M010HS4(vp)F(n)	173	156	17.6
32M005EL4(vp)F(n)	345	41	4.6	32M005HS4(vp)F(n)	345	81	9.1

(vp) = voltage and phase

23 = 208 – 230/460 V, 3-phase

11 = 115 V, 1-phase

### CE Version (50 Hz Gearmotors)

Gearmotors		
Part Number	RPM	N-m
62Z060ES4(vp)FN	23	26.4
62Z040ES4(vp)FN	35	28.9
62Z020ES4(vp)FN	70	19.4
62Z010ES4(vp)FN	140	10.7
62Z005ES4(vp)FN	280	5.6

(vp) = voltage and phase

21 = 230 V, 1-phase

23 = 230 V, 3-phase

43 = 400 V, 3-phase

**Table 3: Belt Speeds for Standard & Heavy Load Variable Speed 90° DC Gearmotors**

### U.S. Version

Standard Load Gearmotors				Heavy Load Gearmotors			
Part Number	RPM	In-lb	N-m	Part Number	RPM	In-lb	N-m
32M060ELD3DEN	5 - 42	198	22.4	32M060HSD9DEN	5 - 42	198	22.4
32M040ELD3DEN	8 - 63	163	18.4	32M040HSD9DEN	8 - 63	215	24.3
32M020ELD3DEN	15 - 125	98	11.1	32M020HSD9DEN	15 - 125	196	22.1
32M010ELD3DEN	30 - 250	54	6.1	32M010HSD9DEN	30 - 250	108	12.2
32M005ELD3DEN	61 - 500	28	3.2	32M005HSD9DEN	61 - 500	56	6.3

# Specifications

## CE Version

Gearmotors		
Part Number	RPM	N-m
62Z060ES423EN	9 - 23	26.4
62Z040ES423EN	14 - 35	28.9
62Z020ES423EN	28 - 70	19.4
62Z010ES423EN	56 - 140	10.7
62Z005ES423EN	112 - 280	5.6

**Table 4: Belt Speeds for Heavy Load Variable Speed 90° VFD Gearmotors**

Heavy Load Gearmotors			
Part Number	RPM	In-lb	N-m
32M060ES423EN	3-29	226	25.5
32M040ES423EN	5-43	247	27.9
32M020ES423EN	10-86	248	27.9
32M010ES423EN	20-173	156	17.6
32M005ES423EN	42-345	81	9.1

**Table 5: Pulley Ratio / Timing Belt**

Motor (Drive) Pulley Teeth	Conveyor (Driven) Pulley Teeth	Pulley Ratio	Timing Belt
22	32	0.69	814-104
28	28	1.00	814-104
28	32	0.88	814-065
32	22	1.45	814-104
32	28	1.14	814-065
44	22	2.00	814-065
44	28	1.57	814-101
44	32	1.38	814-108
48	22	2.18	814-101
48	28	1.71	814-108
48	32	1.50	814-108
60	22	2.73	814-064
60	28	2.14	814-064
60	32	1.88	814-099

**Table 6: Conveyor Belt Speed Factor**

Conveyor Series/Type	Ft / Min	M / Min
2200 / 2300	0.35	0.107
2200 Precision Move	0.394	0.12

### Example:

Gearmotor = 32M010ES423EN = 20 - 173 RPM

Pulley Kit = 34 tooth drive, 32 tooth driven = 1.06

Speed Factor = 2200 series = 0.350 ft/min per RPM

Minimum Belt Speed = 30 x 1.06 x 0.350 = 11.1 ft/min

Maximum Belt Speed = 173 x 1.06 x 0.350 = 64.2 ft/min

## Required Tools

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

## Mid Drive Installation

<b>⚠ WARNING</b>

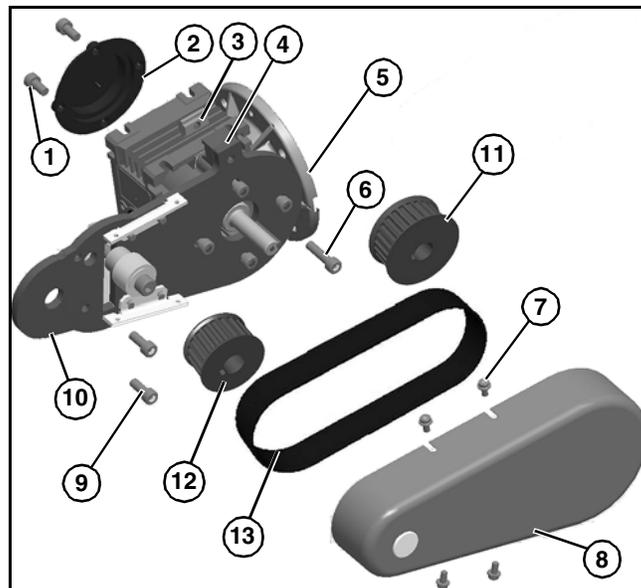
<b>Exposed moving parts can cause severe injury. LOCK OUT POWER before removing guards or performing maintenance.</b>
<b>NOTE</b>
<i>Type 1 mounting package shown below left (Figure 1). Type 2 mounting package shown below right (Figure 1).</i>

## Bottom Mount Mid Drive Assembly

### Installation Component List:

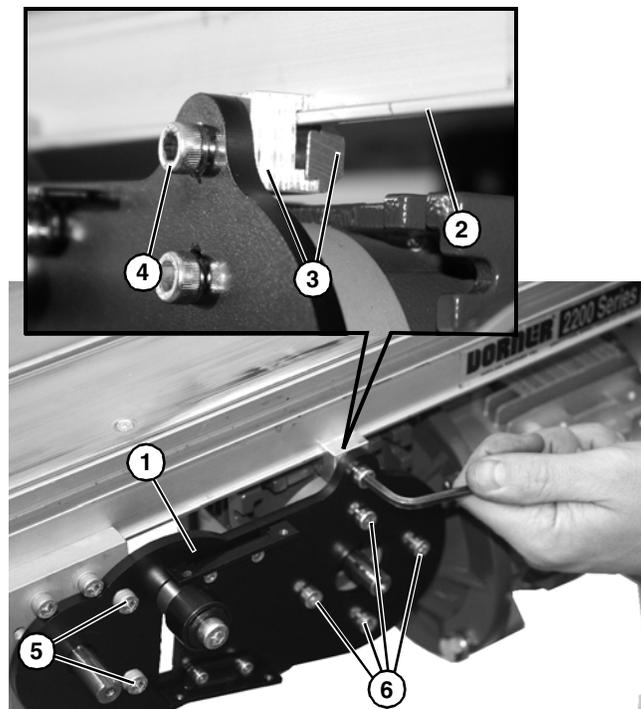
1	M6x12 Screws (2x)
2	Cover
3	Drop-In Tee Bar
4	Frame Clamp Block
5	Gear Reducer
6	M6x25 Socket Head Screw
7	M4x8 Screws (4x)
8	Drive Guard
9	M6x16 Socket Head Screws (2x)
10	Mount Assembly Bracket
11	Drive Pulley
12	Driven Pulley
13	Timing Belt

1. Gather installation components (**Figure 1**)



**Figure 1**

2. Install gearmotor and plate (**Figure 2, item 1**) onto conveyor frame channel (**Figure 2, item 2**) with retaining clip assembly (**Figure 2, item 3**) and socket head screw (**Figure 2, item 4**). Secure bottom with two socket head screws (**Figure 2, item 5**). Do not tighten screws at this time.

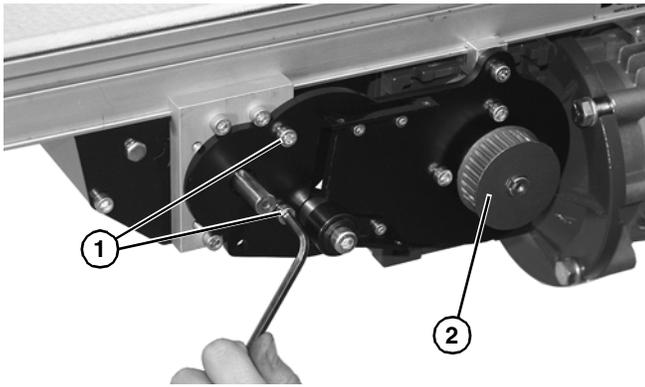


**Figure 2**

3. If required, change gearmotor position by removing four (4) screws (**Figure 2, item 6**). Rotate gearmotor to other position and replace screws. Tighten to 103 in-lb (12 Nm).

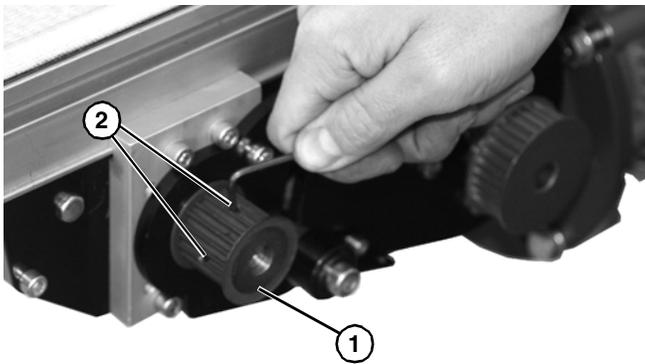
# Installation

4. Tighten two socket head screws (**Figure 3, item 1**) to 60 in-lb (7 Nm).



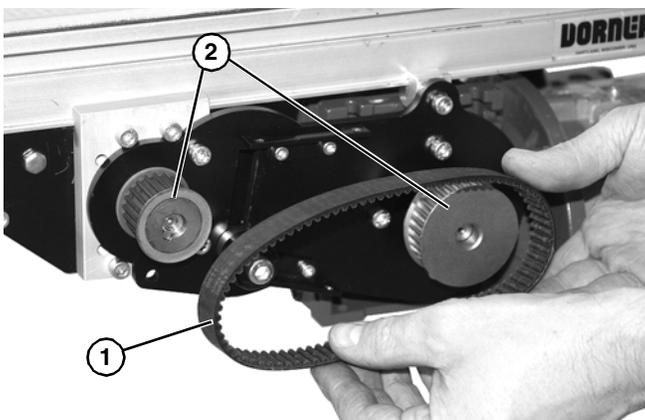
**Figure 3**

5. Install drive pulley (**Figure 3, item 2**) onto gearmotor shaft.
6. Install driven pulley (**Figure 4, item 1**) onto spindle shaft. Tighten two set screws (**Figure 4, item 2**) to 35 in-lb (4 Nm).



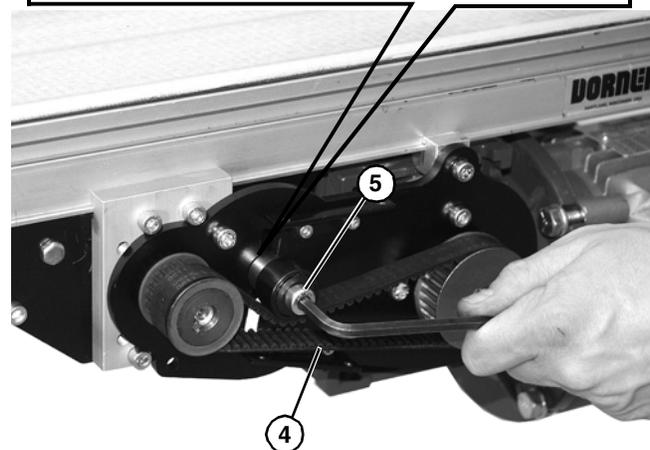
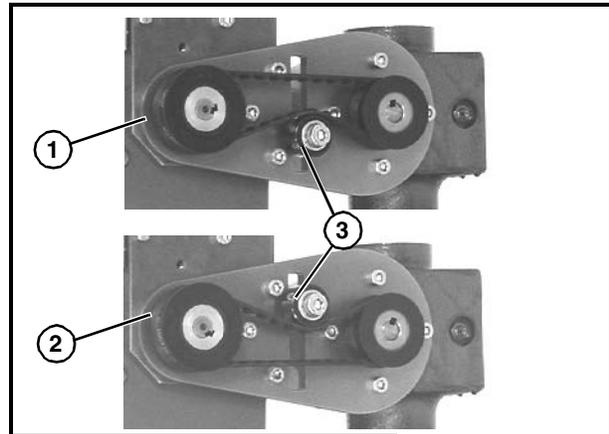
**Figure 4**

7. Install belt (**Figure 5, item 1**) and both pulleys (**Figure 5, item 2**).



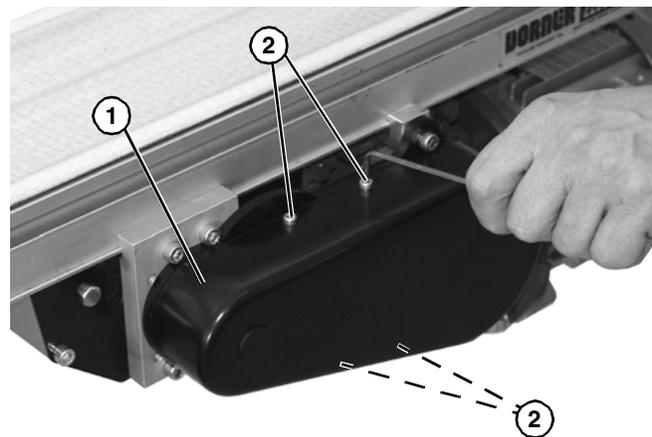
**Figure 5**

8. Depending on direction of conveyor belt travel (**Figure 6, item 1 or 2**), position belt tensioner (**Figure 6, item 3**) as shown. Tension belt to obtain 0.125" (3 mm) deflection for 1.0 lb (456 grams) of force at belt mid-point (**Figure 6, item 4**). Tighten tensioner screw (**Figure 6, item 5**) to 103 in-lb (12 Nm).



**Figure 6**

9. Install cover (**Figure 7, item 1**) onto drive assembly with four M4 socket head screws (**Figure 7, item 2**). Tighten screws to 35 in-lb (4 Nm).



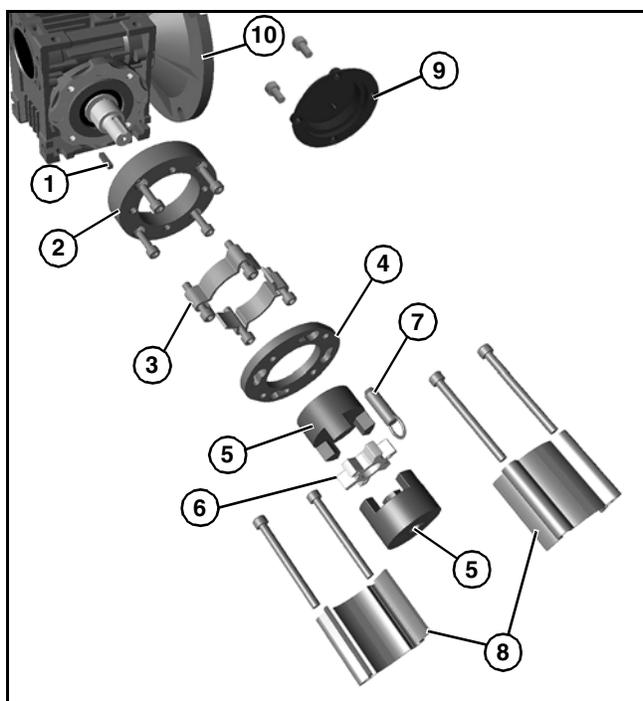
**Figure 7**

## Side Mount Mid Drive Assembly

### Installation Component List:

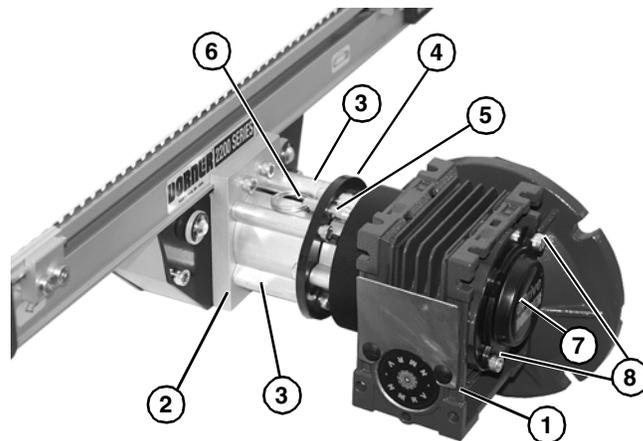
1	Key
2	Spacer Ring
3	Short Side Drive Guard (2x)
4	Mounting Ring
5	3-Jaw Coupler (2x)
6	3-Jaw Spider
7	Quick Release Pin
8	Long Side Drive Guard (2x)
9	Cover
10	Gear Reducer

1. Gather installation components (**Figure 8**)



**Figure 8**

2. Raise gearmotor assembly (**Figure 9, item 1**) into position on mounting block (**Figure 9, item 2**). Install two long side drive couplings (**Figure 9, item 3**) and mounting ring (**Figure 9, item 4**) with four M6x70 socket head screws (**Figure 9, item 5**). Tighten screws to 60 in-lb (7 Nm).



**Figure 9**

3. Install quick release pin (**Figure 9, item 6**) into mounting ring to secure position.
4. Install motor onto gearmotor assembly (**Figure 9, item 1**). Tighten M6 motor mounting screws to 60 in-lb (7 Nm).
5. Install cover (**Figure 9, item 7**) with two M4 socket head screws (**Figure 9, item 8**). Tighten screws enough to secure cover.

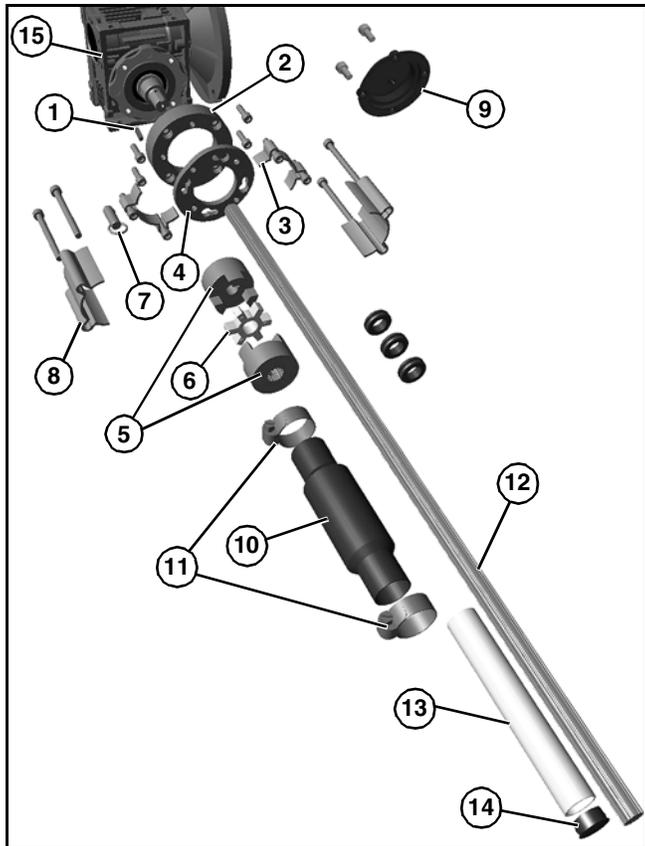
# Installation

## Gang Side Mount Mid Drive Assembly

### Installation Component List:

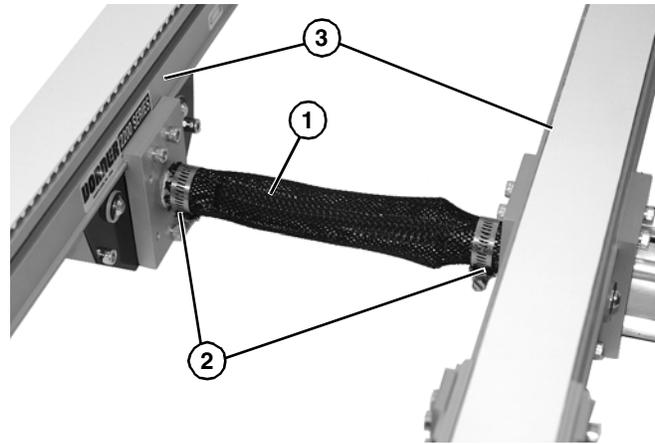
1	Key
2	Spacer Ring
3	Short Side Drive Guard (2x)
4	Mounting Ring
5	3-Jaw Coupler (2x)
6	3-Jaw Spider
7	Quick Release Pin
8	Long Side Drive Guard (2x)
9	Cover
10	Mesh Sleeve
11	Hose Clamp (2x)
12	Shaft
13	Shaft Guard
14	Plug
15	Gear Reducer

1. Gather installation components (**Figure 10**)



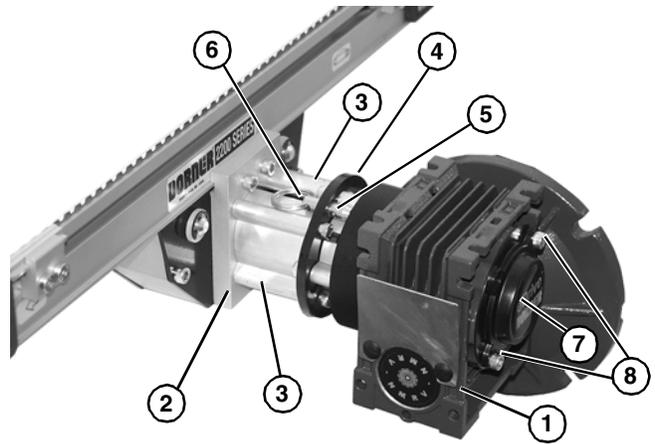
**Figure 10**

2. Install protective cover (**Figure 11, item 1**) and two clamps (**Figure 11, item 2**) onto shaft, and install assembly between conveyor sections (**Figure 11, item 3**).



**Figure 11**

3. Raise gearmotor assembly (**Figure 12, item 1**) into position on shaft (just installed) and on mounting block (**Figure 12, item 2**). Install two long side drive couplings (**Figure 12, item 3**) and mounting ring (**Figure 12, item 4**) with four M6x70 socket head screws (**Figure 12, item 5**). Tighten screws to 60 in-lb (7 Nm).



**Figure 12**

4. Install quick release pin (**Figure 12, item 6**) into mounting ring to secure position.

5. Install motor onto gearmotor assembly (**Figure 12, item 1**). Tighten M6 motor mounting screws to 60 in-lb (7 Nm).

6. Install cover (**Figure 12, item 7**) with two M4 socket head screws (**Figure 12, item 8**). Tighten screws enough to secure cover.

# 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

<b>⚠ WARNING</b>

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

1. Remove four (4) screws (Figure 13, item 1) and remove cover (Figure 13, item 2).

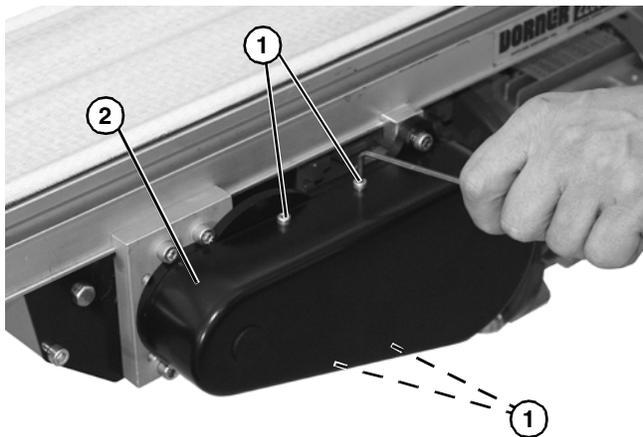


Figure 13

2. Loosen tensioner (Figure 14, item 1).

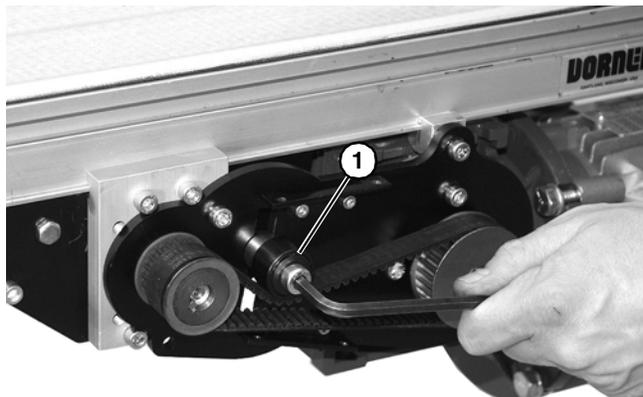


Figure 14

3. Depending direction of conveyor belt travel (Figure 15, item 1 or 2), position belt tensioner (Figure 15, item 3) as shown. Tension belt to obtain 0.125" (3 mm) deflection for 1.0 lb (456 grams) of force at belt mid-point (Figure 15, item 4). Tighten tensioner screw to 103 in-lb (12 Nm).

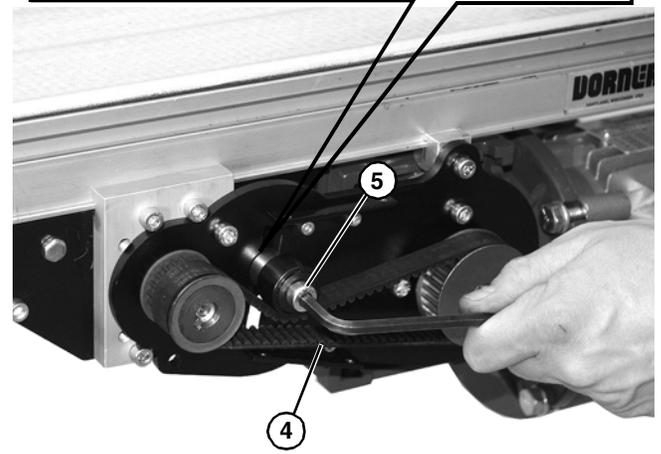
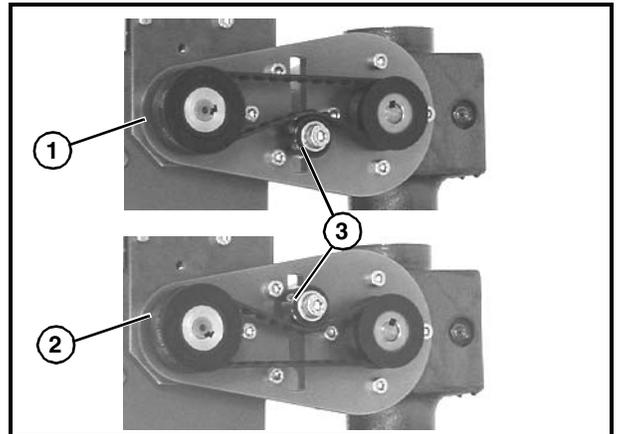


Figure 15

4. Install cover (Figure 13, item 2) with four (4) screws (Figure 13, item 1). Tighten screws to 35 in-lb (4 Nm).

## Timing Belt Replacement

<b>⚠ WARNING</b>

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

1. Remove four (4) screws (Figure 13, item 1) and remove cover (Figure 13, item 2).
2. Loosen tensioner (Figure 14, item 1).

# Preventive Maintenance and Adjustment

- Remove timing belt (Figure 16, item 1).

## NOTE

If timing belt does not slide over driven pulley (Figure 16, item 3) flange, loosen driven pulley set screws and remove pulley with belt (Figure 16, item 1). For re-installation, see steps 7 and 8 of "Bottom Mount Mid Drive Assembly" story on page 8.

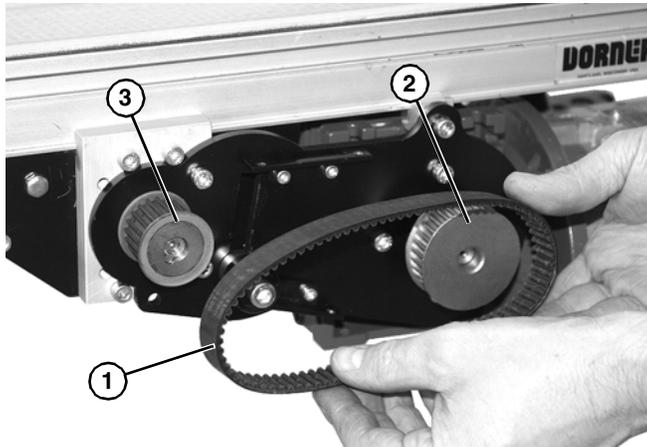


Figure 16

- Install new timing belt around drive pulley (Figure 16, item 2) and driven pulley (Figure 16, item 3).
- Depending direction of conveyor belt travel (Figure 15, item 1 or 2), position belt tensioner (Figure 15, item 3) as shown. Tension belt to obtain 0.125" (3 mm) deflection for 1.0 lb (456 grams) of force at belt mid-point (Figure 15, item 4). Tighten tensioner screw to 103 in-lb (12 Nm).
- Install cover (Figure 13, item 1) with four (4) screws (Figure 13, item 2). Tighten screws to 35 in-lb (4 Nm).

## Drive or Driven Pulley Replacement

### WARNING



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

- Complete steps 1 through 3 of "Timing Belt Replacement" section on page 11.
- Loosen set screws and remove drive or driven pulley.

## NOTE

If drive pulley (Figure 16, item 2) is replaced, wrap timing belt around drive pulley and complete step 3.

- Complete steps 7 through 9 of "Bottom Mount Mid Drive Assembly" story on page 8.

## Gear Reducer Replacement

### WARNING



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

- Remove four (4) screws (Figure 13, item 2) and remove cover (Figure 13, item 1).
- Loosen tensioner (Figure 14, item 1).
- Loosen driven pulley set screws and remove driven pulley (Figure 17, item 1) and timing belt (Figure 17, item 2).

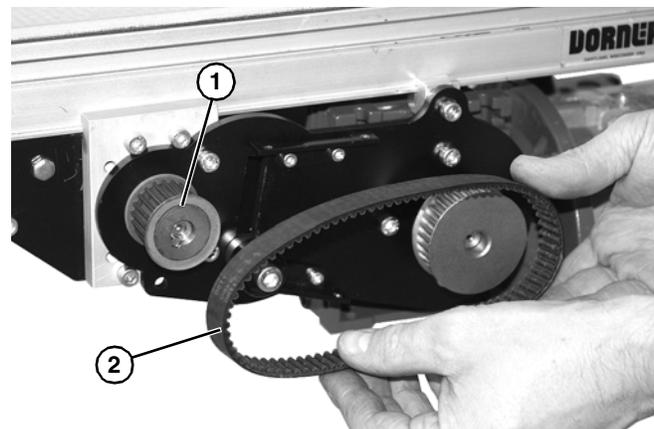
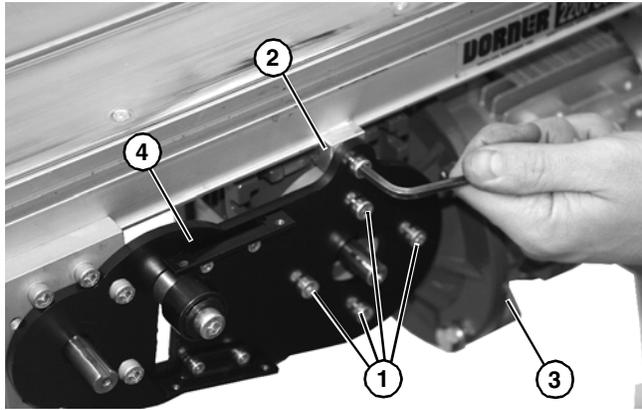


Figure 17

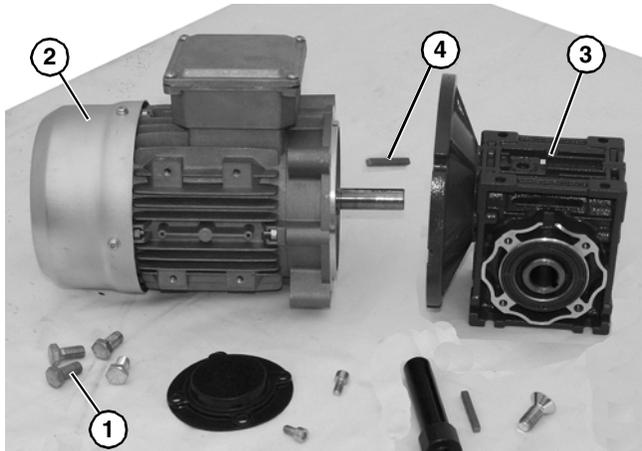
# Preventive Maintenance and Adjustment

4. Remove four (4) gear reducer mounting screws (**Figure 18, item 1**) and retaining clip (**Figure 18, item 2**). Remove gearmotor (**Figure 18, item 3**) from mounting plate (**Figure 18, item 4**).



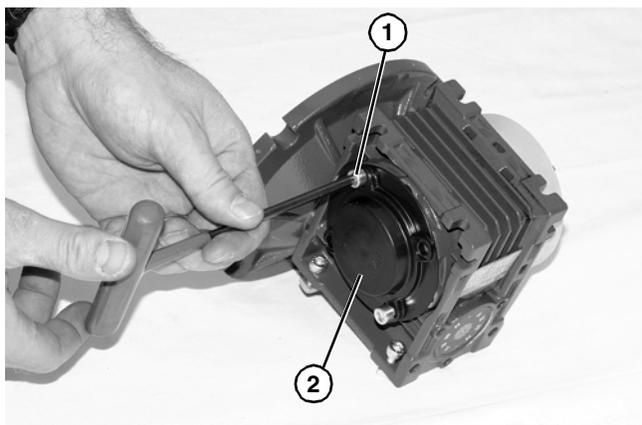
**Figure 18**

5. Remove four screws (**Figure 19, item 1**). Detach motor (**Figure 19, item 2**) from gear reducer (**Figure 19, item 3**). Retain shaft key (**Figure 19, item 4**).



**Figure 19**

6. Remove two (2) screws (**Figure 20, item 1**) and detach output shaft cover (**Figure 20, item 2**).



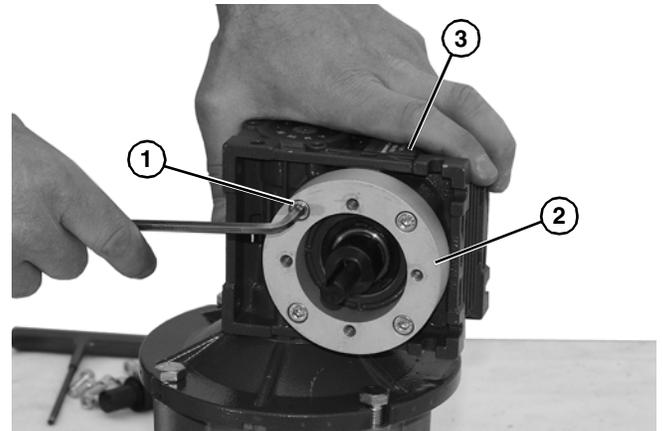
**Figure 20**

## NOTE

*Follow proper procedure below depending upon old or new style gearmotor assembly.*

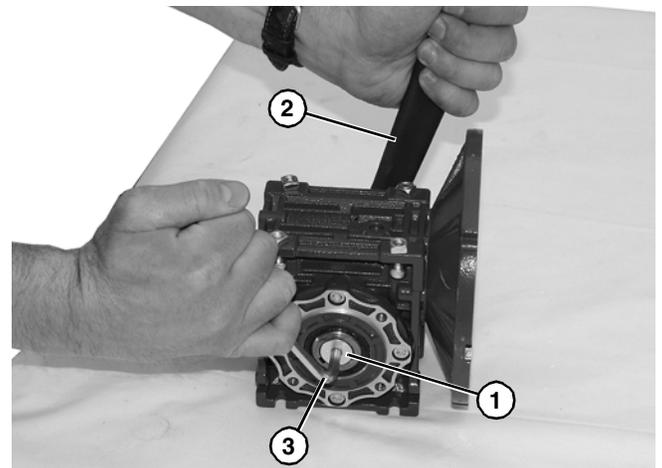
### For e-Drive style gearmotor

1. Loosen four (4) socket head screws (**Figure 21, item 1**) and detach spacer (**Figure 21, item 2**) from gear reducer (**Figure 21, item 3**).



**Figure 21**

2. Loosen driveshaft bolt (**Figure 22, item 1**).

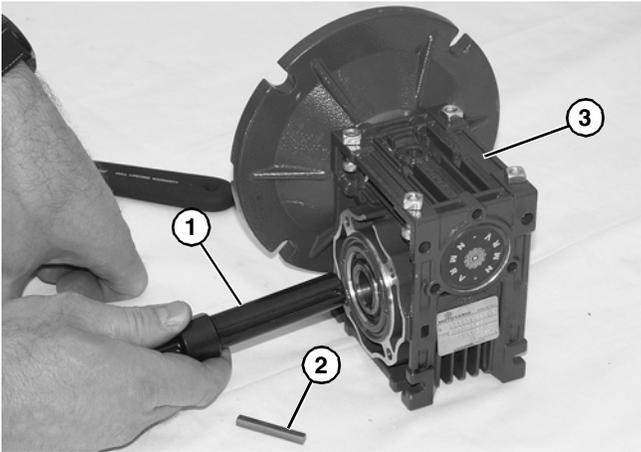


**Figure 22**

3. Hold the driveshaft with a wrench (**Figure 22, item 2**) as shown to keep shaft from turning, while removing screw with hex wrench (**Figure 22, item 3**).

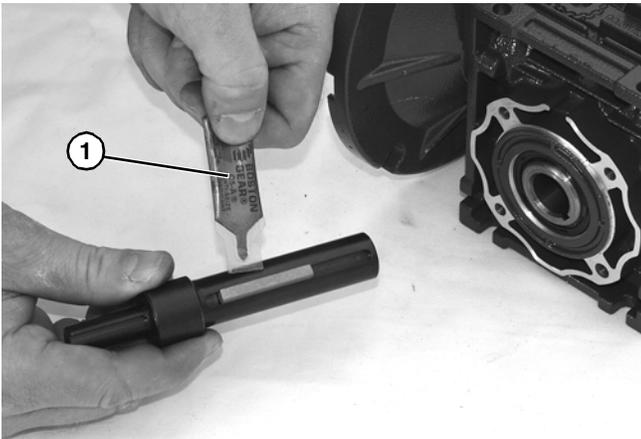
# Preventive Maintenance and Adjustment

- Remove driveshaft (**Figure 23, item 1**) and key (**Figure 23, item 2**).



**Figure 23**

- Replace gear reducer (**Figure 23, item 3**).
- Apply anti-seize (**Figure 24, item 1**) to shaft.



**Figure 24**

- Replace the original shaft components into new gear reducer (**Figure 23**).

## IMPORTANT

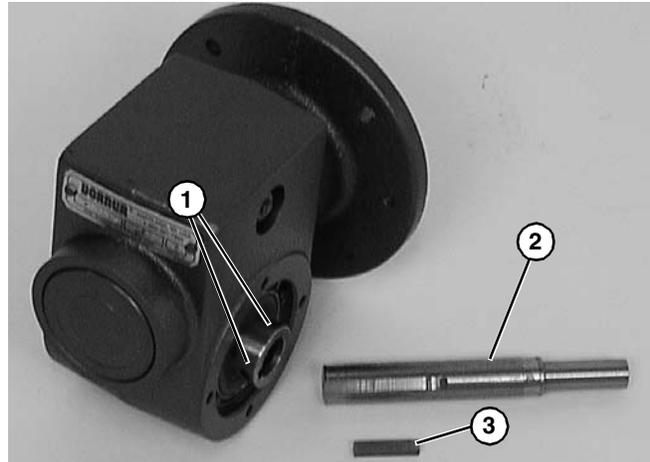
*Be extremely careful when coupling motor to gear reducer. Avoid misalignment and forcing the connection causing possible permanent gear reducer seal damage.*

- Hold the driveshaft with a wrench (**Figure 22, item 2**) as shown to keep shaft from turning, while installing screw with hex wrench (**Figure 22, item 3**). Tighten screw to 100 in-lb (11.5 Nm) for 42CZ or 350 in-lb (39.5 Nm) for 52C, 63B5 and 71B5.
- Apply anti-seize to motor shaft before assembling to gearbox. With key (**Figure 19, item 4**) in keyway, slide motor (**Figure 19, item 2**) and gear reducer (**Figure 19, item 3**) together. Install screws (**Figure 19, item 1**) and tighten.

- Install spacer (**Figure 21, item 2**) onto gear reducer (**Figure 21, item 3**) with four (4) socket head screws (**Figure 21, item 1**).
- Complete steps 7 through 9 of "Bottom Mount Mid Drive Assembly" story on page 8.

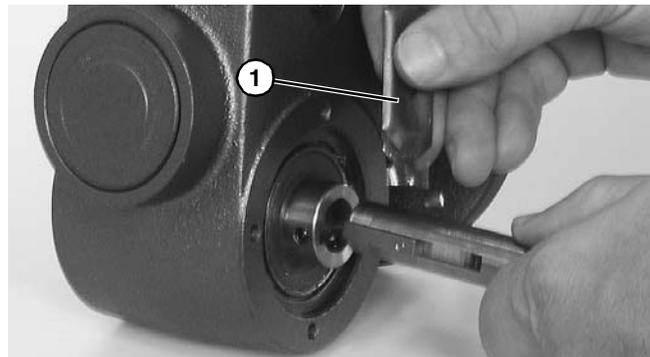
## For old style gearmotor prior to June 2011

- Loosen six (6) set screws (**Figure 25, item 1**). Remove drive shaft (**Figure 25, item 2**) and key (**Figure 25, item 3**).



**Figure 25**

- Apply anti-seize (**Figure 26, item 1**) to shaft.



**Figure 26**

- Replace the original shaft components into new gear reducer (**Figure 25**).

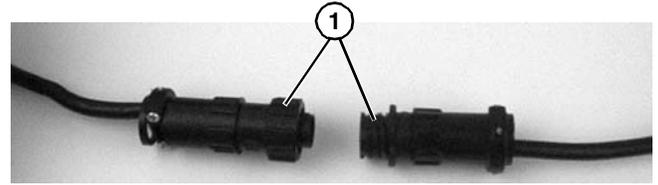
## IMPORTANT

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

# Preventive Maintenance and Adjustment

4. Apply anti-seize to motor shaft before assembling to gearbox. With key (**Figure 29, item 4**) in keyway, slide motor (**Figure 29, item 2**) and gear reducer (**Figure 29, item 3**) together. Install screws (**Figure 29, item 1**) and tighten.
5. Complete steps 7 through 8 of "Bottom Mount Mid Drive Assembly" story on page 8.

3. For DC variable speed motor, unplug motor cord at disconnect (**Figure 28, item 1**).

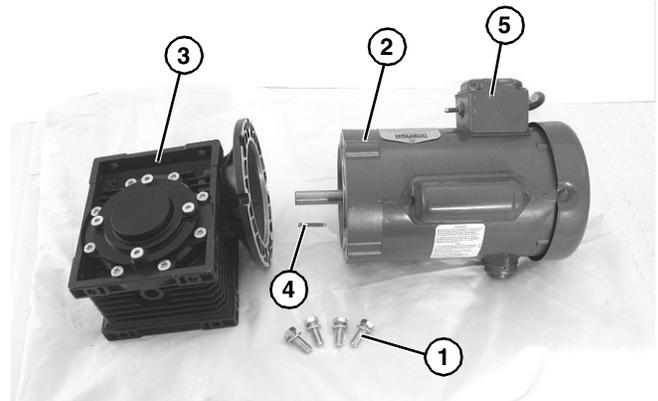


**Figure 28**

## Motor Replacement

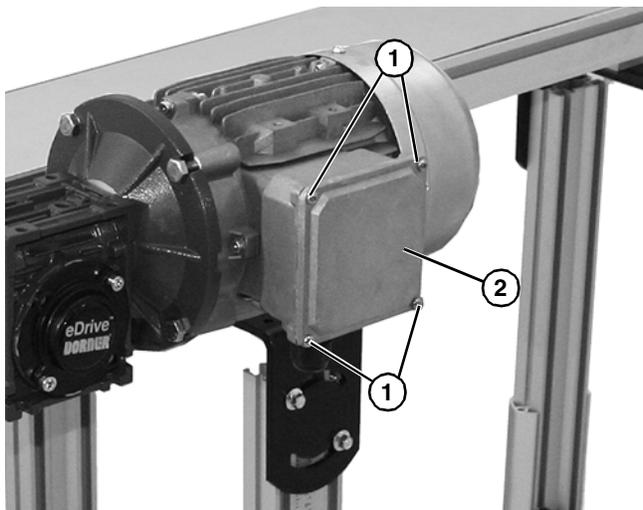
<b>⚠ WARNING</b>
Exposed moving parts can cause severe injury. <b>LOCK OUT POWER</b> before removing guards or performing maintenance.
<b>⚠ DANGER</b>
Hazardous voltage will cause severe injury or death. <b>LOCK OUT POWER BEFORE WIRING.</b>

4. Remove four (4) screws (**Figure 29, item 1**). Detach motor (**Figure 29, item 2**) from gear reducer (**Figure 29, item 3**). Retain motor output shaft key (**Figure 29, item 4**).



**Figure 29**

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



**Figure 27**

- b. Record wire colors on terminals 1, 2 and 3. Loosen wire nuts and remove wires 1, 2 and 3.
- c. Loosen cord grip and remove cord.

<b>IMPORTANT</b>
<i>Be extremely careful when coupling motor to gear reducer. Avoid misalignment and forcing the connection causing possible permanent gear reducer seal damage.</i>

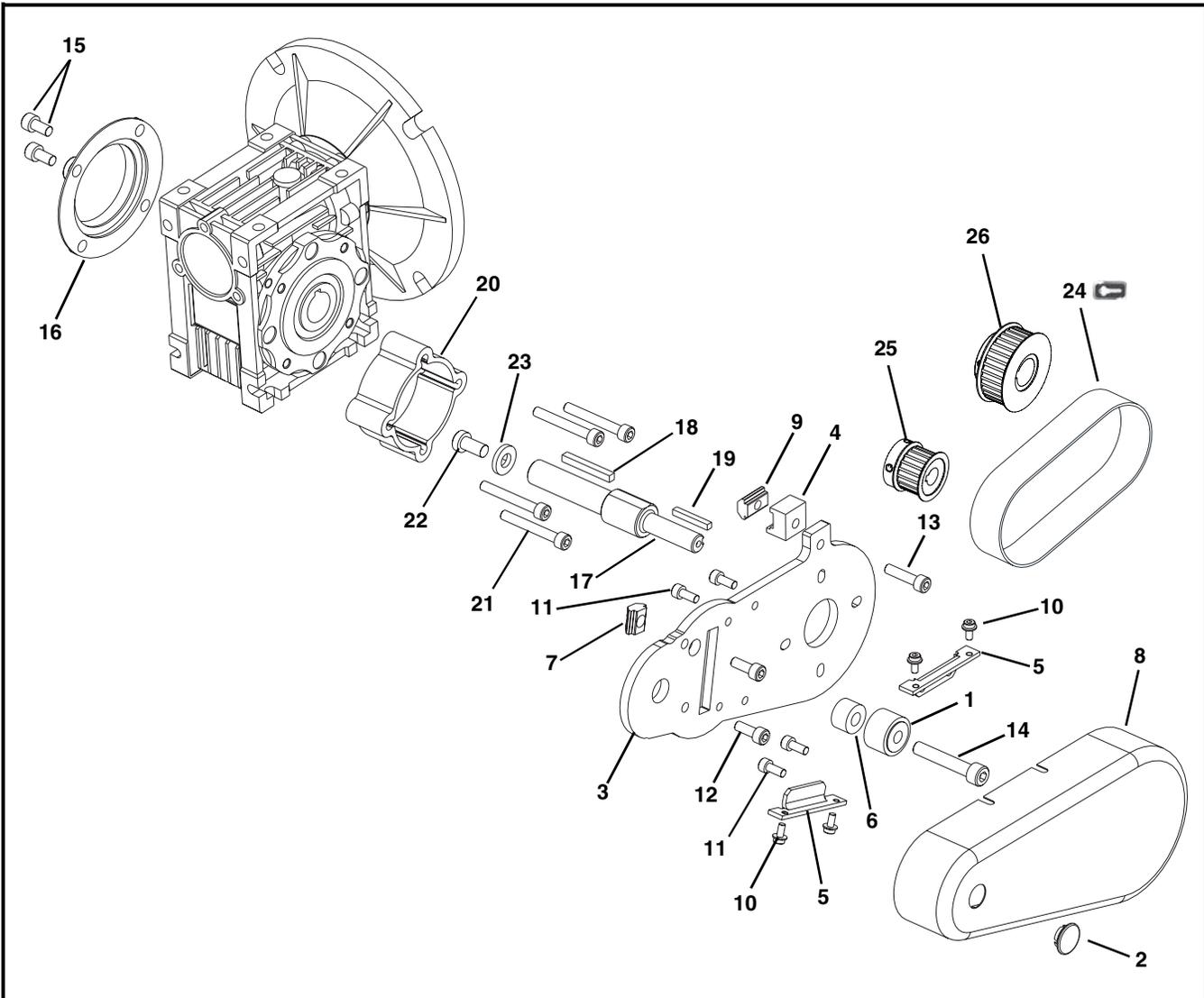
5. With key (**Figure 29, item 4**) in keyway, slide motor (**Figure 29, item 2**) and gear reducer (**Figure 29, item 3**) together, noting where position of switch (**Figure 29, item 5**) will be during installation on conveyor.
6. Install screws (**Figure 29, item 1**) and tighten to 60 in-lb (7 Nm).
7. Replace wiring:
  - For a single phase motor, reverse step 1.
  - For a three phase or VFD variable speed motor, reverse step 2.
  - For a DC variable speed motor, reverse step 3.

# 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.

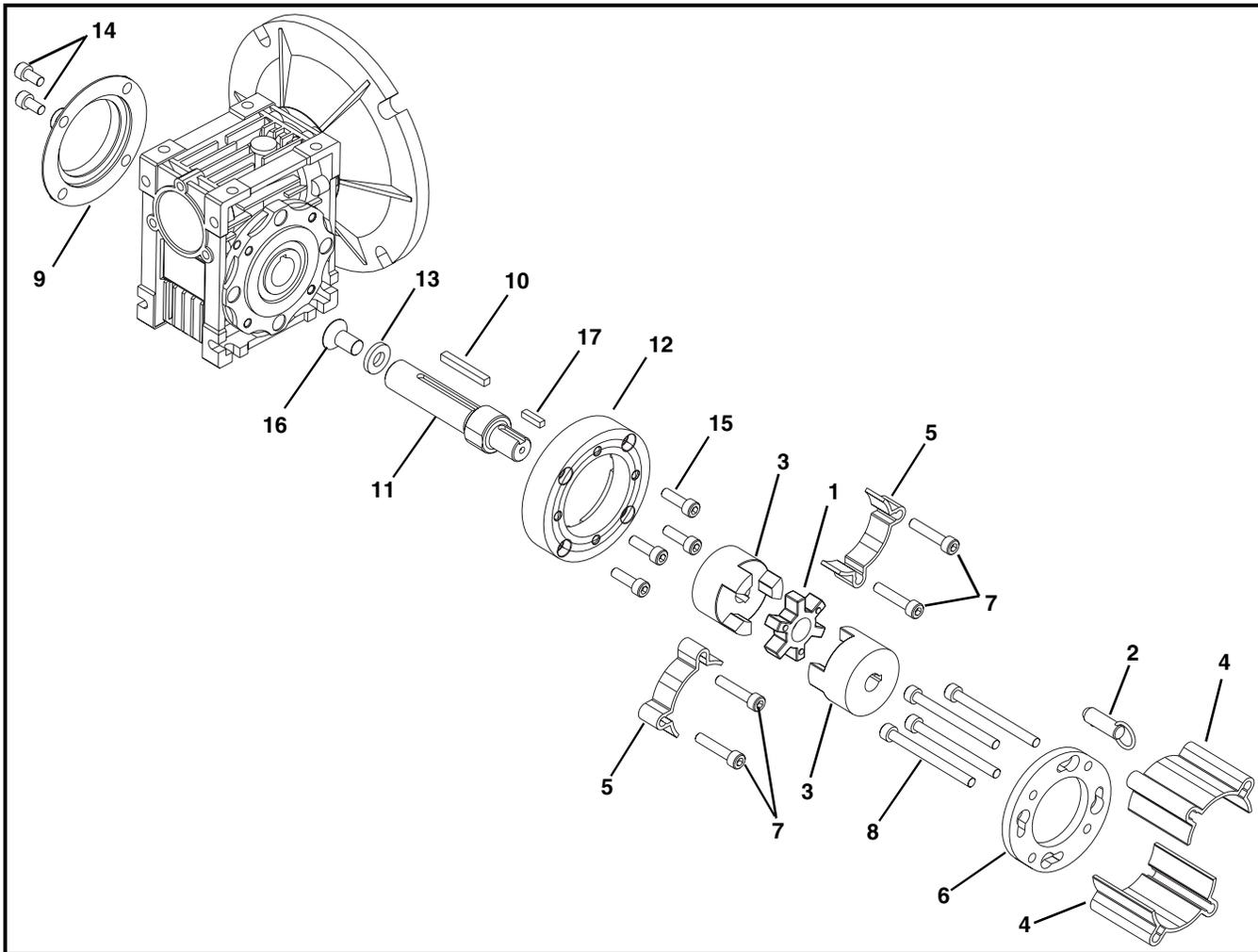
## Bottom Mount Mid Drive Assembly



Item	Part Number	Description
1	802-046	Bearing Cam
2	807-226	Snap-out Plastic Plug
3	201894	Mounting Plate
4	202481	Frame Clamp Block
5	450375	Mounting Cover Bracket
6	450445	Spacer
7	202390M	Nut
8	450376M	Drive Guard
9	639971M	Drop-In Tee Bar
10	920481M	Socket Head Screw, M4-0.70 x 8 mm
11	920512M	Socket Head Screw, M5-0.70 x 12 mm
12	920616M	Socket Head Screw, M6-1.00 x 16 mm
13	920625M	Socket Head Screw, M6-1.00 x 25 mm
14	920845M	Socket Head Screw, M8-1.25 x 45 mm
15	920612M	Socket Head Screw, M6-1.00 x 12 mm
16	807-2059	Cover (for 42CZ C Face Gearmotors)
	807-2016	Cover (for 56 C Face Gearmotors)
17	202272	Output Shaft (for 42CZ C Face Gearmotors)
	350122	Output Shaft (for 56 C Face Gearmotors)
18	912-084	Square Key, 0.188 x 1.50
19	980422M	Square Key 4 mm x 22 mm
20	202270	Spacer (for 42CZ C Face Gearmotors)
	350115	Spacer (for 56 C Face Gearmotors)
21	920645M	Socket Head Screw, M6-1.00 x 12 mm
22	920893M	Low Head Cap Screw, M8-1.25 x 16 mm (for 42CZ C Face Gearmotors)
	931020M	Flat Head Screw, M10-0.50 x 20 mm (for 56 C Face Gearmotors)
23	605280P	Washer (for 42CZ C Face Gearmotors)
24	814-104	Timing Belt, 15mm W x 450mm 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
	814-064	Timing Belt, 15mm W x 535mm L
	814-099	Timing Belt, 15mm W x 565mm L
25	450366MP	Driven Pulley, 22Tooth, 12mm bore
	450367MP	Driven Pulley, 28Tooth, 12mm bore
	450368MP	Driven Pulley, 32Tooth, 12mm bore
26	450434	Drive Pulley, 22Tooth, 0.75" bore
	450435	Drive Pulley, 28Tooth, 0.75" bore
	450436	Drive Pulley, 32Tooth, 0.75" bore
	450437	Drive Pulley, 44Tooth, 0.75" bore
	450438	Drive Pulley, 48Tooth, 0.75" bore
	450439	Drive Pulley, 60Tooth, 0.75" bore

# Service Parts

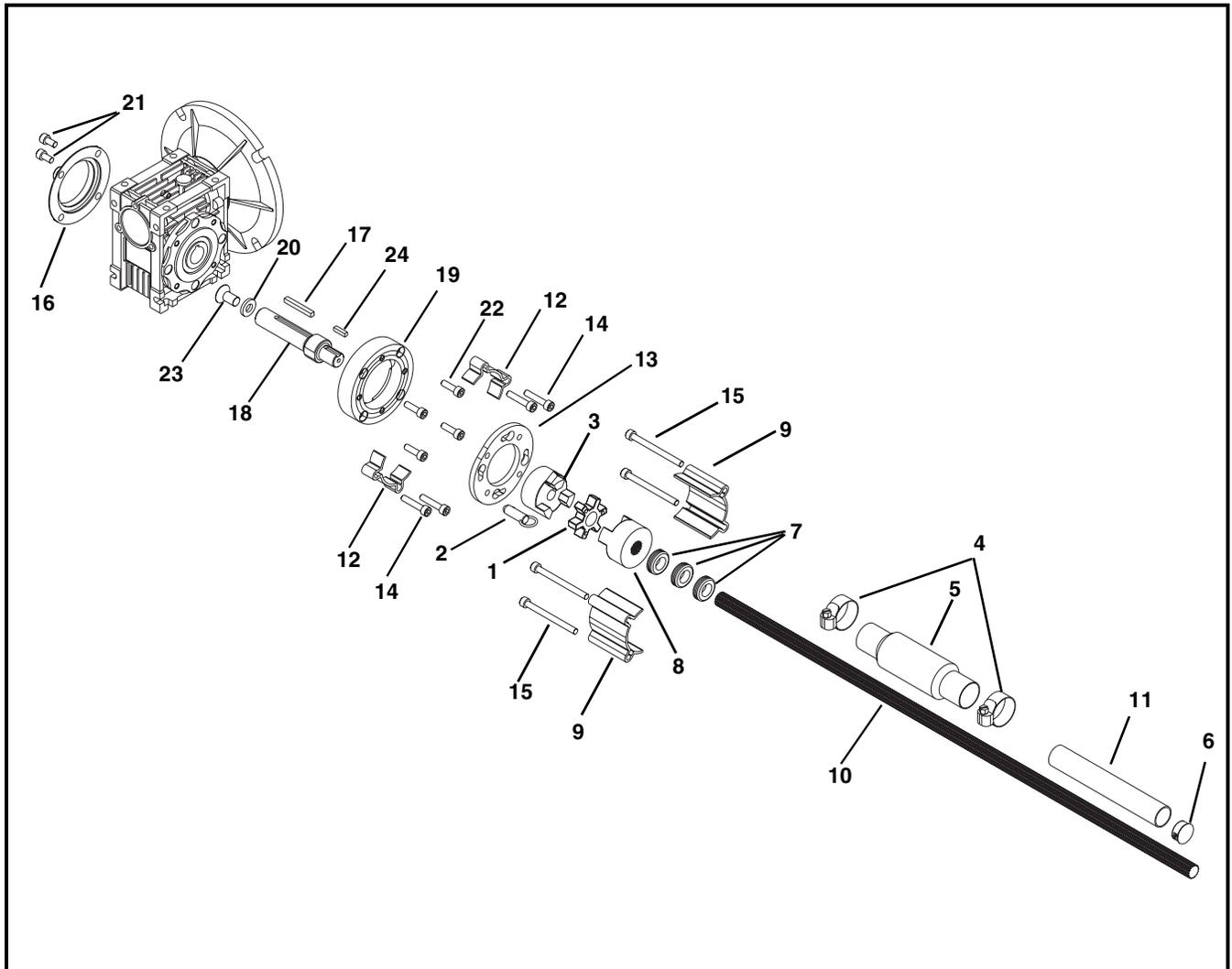
## Side Mount Mid Drive Assembly



Item	Part Number	Description
1	807-1143	3-Jaw Spider
2	807-1169	Quick Release Pin
3	807-1566	3 Jaw Coupling (x2)
4	202359	Long Side Drive Guard (x2)
5	301092	Short Side Drive Guard (x2)
6	301094	Mounting Ring
7	920630M	Socket Head Screw, M6-1.00 x 30 mm
8	920670M	Socket Head Screw, M6-1.00 x 70 mm
9	807-2059	Cover (for 42CZ C Face Gearmotors)
	807-2016	Cover (for 56 C Face Gearmotors)
10	912-084	Square Key, 0.188 x 1.50
11	202273	Output Shaft (for 42CZ C Face Gearmotors)
	350120	Output Shaft (for 56 C Face Gearmotors)
12	400026	Spacer Ring (for 42CZ C Face Gearmotors)
	350115	Adapter Ring (for 56 C Face Gearmotors)
13	605280P	Washer (for 42CZ C Face Gearmotors)

Item	Part Number	Description
14	920612M	Socket Head Screw, M6-1.00 x 12 mm
15	920620M	Socket Head Screw, M6-1.00 x 20 mm (for 56 C Face Gearmotors)
16	920893M	Low Head Cap Screw, M8-1.25 x 16 mm (for 42CZ C Face Gearmotors)
	931020M	Flat Head Screw, M10-0.50 x 20 mm (for 56 C Face Gearmotors)
17	980416M	Square Key, 4 mm x 16 mm

## Gang Side Mount Mid Drive Assembly



Item	Part Number	Description
1	807-1143	3-Jaw Spider
2	807-1169	Quick Release Pin
3	807-1566	3-Jaw Coupling, 12 mm
4	807-2109	Hose Clamp
5	807-2110	Mesh Sleeve
6	207-2113	Plug
7	812-079	Grommet
8	202358	3-Jaw Coupling, 0.60"
9	202359	Long Side Drive Guard (x2)
10	202432- <u>LLLL</u>	Shaft
11	202462- <u>LLLL</u>	Shaft Guard
12	301092	Short Side Drive Guard (x2)
13	301094	Mounting Ring
14	920630M	Socket Head Screw, M6-1.00 x 30 mm
15	920670M	Socket Head Screw, M6-1.00 x 70 mm
16	807-2059	Cover (for 42CZ C Face Gearmotors)
	807-2016	Cover (for 56 C Face Gearmotors)
17	912-084	Square Key, 0.188 x 1.50

Item	Part Number	Description
18	202273	Output Shaft (for 42CZ C Face Gearmotors)
	350120	Output Shaft (for 56 C Face Gearmotors)
19	400026	Spacer Ring (for 42CZ C Face Gearmotors)
	350115	Adapter Ring (for 56 C Face Gearmotors)
20	605280P	Washer (for 42CZ C Face Gearmotors)
21	920612M	Socket Head Screw, M6-1.00 x 12 mm
22	920620M	Socket Head Screw, M6-1.00 x 20 mm (for 56 C Face Gearmotors)
23	920893M	Low Head Cap Screw, M8-1.25 x 16 mm (for 42CZ C Face Gearmotors)
	931020M	Flat Head Screw, M10-0.50 x 20 mm (for 56 C Face Gearmotors)
24	980416M	Square Key, 4 mm x 16 mm
<u>LLLL</u> = Length in inches with 2 decimal places.		
Length Example: Length = 35.25" <u>LLLL</u> = 03525		

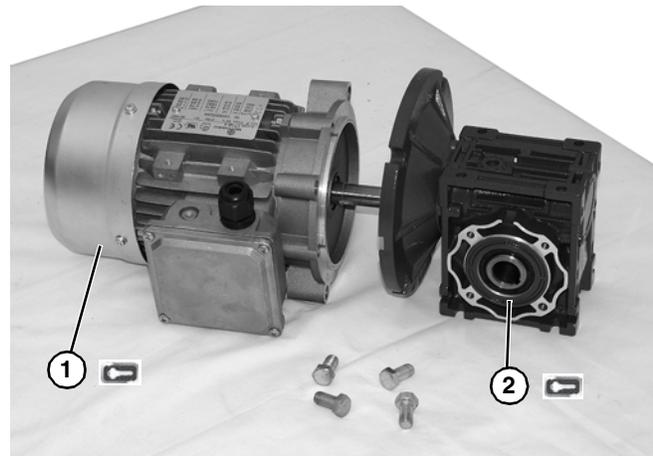
# Service Parts

## U.S. Version Gearmotors



Item	Part Number	Description
1	62MES411FN	Motor, 0.25HP, (0.19 Kw), 115/230 Volts, 60 Hz, 1-Phase
	62MES423FN	Motor, 0.25HP, (0.19 Kw), 208-230/460 Volts, 60 Hz, 3-Phase
	62MSD3DEN	Motor, 0.25HP, (0.19 Kw), 130 VDC
	62MEH423FN	Motor, 0.50HP, (0.37 Kw), 115/230 Volts, 60 Hz, 1-Phase
	32MEH423FN	Motor, 0.50HP, (0.37 Kw), 208-230/460 Volts, 60 Hz, 3-Phase
	62MHD9DEN	Motor, 0.50HP, (0.37 Kw), 90 VDC
	32MES423EN	Motor, 0.50HP, (0.37 Kw), 230 Volts, 3-Phase Inverter Duty
2	32M005EL	Gear Reducer, 5:1, NEMA 42 CZ
	32M010EL	Gear Reducer, 10:1, NEMA 42 CZ
	32M020EL	Gear Reducer, 20:1, NEMA 42 CZ
	32M040EL	Gear Reducer, 40:1, NEMA 42 CZ
	32M060EL	Gear Reducer, 60:1, NEMA 42 CZ
	32M005ES	Gear Reducer, 5:1, 56C
	32M010ES	Gear Reducer, 10:1, 56C
	32M020ES	Gear Reducer, 20:1, 56C
	32M040ES	Gear Reducer, 40:1, 56C
	32M060ES	Gear Reducer, 60:1, 56C

## CE Version Gearmotors



Item	Part Number	Description
1	826-284	Motor, 0.19 Kw 230 Volts, 1400 RPM 50 Hz, 3-Phase
	826-285	Motor, 0.19 Kw 230/400 Volts, 1400 RPM 50 Hz, 3-Phase
2	62Z005ES	Gear Reducer, 5:1, 63 B5
	62Z010ES	Gear Reducer, 10:1, 63 B5
	62Z020ES	Gear Reducer, 20:1, 63 B5
	62Z040ES	Gear Reducer, 40:1, 63 B5
	62Z060ES	Gear Reducer, 60:1, 63 B5



# 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.



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