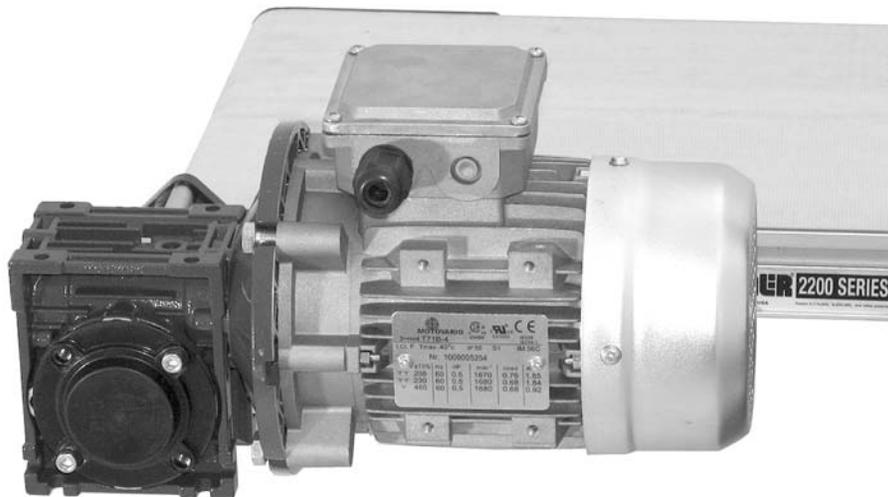




2100, 2200, 2300, 4100, 6200, MPB Series Side Mount Drive Package for Standard Load 90° Industrial Gearmotors

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

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

Dorner 2200, 6200 & MPB Series conveyors are covered by patent number 5,174,435, 6,109,427, 6,298,981, 6,422,382, 6,685,009 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

⚠ 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 conveyor components.

1	Conveyor
2	Mounting Bracket
3	Gearmotor
4	Coupling

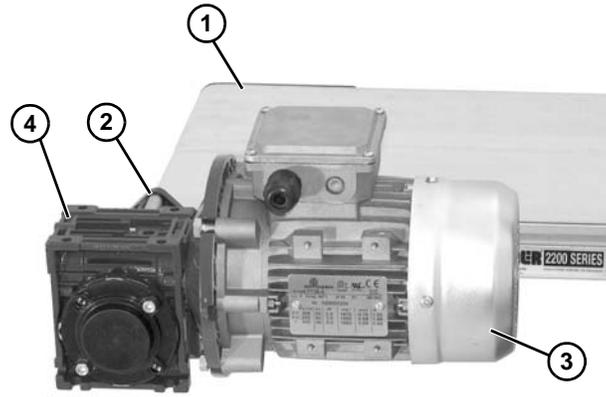


Figure 1

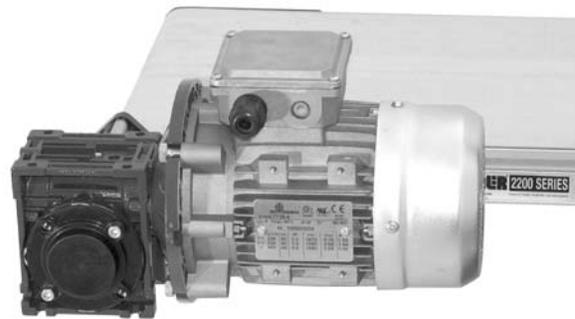
NOTE

The 90° industrial gearhead changed configuration in 2011. See below for configuration details.



Mount Packages with Old Style Gearmotors prior to June 2011

Figure 2

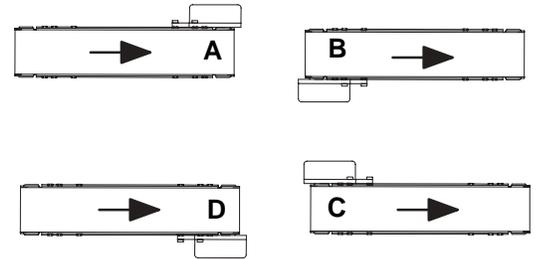
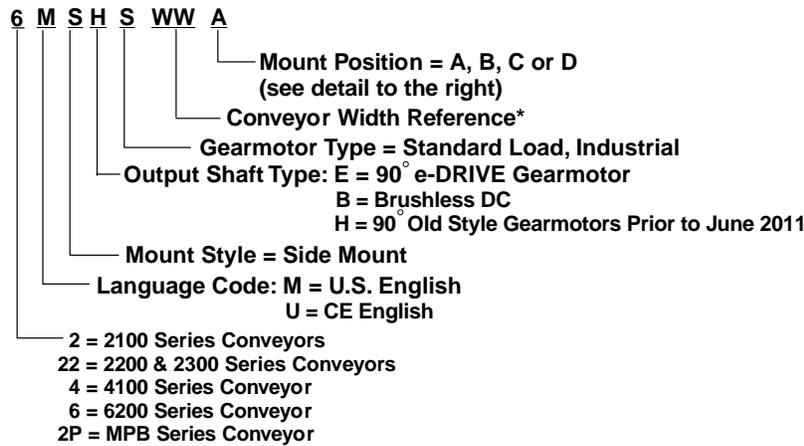


Mount Packages with eDrive Gearmotors

Figure 3

Gearmotor Mounting Package Models:

Example:



* See Ordering and Specifications Catalog for details.

Table 1: Gearmotor Specifications

U.S. Version

	Single Phase	Three Phase	DC Variable Speed	Brushless DC
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.	*115/230 Volts D.C.
Input Frequency	60 Hz		N/A	60 Hz
Input Current	5.0 Amperes	1.2 / 0.6 Amperes	2.2 Amperes	8.8 / 3.4 Amperes
Motor RPM	1725		2500	3000
Gearmotor Ratios	5:1, 10:1, 20:1, 40:1, 60:1			
Frame Size	NEMA 42 CZ			
Motor Type	Totally Enclosed, Fan-cooled			Totally Enclosed, Non-ventilated

* Controller Inputs

CE Version

	Single Phase	Three Phase	VFD Variable Speed
Output Power	0.18 kw		
Input Voltage	230 Volts A.C.	230/400 Volts A.C.	230 Volts D.C.
Input Frequency	50 Hz		25 to 63 Hz
Input Current	1.6 Amperes	1.42 / 0.8 Amperes	1.4 Amperes
Gearmotor Ratios	5:1, 10:1, 20:1, 40:1, 60:1		
Protection Rating	IP55		
Frame Size	IEC 63 B5		

Specifications

**Table 2: RPM/Torque for Standard Load Fixed Speed 90° Gearmotors
U.S. Version (60 Hz Gearmotors)**

Gearmotors			
Part Number	RPM	In lb	N-m
32M060EL4(vp)F(n)	29	319	36
32M040EL4(vp)F(n)	43	238	26.9
32M020EL4(vp)F(n)	86	142	16
32M010EL4(vp)F(n)	173	77	8.7
32M005EL4(vp)F(n)	345	40	4.5

(vp) = voltage and phase

11 = 115 V, 1-phase

23 = 208 – 230/460 V, 3-phase

(n) = Reversing Capability

N = No Reversing Capability

R = With Reversing Capability

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

CE Version (50 Hz Gearmotors)

Gearmotors		
Part Number	RPM	N-m 1-phase/3-phase
62Z060ES4(vp)FN	23	36/36
62Z040ES4(vp)FN	35	26.9/35.5
62Z020ES4(vp)FN	70	16/21.2
62Z010ES4(vp)FN	140	11.4/17.3
62Z005ES4(vp)FN	280	4.5/5.9

(vp) = voltage and phase

21 = 230 V, 1-phase

23 = 230 V, 3-phase

43 = 400 V, 3-phase

**Table 3: RPM/Torque for Standard Load Variable Speed 90° DC Gearmotors
U.S. Version (60 Hz Gearmotors)**

Gearmotors			
Part Number	Max RPM	In-lb	N-m
32M060ELD3DEN	5-42	198	22.4
32M040ELD3DEN	8-63	163	18.4
32M020ELD3DEN	15-125	98	11.1
32M010ELD3DEN	30-250	54	6.1
32M005ELD3DEN	60-500	28	3.2

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

CE Version (50 Hz Gearmotors)

Gearmotors		
Part Number	RPM	N-m 1-phase/3-phase
62Z060ES423EN	9-23	36/36
62Z040ES423EN	14-35	26.9/35.5
62Z020ES423EN	28-70	16/21.2
62Z010ES423EN	56-140	11.4/17.3
62Z005ES423EN	111-280	4.5/5.9

Table 4: RPM/Torque for Brushless DC Gearmotors

Heavy Load Gearmotors			
Part Number	RPM	In-lb	N-m
62M060ESBDDEN	2-50	106	12.4
62M040ESBDDEN	3-75	123	14.3
62M020ESBDDEN	5-150	89	10.4
62M010ESBDDEN	10-300	49	5.7
62M005ESBDDEN	20-600	25	2.9

NOTE
<i>For belt speed other than those listed, contact factory for details.</i>

Table 5: 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 conveyor speed factor using table 5. Based on your conveyor type, select the appropriate factor.
3. Calculate belt speed:

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

2200 Series standard load variable speed 60:1 gearmotor.

Gearmotor =	32M060ELD3DEN	= 5 - 42 RPM
Speed Factor =	2200 Series	= 0.350 ft/min per RPM
Minimum Belt Speed =	5 x 0.350	= 1.75 Ft/min
Maximum Belt Speed =	42 x 0.350	= 14.70 Ft/min

Installation

Required Tools

- Hex key wrenches:
3 mm, 5 mm
- Large flat-blade screwdriver
- 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.

Installation Component List:

1	Drive Assembly
2	M6x25 Socket Head Screws (2x)

1. Typical components (**Figure 4**)

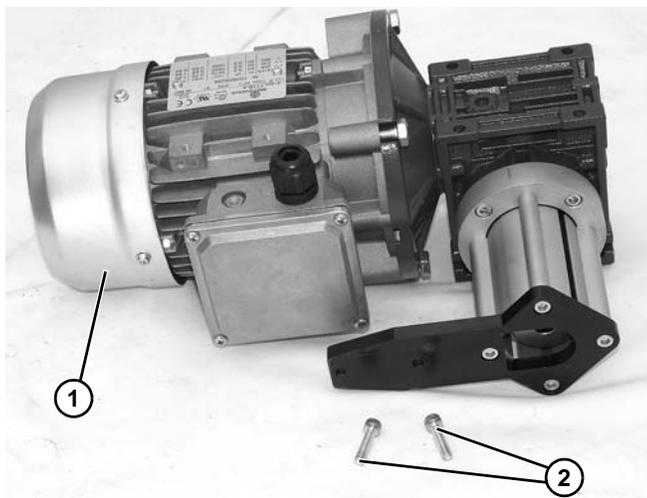


Figure 4

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

NOTE
Gearmotor may be operated in positions 1, 2, 3 or 4 (Figure 5).

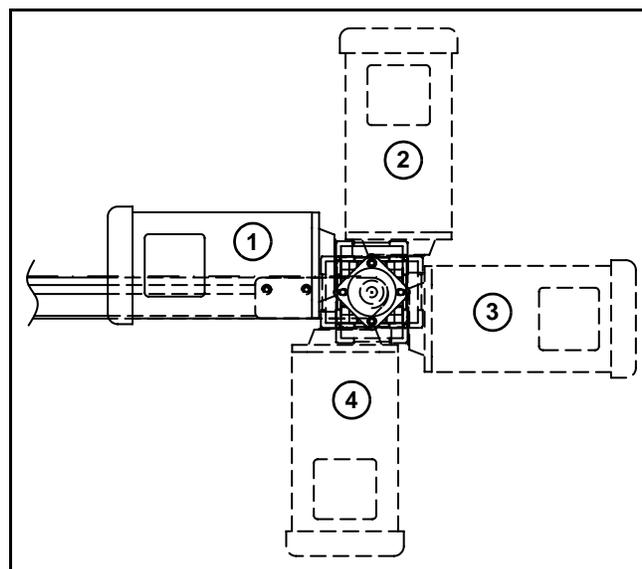


Figure 5

2. If required, change gearmotor position by removing four (4) screws (**Figure 6, item 1**). Rotate gearmotor to other position (**Figure 5**) and replace screws (**Figure 6, item 1**). Tighten to 100 in-lb (12 N-m).

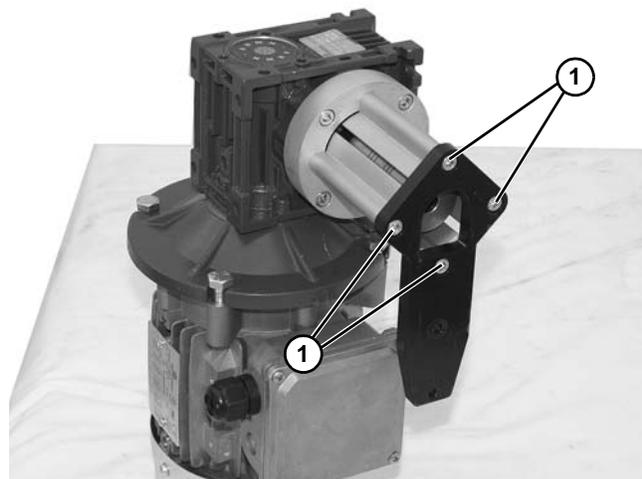


Figure 6

For 4100 and 2100 Flat Belt Conveyors

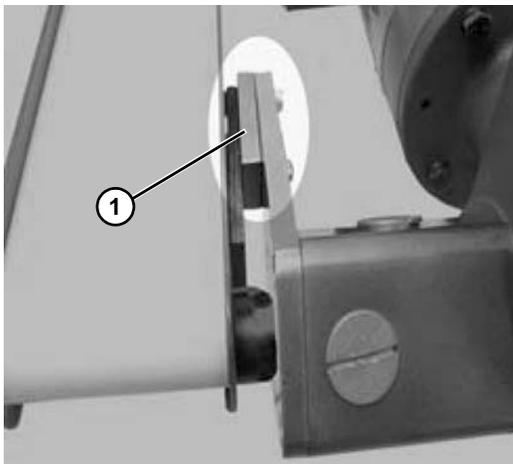
IMPORTANT

On 4 inch (95 mm) and wider conveyors, the hex broach is offset from center towards the drive side for hex shaft engagement.

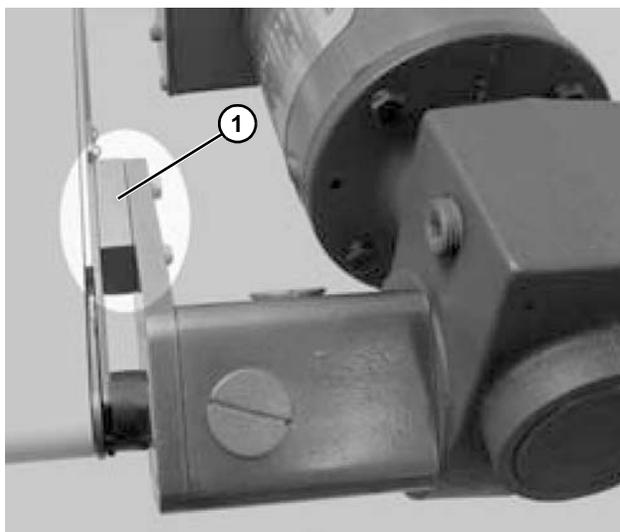
1. The figures below show gearmotor mounting for 4100 and 2100 series conveyors.

NOTE

Gearmotor bottom mount assembly is mounted to spacer plate (Figure 7, item 1) and (Figure 8, item 1).



4100 Series
Figure 7



2100 Series
Figure 8

2. Locate drive mounting position and remove two (2) screws (Figure 9, item 1).

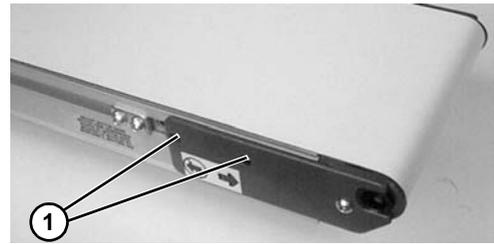


Figure 9

3. Install M6x8 socket head screw (Figure 10, item 1) and washer.

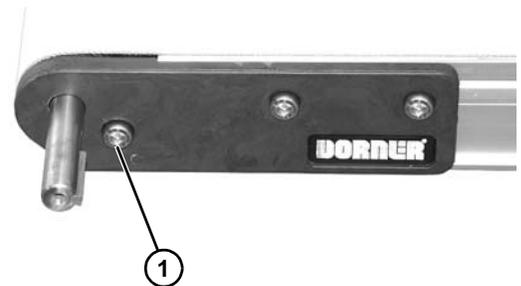


Figure 10

4. Insert hex shaft (Figure 11, item 1) into coupling.

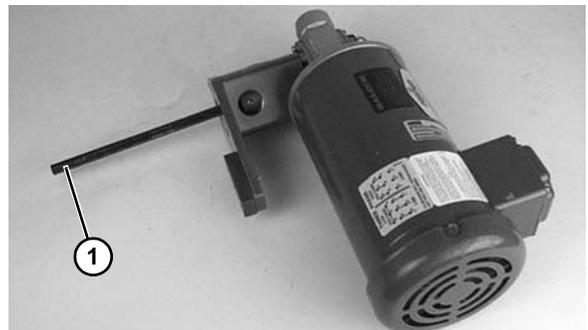


Figure 11

⚠ WARNING



Exposed moving parts can cause severe injury.

KEEP HANDS CLEAR OF DRIVE WHILE JOGGING MOTOR.

Installation

NOTE

Coupling has two (2) set screws (Figure 12, item 1).

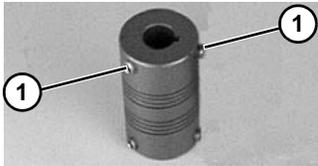


Figure 12

- Remove fan guard (Figure 13, item 1) and rotate fan to align set screws (Figure 14, item 1) with access slot (Figure 14, item 2). Tighten to 32 in-lb (3.7 N-m). Repeat for second set screw.

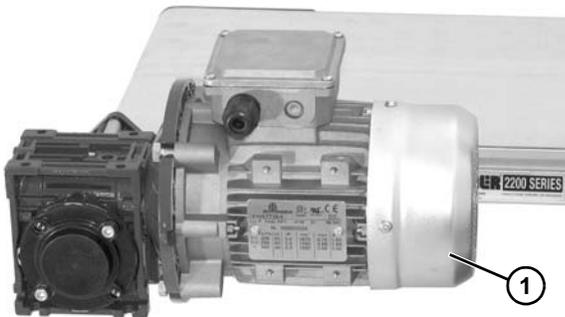


Figure 13

WARNING



Exposed moving parts can cause severe injury.

LOCK OUT POWER AFTER JOGGING MOTOR.

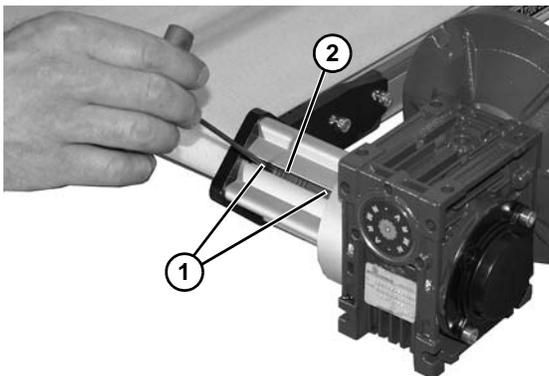


Figure 14

- Insert hex shaft (Figure 15, item 1) into drive pulley hex bushing and slide drive against conveyor. Install two (2) screws (Figure 15, item 2). Tighten to 80 in-lb (9 N-m).

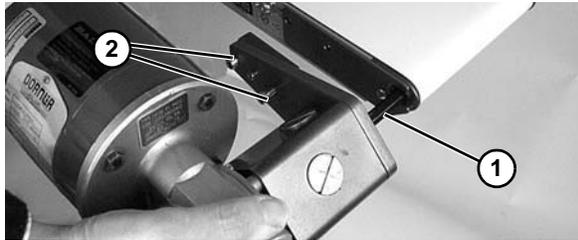


Figure 15

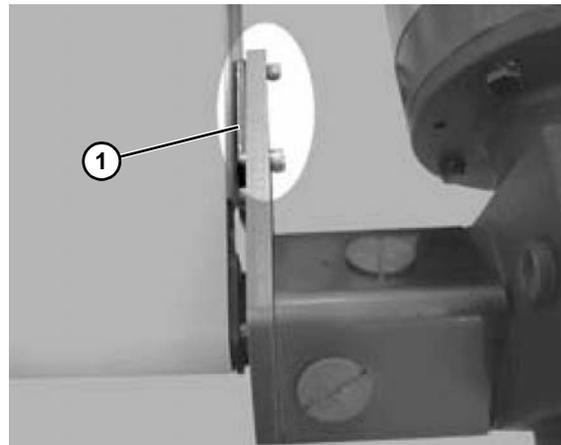
For 6200, 2200, MPB and 2100 Cleated Belt Conveyors

WARNING



Drive shaft keyway may be sharp.
HANDLE WITH CARE.

- The figures below show gearmotor mounting for 6200, 2200 and MPB series conveyors.
- For 6200 series models, gearmotor and drive plate are mounted to spacer plate (Figure 16, item 1).

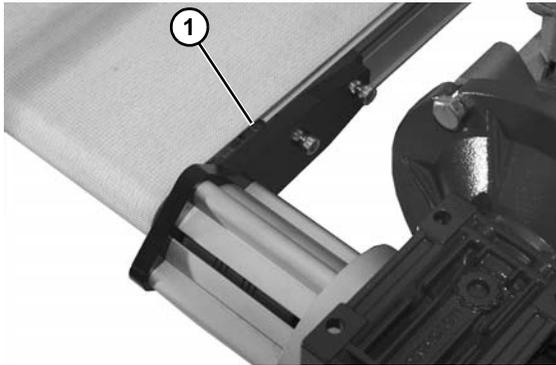


6200 Series

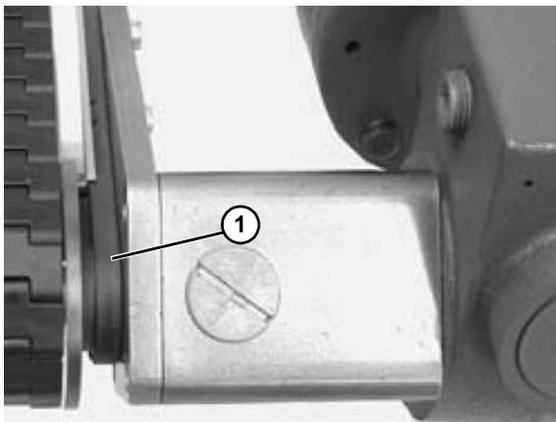
Figure 16

Installation

- For 2200 and MPB models, gearmotor and drive plate are mounted to head plate (**Figure 17, item 1**) and (**Figure 18, item 1**).



2200 Series
Figure 17



MPB Series
Figure 18

NOTE
<i>6200 conveyor shown, 2200 and MPB cleated belt conveyors similar.</i>

- Locate drive output shaft. Remove two screws (**Figure 19, item 1**). Install key (**Figure 19, item 2**).

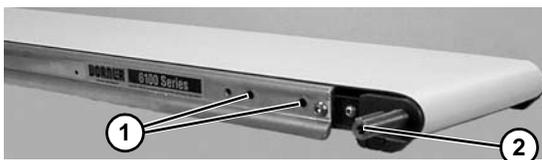


Figure 19

- Slide coupling over drive output shaft and install gear reducer assembly (**Figure 20, item 1**) with screws (**Figure 20, item 2**). Tighten to 80 in-lb (9 N-m).

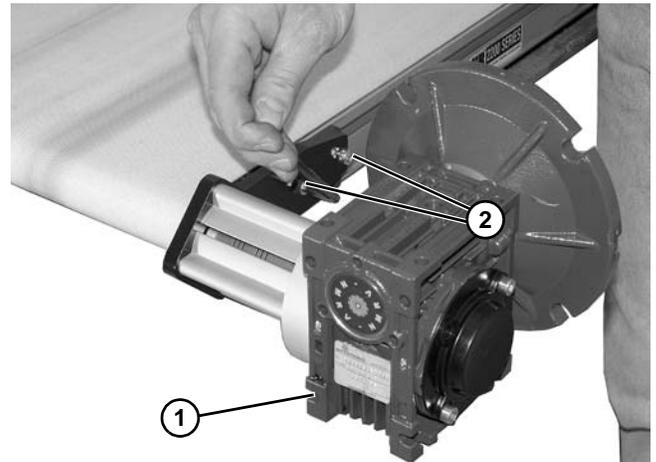


Figure 20

⚠ WARNING
<p>Exposed moving parts can cause severe injury. KEEP HANDS CLEAR OF DRIVE WHILE JOGGING MOTOR.</p>
NOTE
<p><i>Coupling has two (2) set screws (Figure 21, item 1).</i></p>

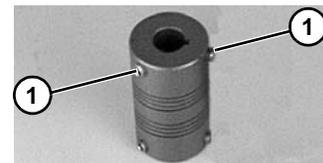


Figure 21

Installation

4. Remove fan guard (**Figure 23, item 1**), and rotate fan to align set screws (**Figure 22, item 1**) with access slot (**Figure 22, item 2**). Tighten to 32 in-lb (3.7 N-m). Repeat for second set screw.
5. Apply anti-seize compound to motor shaft before assembling to gearbox. Install motor assembly (**Figure 23, item 2**) and secure with four bolts (**Figure 23, item 3**).

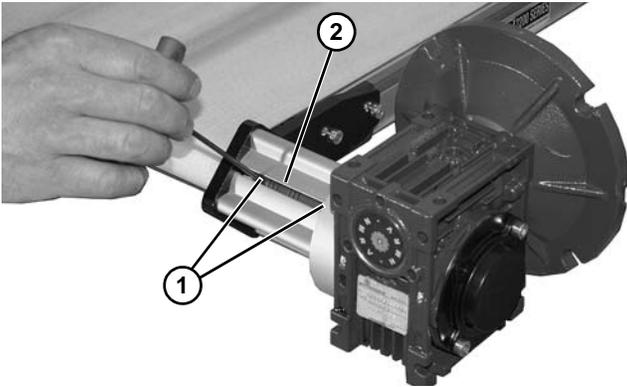


Figure 22

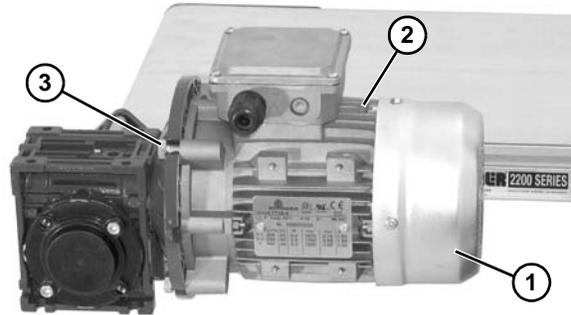


Figure 23

⚠ WARNING

Exposed moving parts can cause severe injury. LOCK OUT POWER AFTER JOGGING MOTOR.

Preventive Maintenance and Adjustment

Required Tools

- Hex key wrenches:
2.5 mm, 3 mm, 5 mm
- Large flat-blade screwdriver
- Adjustable wrench (for hexagon head screws)
- External snap ring pliers
- Torque wrench

Gear Reducer Replacement

⚠ WARNING

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

⚠ WARNING

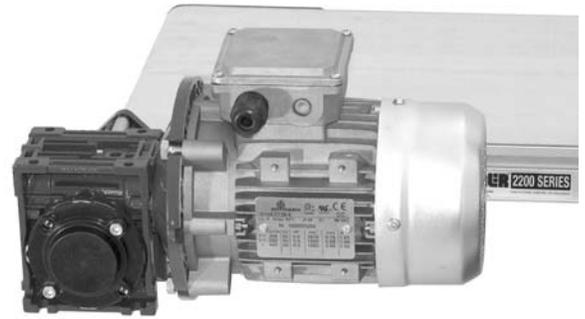
Exposed moving parts can cause severe injury. KEEP HANDS CLEAR OF DRIVE WHILE JOGGING MOTOR.

NOTE
<i>The 90° industrial gearhead changed configuration in 2011. See below for configuration details. See Service Parts section to ensure proper replacement parts are installed.</i>



Old Style Gearmotor prior to June 2011

Figure 24



eDrive Gearmotor

Figure 25

NOTE
<i>Coupling has two (2) set screws (Figure 21, item 1).</i>

1. Remove fan guard (Figure 23, item 1) and rotate fan to align set screws (Figure 22, item 1) with access slot (Figure 22, item 2). Loosen set screw. Repeat for second set screw.
2. Remove two (2) screws (Figure 20, item 2). Remove drive assembly (Figure 20, item 1).
3. Remove four (4) screws (Figure 26, item 1) and remove mounting bracket & tube (Figure 26, item 2).

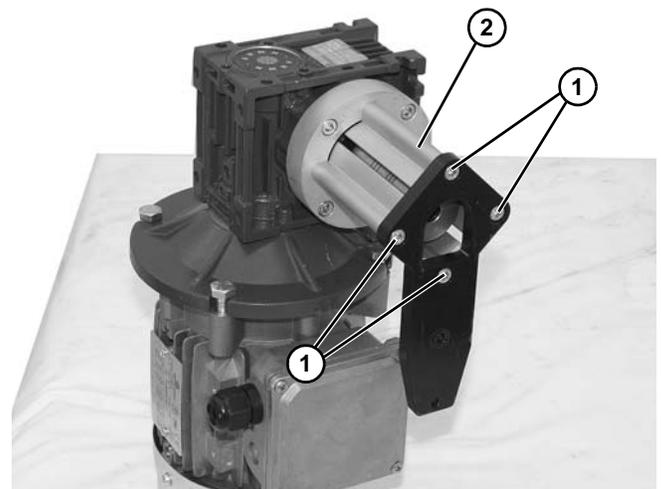


Figure 26

Preventive Maintenance and Adjustment

- Loosen two (2) set screws (**Figure 27, item 1**) and detach coupling (**Figure 27, item 2**) from gear reducer.

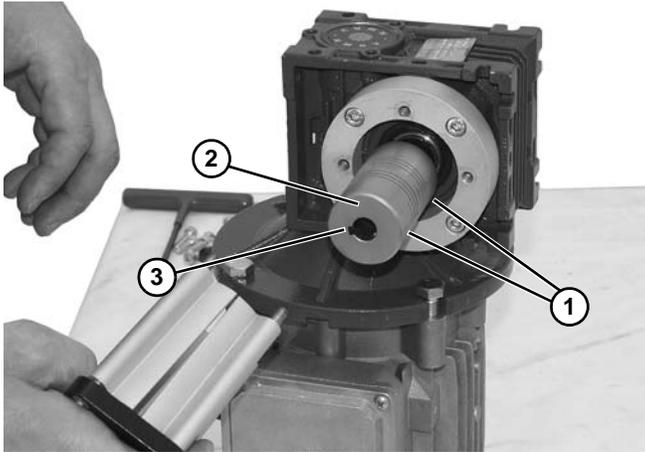


Figure 27

- Remove gear reducer output shaft key (**Figure 27, item 3**).

NOTE

Step 6 and (Figure 28, item 2) is required for standard load VFD gearmotors only.

- Loosen four (4) socket head screws (**Figure 28, item 1**) and detach spacer (**Figure 28, item 2**) from gear reducer (**Figure 28, item 3**).

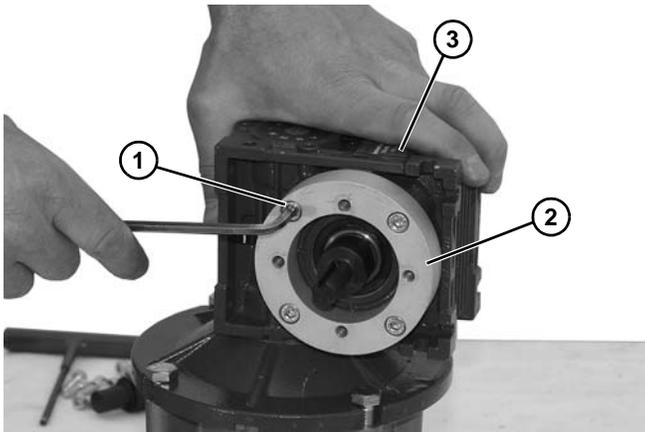


Figure 28

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

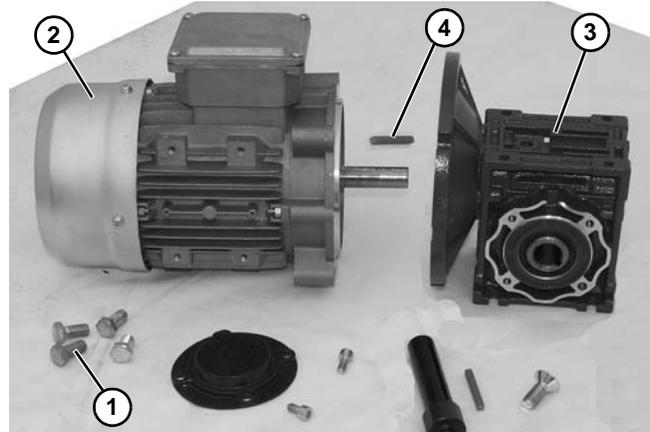


Figure 29

- Remove two (2) screws (**Figure 30, item 1**) and detach output shaft cover (**Figure 30, item 2**).

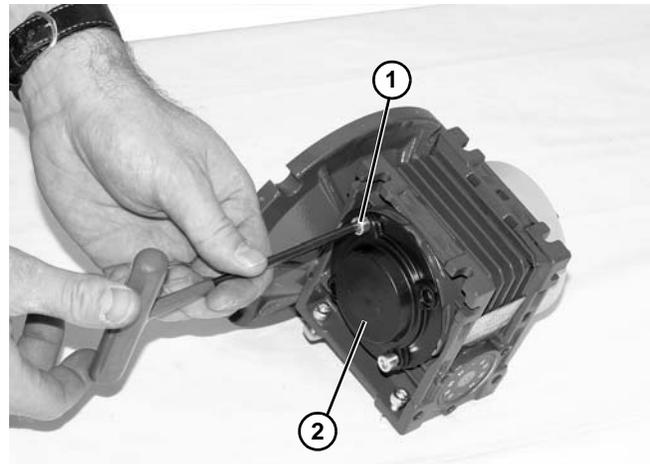


Figure 30

- Remove driveshaft:

NOTE

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

Preventive Maintenance and Adjustment

For eDrive style gearmotor

1. Loosen driveshaft bolt (Figure 31, item 1).

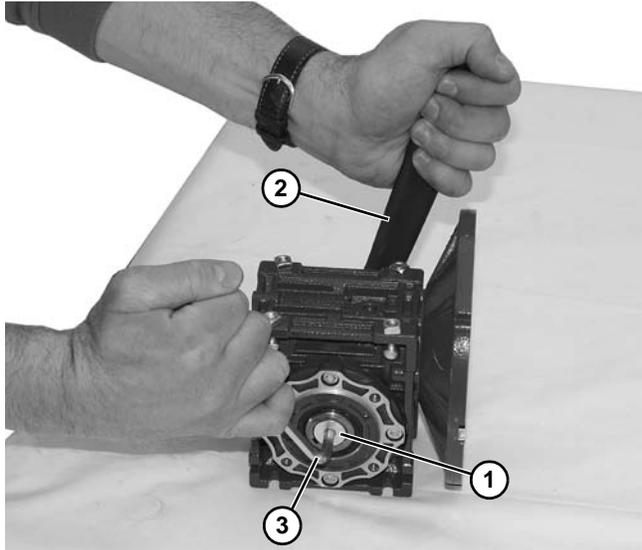


Figure 31

2. Hold the driveshaft with a wrench (Figure 31, item 2) as shown to keep shaft from turning, while removing screw with hex wrench (Figure 31, item 3).
3. Remove driveshaft (Figure 32, item 1) and key (Figure 32, item 2).

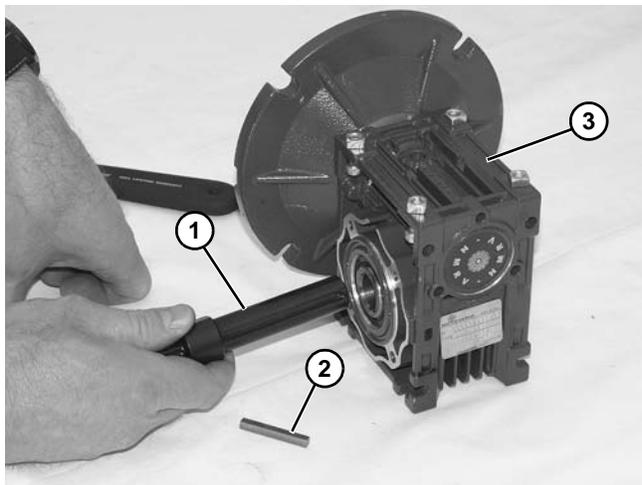


Figure 32

4. Replace gear reducer (Figure 32, item 3).

5. Apply anti-seize (Figure 33, item 1) to shaft.

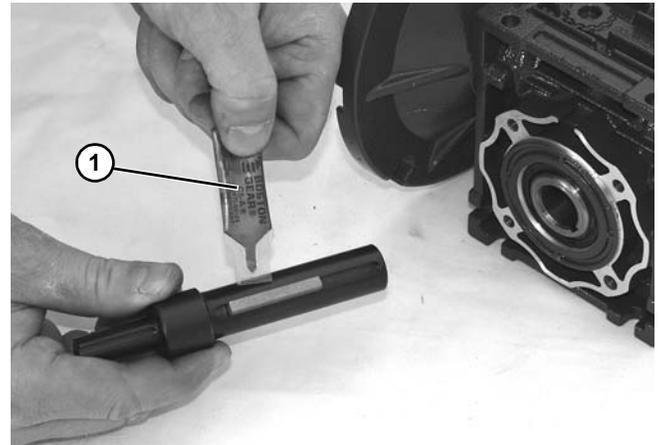


Figure 33

6. Replace the original shaft components into new gear reducer (see Figure 32).

IMPORTANT

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

7. Hold the driveshaft with a wrench (Figure 31, item 2) as shown to keep shaft from turning, while installing screw with hex wrench (Figure 31, item 3). Tighten screw to 100 in-lb (11.5 Nm) for 42CZ or 350 in-lb (39.5 Nm) for 56C, 63B5 and 71B5.
8. Apply anti-seize to motor shaft before assembling to gearbox. With key (Figure 29, item 2) in keyway, slide motor (Figure 29, item 2) and gear reducer (Figure 29, item 3) together. Install screws (Figure 29, item 1) and tighten.
9. Install spacer (Figure 28, item 2) onto gear reducer (Figure 28, item 3) with four (4) socket head screws (Figure 28, item 1).
10. Attach coupling (Figure 27, item 2) to gear reducer shaft. Tighten two set screws (Figure 27, item 1) to 32 in-lb (3.7 Nm).
11. Attach mounting bracket & tube (Figure 26, item 2) to gearmotor. Tighten screws (Figure 26, item 1) to 103 in-lb (12 Nm).
12. Complete installation steps:
 - See “4100 and 2100 Flat Belt Conveyors” section on page 9.
 - See “6200 2200, MPB and 2100 Cleated Belt Conveyors” section on page 10.

Preventive Maintenance and Adjustment

For old style gearmotor prior to June 2011

1. Loosen six (6) set screws (**Figure 34, item 1**). Remove drive shaft (**Figure 34, item 2**) and key (**Figure 34, item 3**).

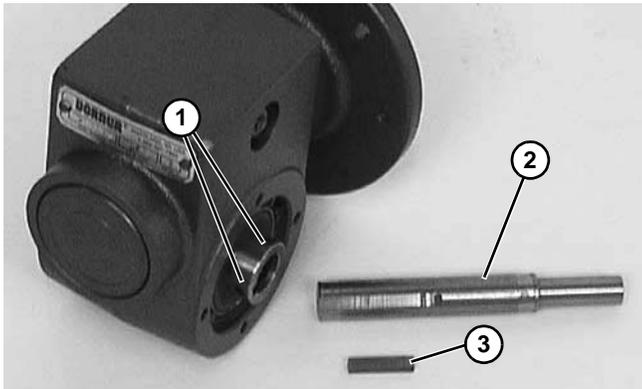


Figure 34

2. Apply anti-seize (**Figure 35, item 1**) to shaft.

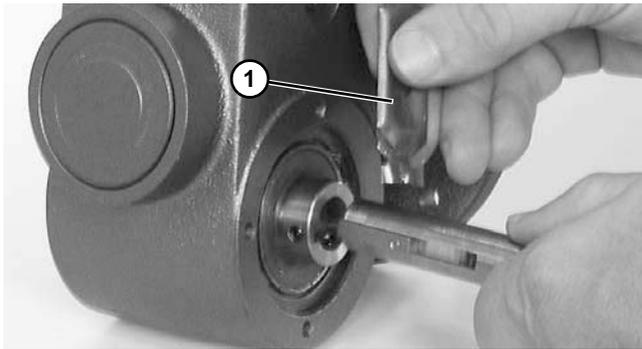


Figure 35

3. Replace the original shaft components into new gear reducer (**Figure 34**).

IMPORTANT

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

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. Install spacer (**Figure 28, item 2**) onto gear reducer (**Figure 28, item 3**) with four (4) socket head screws (**Figure 28, item 1**).
6. With output shaft key (**Figure 27, item 3**) in keyway, attach coupling (**Figure 27, item 2**) to gear reducer shaft. Tighten two set screws (**Figure 27, item 1**) to 32 in-lb (3.7 Nm).
7. Attach mounting bracket & tube (**Figure 26, item 2**) to gearmotor. Tighten screws (**Figure 26, item 1**) to 103 in-lb (12 Nm).

8. Complete installation steps:

- See “4100 and 2100 Flat Belt Conveyors” section on page 9.
- See “6200 2200, MPB and 2100 Cleated Belt Conveyors” section on page 10.

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.

Single Phase Motor

1. For single phase motor, unplug power cord from outlet.

Three Phase Motor

1. Loosen terminal box screws (**Figure 36, item 1**) and remove cover (**Figure 36, item 2**).

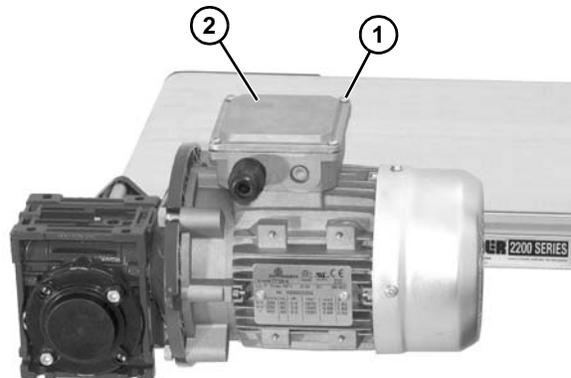


Figure 36

2. Record wire colors connecting to wires 1, 2 and 3. Loosen wire nuts and remove wires 1, 2 and 3.
3. Loosen cord grip and remove cord.

Preventive Maintenance and Adjustment

DC Variable Speed Motor

1. For DC variable speed motor, unplug motor cord at disconnect (**Figure 37, item 1**).

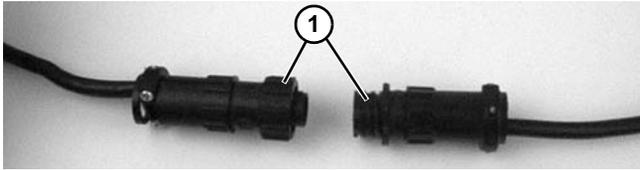


Figure 37

Brushless Motor

1. Twist covers (**Figure 38, item 1**) apart.

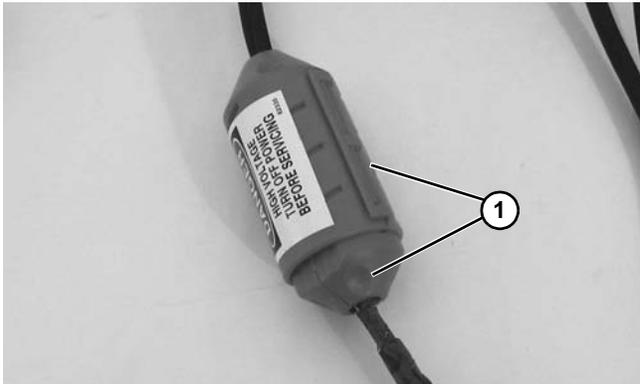


Figure 38

2. Remove outer cord cover (**Figure 39, item 1**) from inner cord cover (**Figure 39, item 2**).

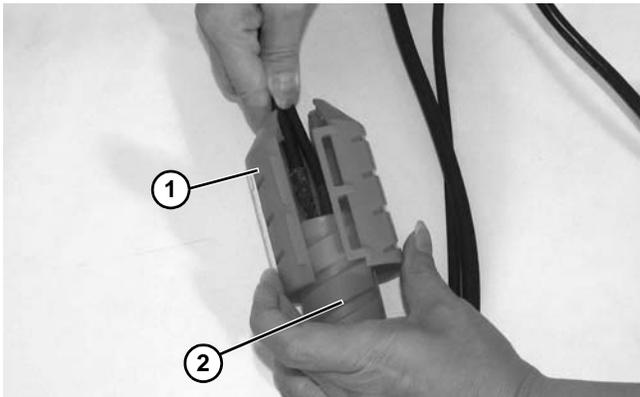


Figure 39

3. Open inner cord cover (**Figure 40, item 1**).

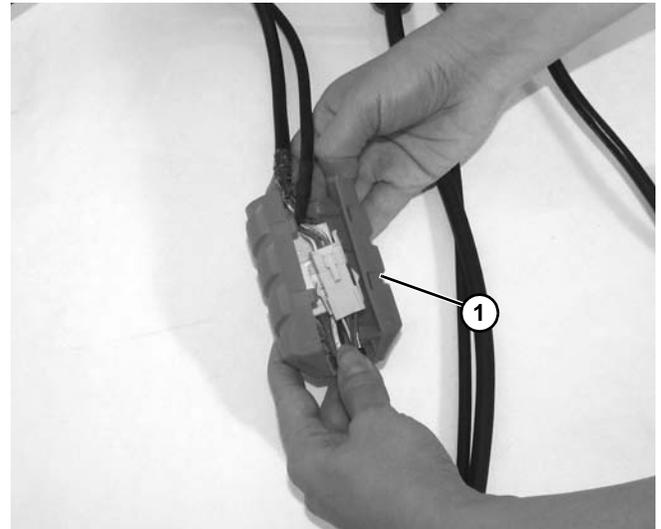


Figure 40

4. Unplug motor cord connectors (**Figure 41, item 1**) and signal cable connectors (**Figure 41, item 2**).

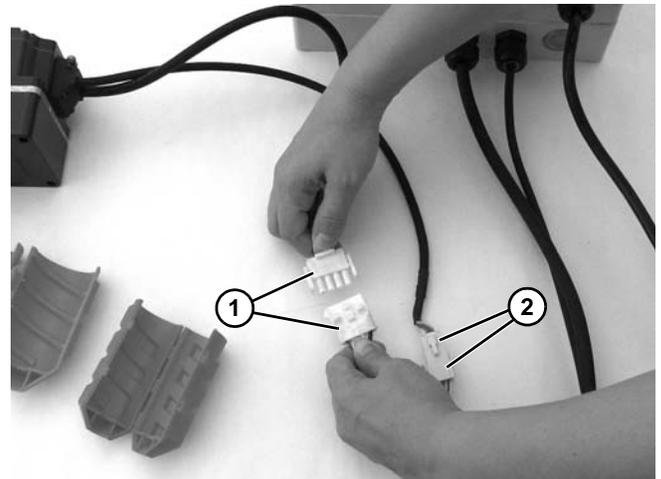


Figure 41

Preventive Maintenance and Adjustment

All Models

1. Remove four screws (**Figure 42, item 1**). Detach motor (**Figure 42, item 2**) from gear reducer (**Figure 42, item 3**). Retain motor output shaft key (**Figure 42, item 4**).

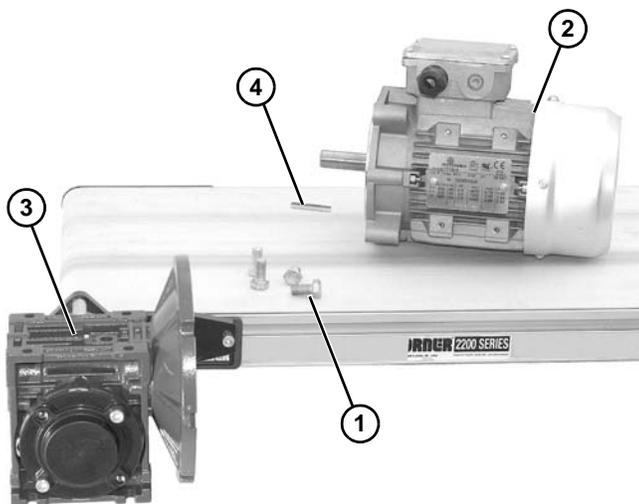


Figure 42

IMPORTANT

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

2. Apply anti-seize to motor shaft before assembling to gearbox. With key (**Figure 43, item 1**) in keyway, slide motor and gear reducer together. Install screws (**Figure 42, item 1**) and tighten.

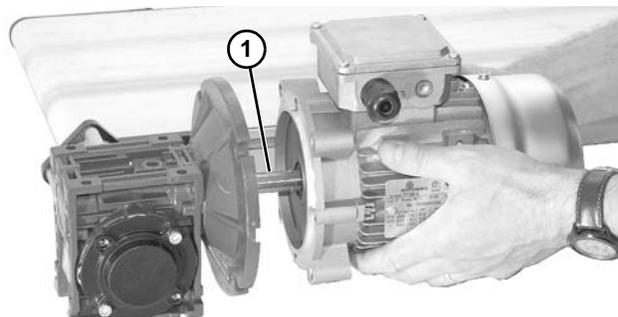


Figure 43

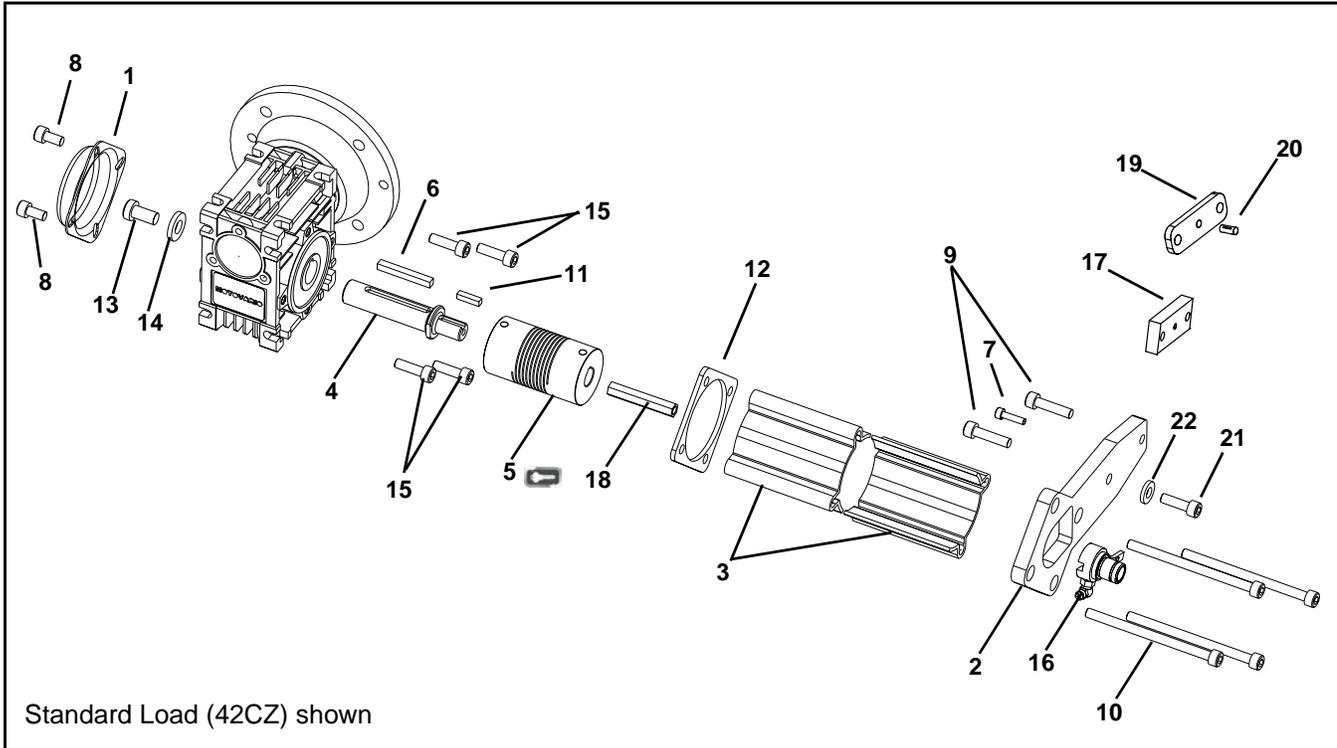
3. Replace wiring:
 - For a single phase motor, reverse step 1 in “Single Phase Motor” on page 16.
 - For a three phase motor, reverse steps 1-3, in “Three Phase Motor” on page 16.
 - For a DC variable speed motor, reverse step 1 on “DC Variable Speed Motor” on page 17.
 - For a brushless motor, reverse steps 1-2 on “Brushless Motor” on page 17.

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.

Side Mount Drive Package for 90° Gearmotors



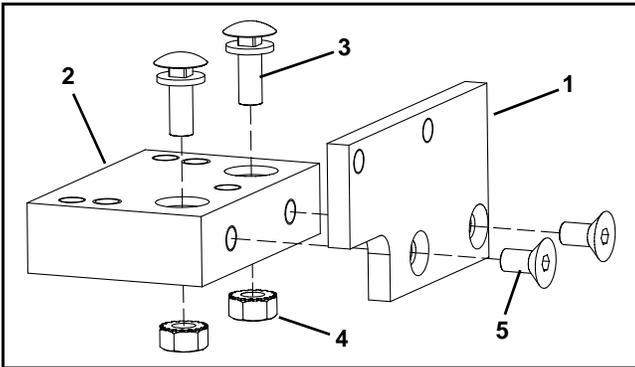
Service Parts

Item	Part Number	Description
1	807-2059	Drive-Bearing Shaft Cover (for E-Drive 42CZ C Face Gearmotors)
	807-2016	Drive-Bearing Shaft Cover (for E-Drive 56 C Face, IEC 63B5 and IEC 71B5 Gearmotors)
	300139	Drive-Bearing Shaft Cover (for Old Style Gearmotors, Prior to June 2011)
2	242525	Side Drive Plate (2200 & MPB Series)
	450266M	Side Drive Plate (2100, 4100 & 6200 Series)
3	400028	Side Drive Spacer Guard
	450475	Side Drive Spacer Guard (for Old Style Gearmotors, Prior to June 2011)
4	202273	Output Shaft (for E-Drive 42CZ C Face Gearmotors)
	350121	Output Shaft (for E-Drive 56 C Face Gearmotors)
	350135	Output Shaft (for E-Drive IEC 63B5 and IEC 71B5 Gearmotors)
	450444M	Output Shaft (for Old Style Gearmotors, Prior to June 2011)
5	807-995	Flex Coupling, 12 mm x 12 mm
	807-996	Flex Coupling (for 2100 & 4100 Series) 12 mm x 3/8" Hex
6	912-084	Square Key, 0.188 x 1.50
	980636M	Square Key, 6 mm x 36 mm (for E-Drive IEC 63B5 and IEC 71B5 Gearmotors)
7	920416M	Socket Head Screw, M4-.70 x 16 mm (2100 & 4100 Series)
8	920612M	Socket Head Screw, M6-1.00 x 12 mm
9	920625M	Socket Head Screw, M6-1.00 x 25 mm
	920630M	Socket Head Screw, M6-1.00 x 14 mm (4100 Series 1" - 2" (25 mm -52 mm) Wide Conveyors)
	242525M	Socket Head Screw, M6-1.00 x 30 mm (6200 Series)
	920635M	Socket Head Screw, M6-1.00 x 35 mm (2100 Series)
10	920690M	Socket Head Screw, M6-1.00 x 90 mm
11	980416M	Square Key, 4 mm x 16 mm
12	400026	Spacer Ring (for E-Drive 42CZ C Face Gearmotors)
	350115	Adapter (for E-Drive 56 C Face, IEC 63B5 and IEC 71B5 Gearmotors)
13	950816M	Low Head Cap Screw, M8-1.25 x 16 mm (for E-Drive 42CZ C Face Gearmotors)
	931020M	Flat Head Screw M10-1.50 x 20 mm (for E-Drive 56 C Face, IEC 63B5 and IEC 71B5 Gearmotors)
14	605280P	Washer (for E-Drive 42CZ C Face Gearmotors)
15	920620M	Socket Head Screw, M6-1.00 x 20 mm (for E-Drive 56 C Face, IEC 63B5 and IEC 71B5 Gearmotors)

Item	Part Number	Description
16	618898	Retaining Sleeve 3" - 12" (76 mm - 305 mm) Wide (4100 Series)
	200399M	Retaining Sleeve (2100 Series Flat Belt Conveyors)
	200223M	Retaining Sleeve (2100 Series Cleated Belt Conveyors)
17	697863M	Spacer Plate (for 4100 Series)
	203975M	Spacer Plate (for 2100 Series)
18	616301	Outboard Drive Shaft 1" (25 mm) Wide (4100 Series)
	616302	Outboard Drive Shaft 2" (51 mm) Wide (4100 Series)
	616303	Outboard Drive Shaft 3" (76 mm) Wide (4100 Series)
	616304	Outboard Drive Shaft 4" (102 mm) Wide (4100 Series)
	616305	Outboard Drive Shaft 5" (127 mm) Wide (4100 Series)
	616306	Outboard Drive Shaft 6" (152 mm) Wide (4100 Series)
	616308	Outboard Drive Shaft 8" (203 mm) Wide (4100 Series)
	616310	Outboard Drive Shaft 10" (254 mm) Wide (4100 Series)
	616312	Outboard Drive Shaft 12" (305 mm) Wide (4100 Series)
	203968	Outboard Drive Shaft 18" (457 mm) Wide (2100 Series)
	203971	Outboard Drive Shaft 21" (533 mm) Wide (2100 Series)
	203974	Outboard Drive Shaft 24" (610 mm) Wide (2100 Series)
19	450027M	Spacer Plate (6200 Series)
20	807-952	Groove Pin (6200 Series)
21	920608M	Socket Head Screw, M6-1.00 x 8 mm
22	807-2092	Washer

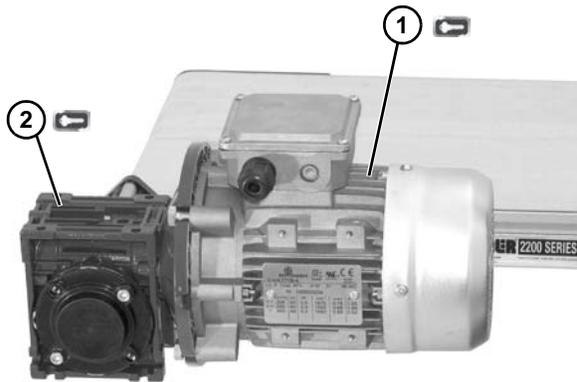
Service Parts

4100 Series Adapter Components

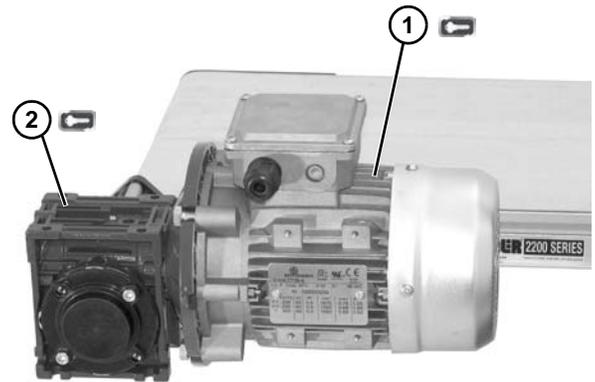


Item	Part Number	Description
1	450374	Drive Adaptor Plate
2	609486	Mounting Block 1" (25mm)
	609487	Mounting Block 2" (51mm)
	609488	Mounting Block 3" (76mm)
	609479	Mounting Block 4" (102mm)
	609480	Mounting Block 5" (127mm)
	609481	Mounting Block 6" (152mm)
	609482	Mounting Block 7" (178mm)
	609483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

U.S. Version Gearmotors



CE Version Gearmotors



Item	Part Number	Description
1	62MES411FN	Motor, 0.25 Hp (0.19 Kw) 115/230 Volts, 60 Hz, 1-Phase
	62MES423FN	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
	62M060ESBDDEN	Motor, 0.25HP, (0.19 Kw), 50 RPM, Brushless DC
	62M040ESBDDEN	Motor, 0.25HP, (0.19 Kw), 75 RPM, Brushless DC
	62M020ESBDDEN	Motor, 0.25HP, (0.19 Kw), 150 RPM, Brushless DC
	62M010ESBDDEN	Motor, 0.25HP, (0.19 Kw), 300 RPM, Brushless DC
	62M005ESBDDEN	Motor, 0.25HP, (0.19 Kw), 600 RPM, Brushless DC
	2	32M005EL
32M010EL		Gear Reducer, 10:1, 42CZ
32M020EL		Gear Reducer, 20:1, 42CZ
32M040EL		Gear Reducer, 40:1, 42CZ
32M060EL		Gear Reducer, 60:1, 42CZ
32M005ES		Gear Reducer, 5:1, 56C (for motors with part numbers ending with EI or EN only)
32M010ES		Gear Reducer, 10:1, 56C (for motors with part numbers ending with EI or EN only)
32M020ES		Gear Reducer, 20:1, 56C (for motors with part numbers ending with EI or EN only)
32M040ES		Gear Reducer, 40:1, 56C (for motors with part numbers ending with EI or EN only)
32M060ES		Gear Reducer, 60:1, 56C (for motors with part numbers ending with EI or EN only)

*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.

Item	Part Number	Description
1	826-281	Motor, 0.19 Kw 230 Volts, 1400 RPM 50 Hz, 1-Phase
	826-284	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.

Product Type									
Standard Products									Engineered to order parts
Product Line	Conveyors	Gearmotors & Mounting Packages	Support Stands	Accessories	Spare Parts (non-belt)	Spare Belts - Standard Flat Fabric	Spare Belts - Cleated & Specialty Fabric	Spare Belts - Plastic Chain	All equipment and parts
1100	30% return fee for all products except: 50% return fee for conveyors with modular belt, cleated belt or specialty belts						non-returnable		case-by-case
2200									
2200 Modular Belt									
2200 Precision Move									
2300									
2300 Modular Belt									
3200									
3200 LPZ									
3200 Precision Move									
4100									
5200									
5300									
6200									
Controls									
7200 / 7300	50% return fee for all products								
7350	non-returnable								
7360									
7400									
7600									

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

Dorner has representatives throughout the world. Contact Dorner for the name of your local representative. Our Customer Service Team will gladly help with your questions on Dorner products.

For a copy of Dorner's Warranty, contact factory, distributor, service center or visit our website at www.dorner.com.

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

 <p>Dorner Mfg. Corp. reserves the right to change or discontinue products without notice. All products and services are covered in accordance with our standard warranty. All rights reserved. © Dorner Mfg. Corp. 2015</p>	<p>DORNER MFG. CORP. 975 Cottonwood Ave., PO Box 20 Hartland, WI 53029-0020 USA TEL 1-800-397-8664 (USA) FAX 1-800-369-2440 (USA) Internet: www.dorner.com</p>	<p>Outside the USA: TEL 1-262-367-7600 FAX 1-262-367-5827</p>
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