

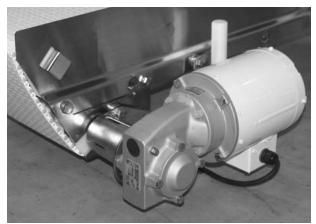


# AquaPruf<sup>®</sup> Drive Packages

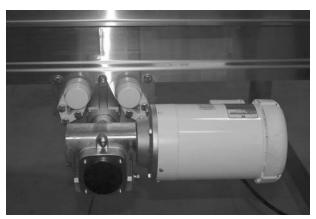
# **Installation, Maintenance & Parts Manual**



Side Mount 90° Drive



Side Mount 90° Nose Bar Drive



**Center Mount Drive** 

For other service manuals visit our website at: www.dornerconveyors.com/manuals-literature

**Record Conveyor Serial Number Here** 

# **Warnings - General Safety**

#### **A** WARNING

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

# **A** DANGER



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

## **A** DANGER



DO NOT OPERATE CONVEYORS IN AN EXPLOSIVE ENVIRONMENT.

## **A** WARNING



#### **SEVERE HAZARD!**

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

## **A** WARNING



Gearmotors may be HOT.

DO NOT TOUCH Gearmotors.

### **A** WARNING



Exposed moving parts can cause severe injury.

REPLACE ALL GUARDS BEFORE RUNNING CONVEYOR.

#### **A** 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.

# **Product Description**

Refer to (Figure 1) for typical gearmotor assembly components.

- 1 Motor Mount
- 2 Gear Reducer
- 3 Motor

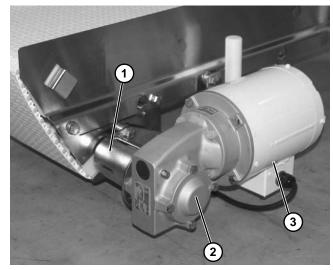
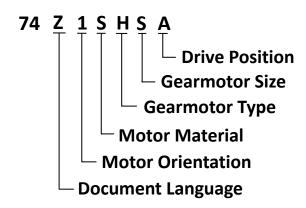


Figure 1

# **Specifications**

# **Gearmotor Mounting Package**



# **Torque Specifications**

	Flat Head		Socket Head		Button/Low Head		Set Screw	
Size Torque Size		Size	Torque Size		Torque	Size	Torque	
M4 x 0.7	2.5 mm	3.4 Nm (30 in lbs)	3 mm	5.9 Nm (52 in lbs)	2.5 mm	2.9 Nm (26 in lbs)	2 mm	2.1 Nm (19 in lbs)
M5 x 0.8	3 mm	6.9 Nm (61 in lbs)	4 mm	12.0 Nm (106 in lbs)	3 mm	5.9 Nm (52 in lbs)	2.5 mm	4.7 Nm (42 in lbs)
M6 x 1.0	4 mm	12.0 Nm (106 in lbs)	5 mm	20.3 Nm (180 in lbs)	4 mm	10.0 Nm (89 in lbs)	3 mm	7.7 Nm (68 in lbs)
M8 x 1.25	5 mm	28.0 Nm (248 in lbs)	6 mm	48.8 Nm (432 in lbs)	5 mm	24.0 Nm (212 in lbs)	4 mm	17.8 Nm (158 in lbs)
M10 x 1.5	6 mm	56.0 Nm (496 in lbs)	8 mm	97.5 Nm (863 in lbs)	6 mm	48.0 Nm (425 in lbs)	5 mm	35.0 Nm (310 in lbs)

# Installation

# **Drive Package Types**

Typical Drive Package Components (Figure 2).

- 1 Gearmotor Assembly
- 2 Quick Disconnect Coupling
- 3 Motor Mount
- 4 Hex Head Cap Screw (x4)

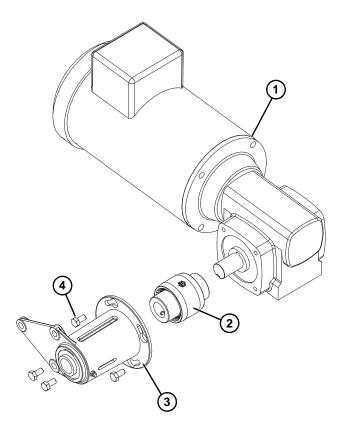


Figure 2

There are several drive package types available, including:

- Side Drive Package
- Nose Bar Drive Package
- Center Drive Package

## **Side Drive Package**

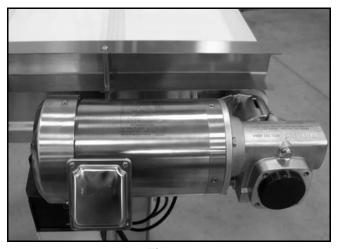


Figure 3

## **NOTE**

Gearmotor may be operated in positions 1 through 4 (Figure 4).

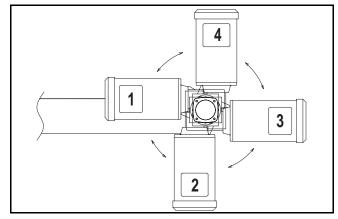


Figure 4

# Installation

## **Nose Bar Drive Package**



Figure 5

## **NOTE**

Gearmotor may be operated in positions 1 through 4 (Figure 6).

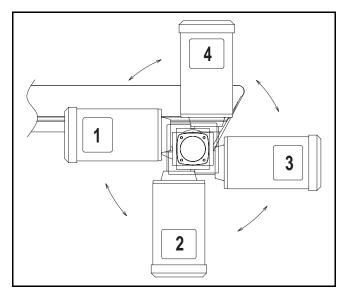


Figure 6

## **Center Drive Package**



Figure 7

## **NOTE**

Gearmotor may be operated in positions 1 through 4 (Figure 8).

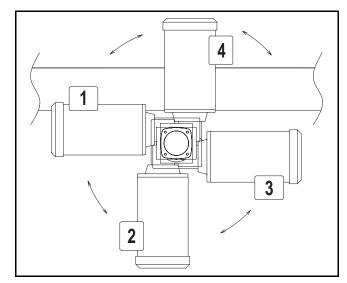


Figure 8

# Installation

# **Drive Package Installation**

#### **Required Tools**

- 5/32" hex wrench
- 3/16" hex wrench
- 5/16" wrench
- 4 mm wrench
- 13 mm wrench
- 14 mm wrench
- 17 mm wrench
- · Large flat head screwdriver
- Torque wrench

#### **Install Drive Package**

## **A** WARNING



#### **SEVERE HAZARD!**

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

# **A** WARNING



#### **PUNCTURE HAZARD!**

Handle drive shaft keyway with care. It may be sharp and could puncture the skin, causing serious injury.

1. Install quick disconnect coupling onto gear reducer shaft gear.



Figure 9

- 2. Install shaft key.
- 3. Rotate and install gearmotor and gear reducer assembly onto motor mount.



Figure 10

4. Lower assembly and tighten four screws.



Figure 11

## **Drive Package Maintenance**

#### **Required Tools**

- 5/32" hex wrench
- 3/16" hex wrench
- 5/16" wrench
- 4 mm wrench
- · 13 mm wrench
- 14 mm wrench
- 17 mm wrench
- · Large flat head screwdriver
- · Torque wrench

#### **Check List**

- Keep critical service parts on hand. Refer to "Service Parts" on page 11 for recommendations.
- · Replace any worn or damaged parts.

#### **Gear Reducer Replacement**



#### **SEVERE HAZARD!**

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





#### **BURN HAZARD!**

DO NOT TOUCH the motor while operating, or shortly after being turned off. Motors may be HOT and can cause serious burn injuries.

## **A** WARNING



#### **CRUSH HAZARD!**

- SUPPORT MOTOR PRIOR TO LOOSENING THE BOLTS
- Loosening motor bolts may cause it to drop down, causing serious injury.
- 1. Loosen four screws securing gear reducer to motor mount.

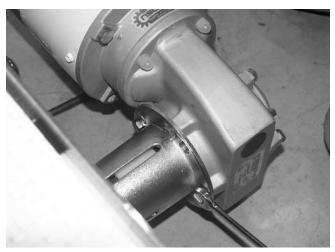


Figure 12

Rotate and remove gearmotor and gear reducer assembly from motor mount.



Figure 13

3. Remove quick disconnect coupling from gear reducer shaft gear.



Figure 14

4. Remove cover.

## **NOTE**

There may be several types of covers available (Figure 15).





Figure 15

5. Remove screw and washer from shaft.



Figure 16

6. Remove snap ring, if needed.

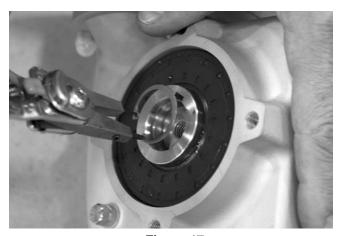


Figure 17

7. Remove shaft assembly from gear reducer.



Figure 18

8. Loosen two set screws on gear.



Figure 19

9. Remove gear and two shaft keys from shaft.



Figure 20

- 10. Replace worn or damaged parts.
- 11. Install components in the reverse of removal.
- 12. Install gearmotor to gear reducer. Refer to "Gearmotor Replacement" on page 9. Complete steps 3 through 5.

#### **Gearmotor Replacement**

## **A** WARNING



#### **SEVERE HAZARD!**

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

## **A** WARNING



#### **BURN HAZARD!**

DO NOT TOUCH the motor while operating, or shortly after being turned off. Motors may be HOT and can cause serious burn injuries.

1. Remove four bolts.

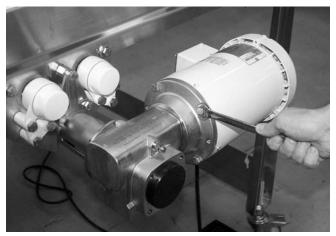


Figure 21

2. Remove gearmotor and shaft key from gear reducer.



Figure 22

- 3. Install shaft key.
- 4. Install gearmotor to gear reducer.

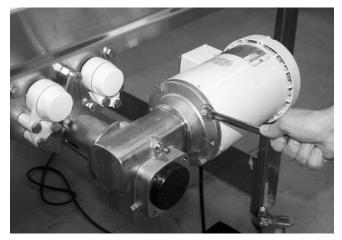


Figure 23

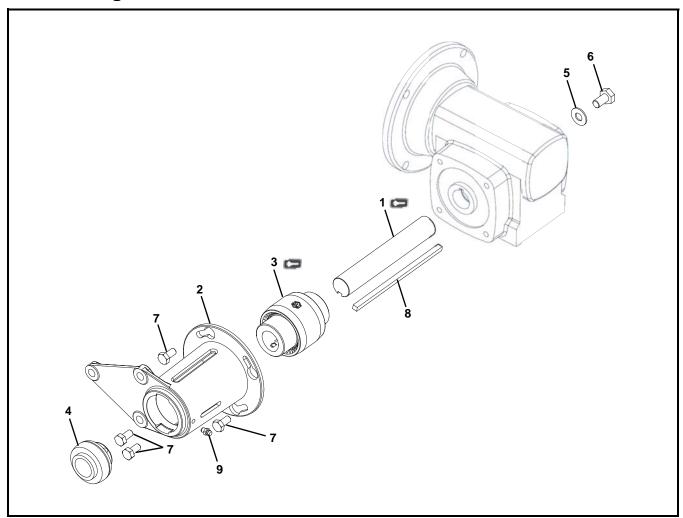
5. Install and tighten four bolts.

# **Service Parts**

## **NOTE**

For replacement parts other than those shown in this section, contact an authorized Dorner distributor or Dorner directly. Recommended Critical Service Parts and Kits are identified by the Key Service Parts symbol . Dorner recommends keeping these parts on hand.

# **Drive Package**



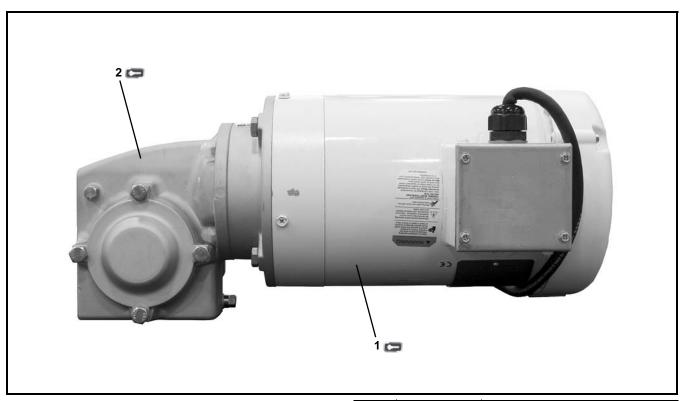
Item	Part Number	Description				
1	516866	Shaft for Painted Gearmotors				
	520683	Shaft for Stainless Steel Gearmotors				
2	806-040	Motor Mount				
3	529791-A-P	Quick Disconnect Coupling for Painted Gearmotors in the A or B positions				
	529791-D-P	Quick Disconnect Coupling for Painted Gearmotors in the C or D positions				
	529791-A-S	Quick Disconnect Coupling for Stainless Steel Gearmotors in the A or B positions				
	529791-D-S	Quick Disconnect Coupling for Stainless Steel Gearmotors in the C or D positions				
4	802-162	Bearing				

Item	Part Number	Description		
5	807-3392	Washer		
6	960816MSS	Hex Head Cap Screw, M8-1.25 x 16 mm		
7	961018MSS	Hex Head Cap Screw, M10-1.50 x 18 mm		
8	532121-00502	Square Key for Painted Gearmotors, .25" x 5.02"		
	532121-00618	Square Key for Stainless Steel Gearmotors		
9	810-187	Grease Fitting		
Service parts can be obtained through your distributor or directly				

Service parts can be obtained through your distributor or directly from Dorner Mfg. Corp. (800) 397-8664 or customerservice@dorner.com

# **Service Parts**

# **Gearmotor Assembly**



Item	Part Number Description					
1	826-312	Painted Motor, 0.5 hp, 230/460 volts, 60 Hz, 3 phase				
	826-354	Painted Motor, 1.0 hp, 208-230/460 volts, 60 Hz, 3 phase				
	826-472	Painted Motor, 1.5 hp, 208-230/460 volts, 60 Hz, 3 phase				
	826-431	Stainless Steel Motor, 0.5 hp, 230/460 volts, 60 Hz, 3 phase				
	826-466	Stainless Steel Motor, 1.0 hp, 208-230/ 460 volts, 60 Hz, 3 phase				
	826-464	Stainless Steel Motor, 1.5 hp, 208-230/ 460 volts, 60 Hz, 3 phase				

Item	Part Number	Description					
2	820-379	Painted Gear Reducer, 7:1 Nema 56C					
	820-735	Painted Gear Reducer, 10:1 Nema 56C					
	820-736	Painted Gear Reducer, 15:1 Nema 560					
	820-737	Painted Gear Reducer, 20:1 Nema 56C					
	820-738	Painted Gear Reducer, 30:1 Nema 56C					
	820-739	Painted Gear Reducer, 40:1 Nema 56C					
	820-740	Painted Gear Reducer, 60:1 Nema 56C					
	820-1234	Stainless Steel Gear Reducer, 7:1 Nema 56C					
	820-1235	Stainless Steel Gear Reducer, 10:1 Nema 56C					
	820-1236	Stainless Steel Gear Reducer, 15:1 Nema 56C					
	820-1237	Stainless Steel Gear Reducer, 20:1 Nema 56C					
	820-1238	Stainless Steel Gear Reducer, 30:1 Nema 56C					
	820-1239	Stainless Steel Gear Reducer, 40:1 Nema 56C					
	820-1240	Stainless Steel Gear Reducer, 60:1 Nema 56C					

# **Notes**

# **Return Policy**

Returns must have prior written factory authorization or they will not be accepted. Items that are returned to Dorner without authorization will not be credited nor returned to the original sender. When calling for authorization, please have the following information ready for the Dorner factory representative or your local distributor:

- 1. Name and address of customer.
- 2. Dorner part number(s) of item(s) being returned.
- 3.
- Customer's original order number used when ordering the item(s). 4.
- Dorner or distributor invoice number. Include part serial number if available.

A representative will discuss action to be taken on the returned items and provide a Returned Materials 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 & Spec. Fabric	Spare Belts - Plastic Chain	All equipment and parts
1100 Series		•				•			
2200 Series		30% re	turn fee fo	or all products	except:				
3200 Series	30% return fee for all products except: 50% return fee for conveyors with modular belt,								
Pallet Systems	cleated belt or speciality belts								
FlexMove/SmartFlex	1				_				
GAL Series	All Electrical items are assigned original manufacturers return policy.					case-by-case			
All Electrical	non-returnable								
7100 Series	50% return fee for all products								
7200/7300 Series									
AquaGard 7350 Series Version 2									
GES Series									
AquaGard 7350/7360 Series	non-returnable								
AquaPruf Series	1								

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 Dorner, an authorized sales channel or visit our website: www.dorner.com.

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

# www.dorner.com















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