



# 7350 Series Version 2 Bottom Mount 90° Drive Package

**Installation, Maintenance & Parts Manual** 



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.

#### 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.

## **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.

# **Product Description**

#### Refer to (Figure 1) for typical components.

- 1 M6 Hex Head Screws (4x)
- 2 Cover
- 3 Driven Pulley
- 4 Timing Belt
- 5 Drive Pulley
- 6 Timing Belt Tensioner
- 7 Mounting Bracket
- 8 Motor
- 9 Gear Reducer

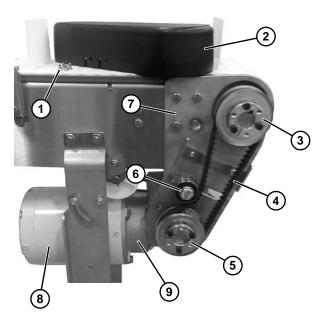


Figure 1

## **Required Tools**

- 5/16" wrench
- 4 mm wrench
- 13 mm wrench
- 14 mm wrench
- 19 mm wrench
- · Large flat head screwdriver
- Pry Bar
- · Torque wrench

## **Bottom Mount 90° Drive Package**



**SEVERE HAZARD!** 

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

Typical Components (Figure 2).

- 1 Bottom Mount Assembly
- 2 Drive Pulley
- 3 Cover
- 4 M6 Hex Head Screws (4x)
- 5 Driven Pulley
- 6 M8 Hex Head Screws (3x)
- 7 Timing Belt
- 8 Timing Belt Tensioner
- 9 Gearmotor Assembly

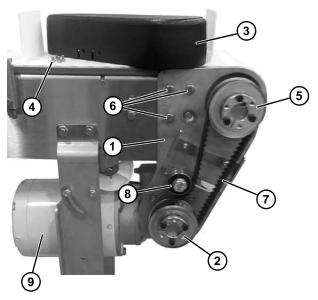


Figure 2

# NOTE operated in positions

Gearmotor may be operated in positions 1 or 3 (Figure 3).

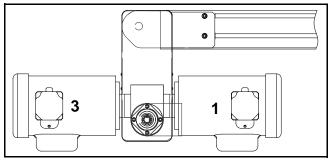


Figure 3

1. Remove three fasteners from conveyor, leaving the fourth fastener that lines up with the clearance hole on the motor mount.

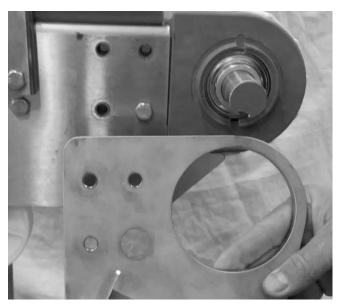


Figure 4

2. Attach bottom mount assembly to the conveyor.



Figure 5

## **A** WARNING



Drive shaft keyway may be sharp. HANDLE WITH CARE.

3. Install key and driven pulley onto conveyor shaft.

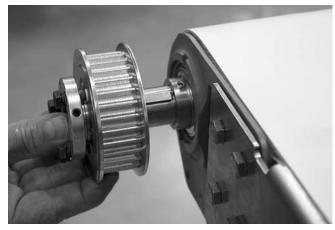


Figure 6

4. Attach gear reducer to the bottom mount assembly.

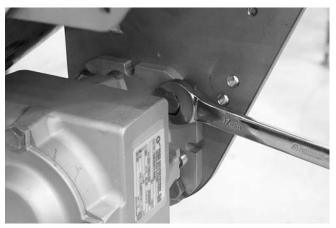


Figure 7

- 5. Install shaft key.
- 6. Install coupling (see label on coupling).



Figure 8

- 7. Install gearmotor to gear reducer.
- 8. Tighten bolts.



Figure 9

9. Wrap the timing belt around the drive and driven pulley.

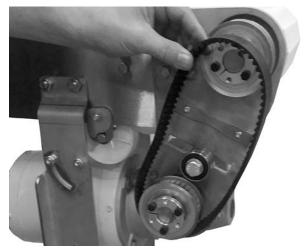


Figure 10

10. Align driven pulley with drive pulley.



Figure 11

11. Tighten taper-lock screws on pulleys.



Figure 12

12. Loosen tensioner bolt and tension timing belt.

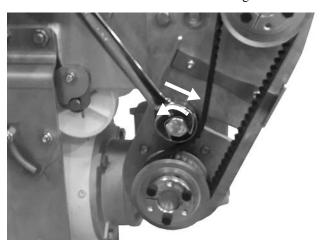


Figure 13

## **A** CAUTION

Over tightening of timing belt will result in reduced gearmotor and timing belt life.

13. Tighten tensioner bolt.

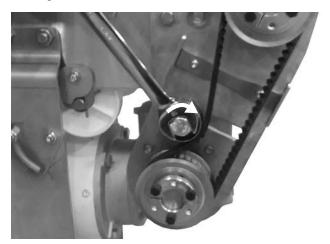


Figure 14

14. Install cover with four screws.



Figure 15

## **Required Tools**

- 5/16" wrench
- 4 mm wrench
- 13 mm wrench
- 14 mm wrench
- 19 mm wrench
- · Large flat head screwdriver
- Pry Bar
- Torque wrench

#### **Check List**

- Keep critical service parts on hand. Refer to "Service Parts" on page 14 for recommendations.
- Replace any worn or damaged parts.

## **Timing Belt Tensioning**



SEVERE HAZARD!

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

1. Remove four screws and cover.



Figure 16

2. Loosen tensioner bolt and tension timing belt.

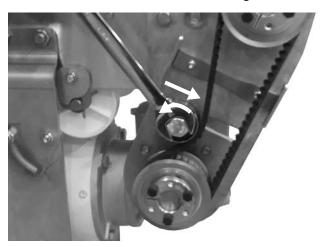


Figure 17

# **A** CAUTION

Over tightening of timing belt will result in reduced gearmotor and timing belt life.

- 3. Tighten tensioner bolt.
- 4. Install cover with four screws.



Figure 18

## **Timing Belt Replacement**

## **A** WARNING



#### **SEVERE HAZARD!**

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

1. Remove four screws and cover.



Figure 19

2. Loosen tensioner bolt.

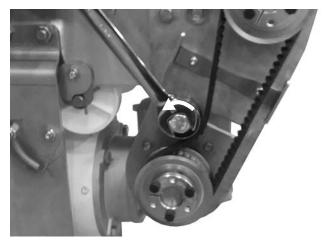


Figure 20

3. Remove timing belt.

#### **NOTE**

If timing belt does not slide over pulley flange, loosen driven pulley taper-lock screws and remove pulley with belt.

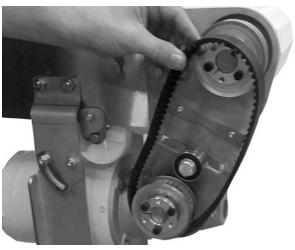


Figure 21

- 4. Install new timing belt.
- 5. Tension timing belt. Complete steps 2 and 3 of "Timing Belt Tensioning" section on page 8.
- 6. Install cover with four screws.



Figure 22

## **Drive or Driven Pulley Replacement**

## **A** WARNING



#### **SEVERE HAZARD!**

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

- 1. Complete steps 1 through 3 of "Timing Belt Replacement" section on page 9.
- Remove taper-lock screws. Insert taper lock screws in threaded holes. Tighten screws until pulley is loose. Remove pulley and taper hub assembly.

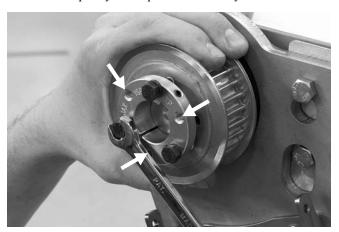


Figure 23

#### **NOTE**

If drive pulley is replaced, wrap timing belt around drive pulley and complete step 3.

3. Complete steps 10 through 14 of "Installation" section beginning on page 6.

## **Gear Reducer Replacement**

# **A** WARNING



#### **SEVERE HAZARD!**

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

1. Remove four screws and cover.



Figure 24

2. Loosen tensioner bolt.

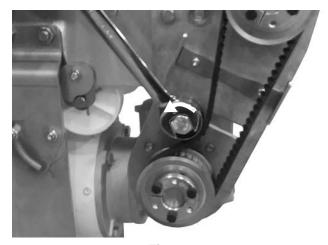


Figure 25

3. Remove timing belt.

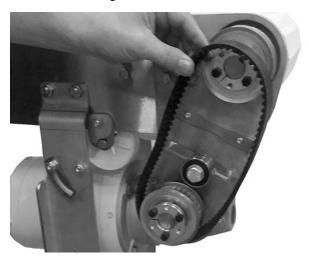


Figure 26

4. Remove drive pulley. Refer to "Drive or Driven Pulley Replacement" on page 10.

# **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.

# **A** WARNING



#### **CRUSH HAZARD!**

- SUPPORT MOTOR PRIOR TO LOOSENING THE BOLTS
- Loosening motor bolts may cause it to drop down, causing serious injury.

5. Remove gearmotor from gear reducer.



Figure 27

6. Remove gear reducer from mounting bracket.

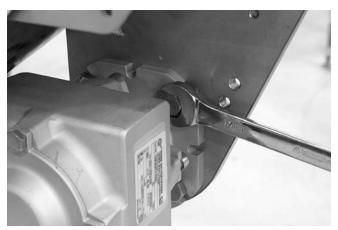


Figure 28

7. Remove four bolts and cover.



Figure 29

8. Remove bolt and washer from shaft.



Figure 30

9. Remove snap ring.

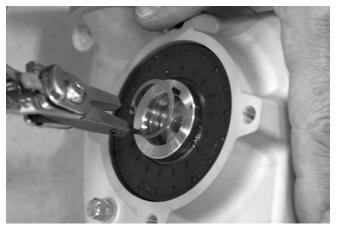


Figure 31

10. Remove gear reducer output shaft and key.

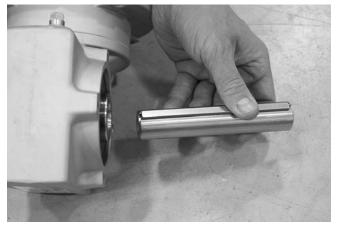


Figure 32

- 11. Insert a new shaft with key into a new gear reducer.
- 12. Install gear reducer components in the reverse of removal.

13. Attach gear reducer to the bottom mount assembly.

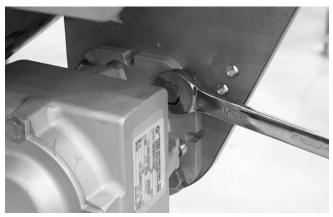


Figure 33

- 14. Install shaft key.
- 15. Install coupling (see label on coupling).



Figure 34

- 16. Install gearmotor to gear reducer.
- 17. Tighten bolts.



Figure 35

- 18. Install drive pulley. Refer to "Drive or Driven Pulley Replacement" on page 10.
- 19. Complete steps 9 through 14 of "Installation" section beginning on page 6.

## **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. Loosen four bolts.



Figure 36

2. Remove gearmotor from gear reducer.



Figure 37

- 3. Install shaft key.
- 4. Install coupling (see label on coupling).
- 5. Install gearmotor to gear reducer.



Figure 38

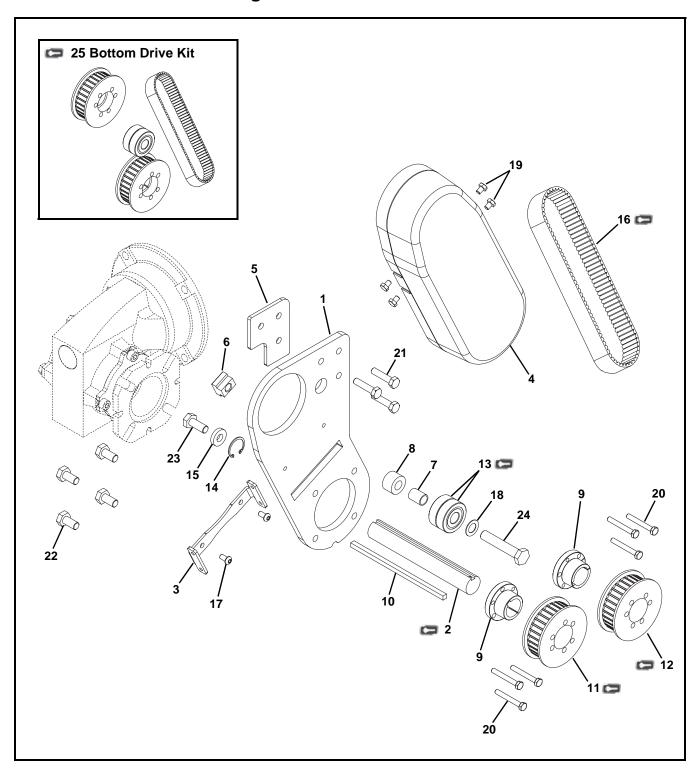
6. Tighten four bolts.

# **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.

## **Bottom Mount Drive Package**

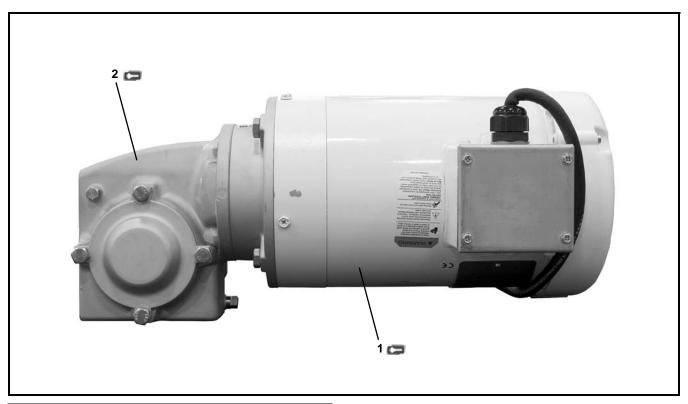


# **Service Parts**

Item	Part Number	Description						
1	520398	Motor Mount Plate for Belted						
		Conveyors						
	518476	Motor Mount Plate for Straight Modular						
		Belt Conveyors						
	518345	Motor Mount Plate for Curve						
		Conveyors						
2	516916	Shaft						
3	516917	Cover Bracket						
4	518302	Drive Cover						
5	518447	Spacer Plate for Curve Conveyors Only						
6	518478	T-Nut						
7	518479	Bearing Sleeve						
8	518480	Spacer						
9	532235	Bushing						
10	523121-00650	Square Key, 0.25" x 6.50"						
11	532234-30	Drive Pulley 30T						
	532234-36	Drive Pulley 36T						
12	532234-30	Driven Pulley 30T						
		•						
13	802-202	Bearing						
14	807-3303	Retaining Ring						
15	807-3392	Washer						
16	814-143	Timing Belt for 30:30 Pulley Ratio						
	814-454	Timing Belt for 36:30 Pulley Ratio						
17	910612MSS	Button Head Screw, M6-1.00 x 12 mm						
18	911-518							
19	960608MSS	Washer Hex Head Cap Screw, M6-1.00 x 8 mm						
20	960640MSS	Hex Head Cap Screw, Wo 1.00 x 6 min						
20	30004010100	M6-1.00 x 40 mm						
21	960830MSS	Hex Head Cap Screw, M8-1.25 x 30						
_ '	SOCOOONICO	mm (for Straight Conveyors)						
	960835MSS	Hex Head Cap Screw, M8-1.25 x 35						
		mm (for Curve Conveyors)						
22	961020MSS	Hex Head Cap Screw,						
		M10-1.50 x 20 mm						
23	961025MSS	Hex Head Cap Screw,						
		M10-1.50 x 25 mm						
24	961265MSS	Hex Head Cap Screw,						
		M12-1.75 x 65 mm						
25	520383-3030	Bottom Drive Kit for 30:30 Pulley Ratio						
		(Includes items 9, 11, 12, 13 and 16)						
	520383-3630	Bottom Drive Kit for 36:30 Pulley Ratio						
		(Includes items 9, 11, 12, 13 and 16)						
	Service parts can be obtained through your distributor or directly							
from Dorner Mfg. Corp. (800) 397-8664 or								
custon	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				
2	820-735	Gear Reducer, 10:1, Nema 56C				
	820-736	Gear Reducer, 15:1, Nema 56C				
	820-737	Gear Reducer, 20:1, Nema 56C				
	820-738	Gear Reducer, 30:1, Nema 56C				
	820-739	Gear Reducer, 40:1, Nema 56C				
	820-740	Gear Reducer, 60:1, Nema 56C				

N	otes
Ν	otes

# **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. 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% return fee for all products except:								
3200 Series	50% return fee for conveyors with modular belt, cleated belt or speciality belts								
Pallet Systems									
FlexMove/SmartFlex	All Electrical items are assigned original manufacturers return policy.						case-by-case		
GAL Series						urnahle			
All Electrical	1	non-returnable							
7100 Series									
7200/7300 Series	50% return fee for all products								
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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