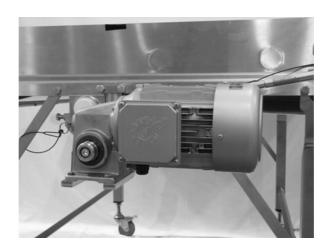




# 7600 Series CE Center Drive Package

**Installation, Maintenance and Parts Manual** 



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## Introduction



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.

The Dorner Limited Warranty applies.

Dorner AquaPruf conveyors are covered by Patent Numbers 7,207,435, 7,246,697, 7,383,944, additional patent pending applications, and corresponding patents in other countries.

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

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# Warnings - General Safety

#### **A** DANGER



#### **SEVERE HAZARD!**

KEEP OFF CONVEYORS. Climbing, sitting, walking or riding on conveyor will result in death or serious injury.

## **A** DANGER



#### **EXPLOSION HAZARD!**

- DO NOT OPERATE CONVEYORS IN AN EXPLOSIVE ENVIRONMENT. The electric gearmotor generates heat and could ignite combustible vapors.
- Failure to comply will result in death or serious injury.

## **WARNING**



#### **CRUSH HAZARD!**

- DO NOT place hands or fingers inside the conveyor while it is running.
- DO NOT wear loose garments while operating the conveyor. Loose garments can become caught up in the conveyor.
- Failure to comply could result in serious injury.

#### WARNING



#### **CRUSH HAZARD!**

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

#### WARNING



#### SEVERE HAZARD!

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

#### **▲** 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.

#### WARNING



#### **PUNCTURE HAZARD!**

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

#### WARNING



#### SEVERE HAZARD!

- 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 startup.
- Failure to comply could result in serious injury.

# **Product Description**

Refer to Figure 1 for typical gearmotor assembly components.

- 1 Conveyor
- 2 Mounting Bars
- 3 Gearmotor
- 4 Motor Bracket

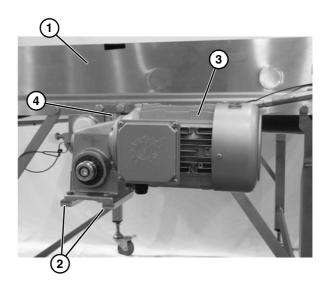
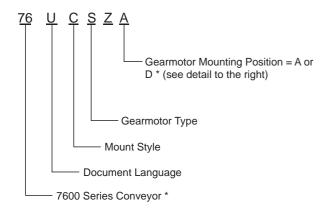


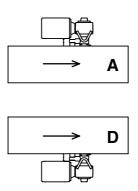
Figure 1

# **Specifications**

## **7600 Series Gearmotor Mounting Package Models**

#### Example:





\* Refer to "Ordering and Specifications" Catalog for details.

# **7600 Series Gearmotor Specifications**

	Three Phase
Output Power	(.37 kW) / (.74 kW) / (1.11 kW) / (1.49kW)
Input Voltage	230 / 400 V.A.C.
Input Frequency	50 Hz
Motor RPM	See Below
Gearmotor Ratios	5:1, 7:1, 10:1, 15:1, 25:1, 30:1, 60:1
Frame Size	IEC
Motor Type	Totally Enclosed, Fan Cooled

<sup>\*</sup> Refer to "Ordering and Specifications" Catalog for details.

## **Fixed Speed Gearmotor**

Part Number	7600 Series m / min	RPM @50 Hz	N • m	Output Power	Input Voltage	Input Frequency	Gearmotor Ratios	Motor Type
74U060HS423FN	6.4	23	80.9	0.37 Kw	230 / 400	17-58 Hz	60:1	CE Rated, Painted
74U030HS423FN	12.8	46	101.9	0.74 Kw	230 / 400	12-80 Hz	30:1	Gearmotor
74U025HS423FN	15.2	55	93.9	0.74 Kw	230 / 400	12-80 Hz	25:1	
74U015HS423FN	25.9	93	88.9	1.11 Kw	230 / 400	12-80 Hz	15:1	
74U010HS423FN	39.0	140	63.9	1.11 Kw	230 / 400	12-72 Hz	10:1	
74U007HS423FN	51.8	186	67.0	1.49 Kw	230 / 400	12-75 Hz	7:1	
74U005HS423FN	78.0	279	46.0	1.49 Kw	230 / 400	25-50 HZ	5:1	

## **Variable Speed Gearmotor**

Part Number	7600 Series m / min	RPM @50 Hz	N • m	Output Power	Input Voltage	Input Frequency	Gearmotor Ratios	Motor Type
74U060HS423EN	2.2 - 7.3	23	80.9	0.37 Kw	230 / 400	17-58 Hz	60:1	CE Rated,
74U030HS423EN	3.0 - 20.4	46	101.9	0.74 Kw	230 / 400	12-80 Hz	30:1	Painted Gearmotor
74U025HS423EN	3.7 - 24.4	55	93.9	0.74 Kw	230 / 400	12-80 Hz	25:1	
74U015HS423EN	6.1 - 41.5	93	88.9	1.11 Kw	230 / 400	12-80 Hz	15:1	
74U010HS423EN	9.4 - 56.1	140	63.9	1.11 Kw	230 / 400	12-72 Hz	10:1	
74U007HS423EN	12.5 - 77.7	186	67.0	1.49 Kw	230 / 400	12-75 Hz	7:1	
74U005HS423EN	39.0 - 78.0	279	46.0	1.49 Kw	230 / 400	25-50 HZ	5:1	

## **NOTE**

Contact the factory for details about belt speeds other than those listed.

## Installation

### **Required Tools**

- 4 mm Hex Key Wrench
- 8 mm Hex Key Wrench
- 13 mm Open End Wrench
- Flat Blade Screwdriver

## **Center Drive Package Installation**



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



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

Typical Horizontal Drive Package Components (Figure 2)

- 1 Bore Plug
- 2 Center Drive Shaft Assembly
- 3 Center Drive Left Hand Bent Bar
- 4 Center Drive Right Hand Bent Bar
- 5 Socket Head Screw M10-0.50 x 35 mm
- 6 Hex head cap screw M10-1.50 x 40 mm
- 7 Hex head cap screw 5 / 16 18 x 1.00
- 8 Hex head cap screw M8-1.25 x 25 mm

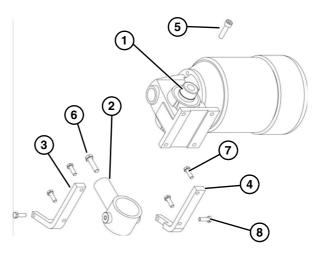


Figure 2

1. Insert the drive spindle key (**Figure 3, item 1**) into the drive spindle keyway (**Figure 3, item 2**).

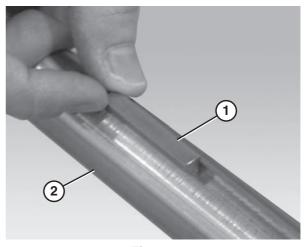


Figure 3

2. Slide the gearmotor assembly (**Figure 4, item 1**) onto the drive spindle (**Figure 4, item 2**).

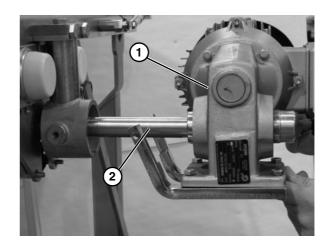


Figure 4

3. Attach the bent bars (**Figure 5**, **item 1**) to the motor mounting bracket (**Figure 5**, **item 2**).

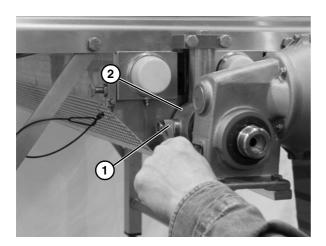


Figure 5

4. Attach the bore plug (**Figure 6, item 1**) and tighten the socket head screw (**Figure 6, item 2**). Snap cover onto bore plug.

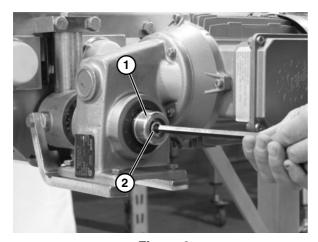


Figure 6

# **Preventive Maintenance and Adjustment**

## **Required Tools**

- 4 mm Hex Key Wrench
- 8 mm Hex Key Wrench
- 13 mm Open End Wrench
- Flat Blade Screwdriver

#### Checklist

- Keep service parts on hand. Refer to the "Service Parts" section starting on page 10 for recommendations.
- Replace any worn or damaged parts.

## **Gearmotor Replacement**



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



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



LOCK OUT POWER BEFORE WIRING. Exposure to high voltage current can cause death or serious injury. 1. Loosen the screws and remove the cover (Figure 7, item 1) from the junction box located on the side of the motor (Figure 7, item 2).

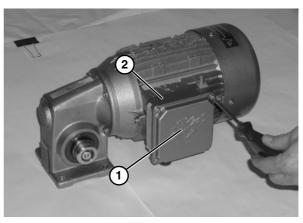


Figure 7

2. Refer to the wiring diagram (**Figure 8, item 1**) on the inside of the junction box cover.

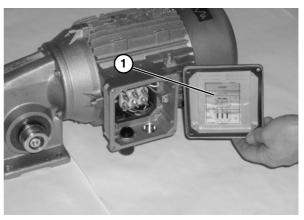


Figure 8

- 3. Loosen the wire terminals and disconnect the wires.
- 4. Loosen the cord grip and remove the cord.



#### **CRUSH HAZARD!**

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

# **Preventive Maintenance and Adjustment**

5. Remove the bolts (**Figure 9, item 1**) that connect the gearmotor (**Figure 9, item 2**) to the bent bars.

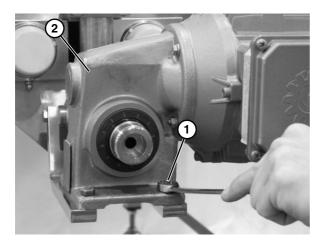


Figure 9

6. Remove the plastic cap on the end of the motor and remove the socket head screw (**Figure 10, item 1**) and the bore plug.

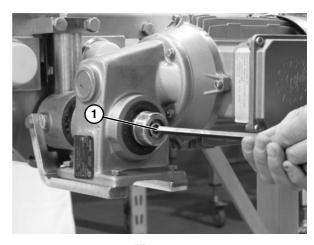


Figure 10

## **NOTE**

Be sure to retain the motor output shaft key.

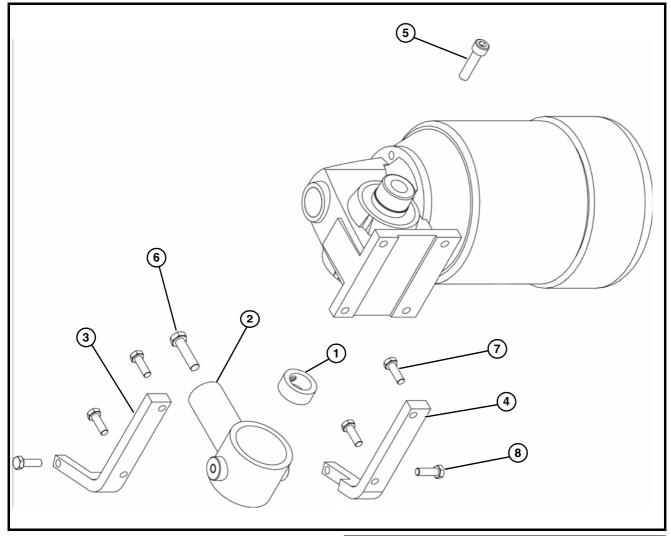
7. Slide the gearmotor off of the drive spindle (**Figure 10**).

# **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.

## **Center Drive**

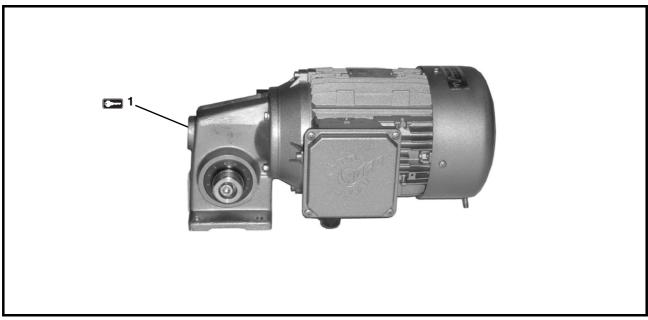


Item	Part Number	Description
1	807-1458	Set Screw Collar
2	500687	Center Drive Shaft Assembly
3	506200	Center Drive Left Hand Bent Bar
4	506201	Center Drive Right Hand Bent Bar

Item	Part Number	Description
5	921040MSS	Socket Head Screw, M10-0.5 x 35 mm
6	961040MSS	Hex Head Cap Screw, M10-1.5 x 40 mm
7	906-063SS	Hex Head Cap Screw, 5/16-18 x 1.00
8	960825MSS	Hex Head Cap Screw, M8-1.25 x 25 mm

# **Service Parts**

# **Gearmotor Assembly**



Item	Part Number	Description
1	74U060HS423FN	Motor, 0.5 Hp (0.37Kw), 23 RPM, 50Hz
	74U030HS423FN	Motor, 1.00 Hp (0.74Kw), 46 RPM, 50Hz
	74U025HS423FN	Motor, 1.00 Hp (0.74Kw), 55 RPM, 50Hz
	74U015HS423FN	Motor, 1.50 Hp (1.11Kw), 93 RPM, 50Hz
	74U010HS423FN	Motor, 1.50 Hp (1.11Kw), 140 RPM, 50Hz
	74U007HS423FN	Motor, 2.00 Hp (1.49Kw), 186 RPM, 50Hz
	74U005HS423FN	Motor, 2.00 Hp (1.49Kw), 279 RPM, 50Hz
	74U060HS423EN	Motor, 0.5 Hp (0.37Kw), 23 RPM, 50Hz, 230/400 Volts
	74U030HS423EN	Motor, 1.00 Hp (0.74Kw), 46 RPM, 50Hz, 230/400 Volts
	74U025HS423EN	Motor, 1.00 Hp (0.74Kw), 55 RPM, 50Hz, 230/400 Volts
	74U015HS423EN	Motor, 1.50 Hp (1.11Kw), 93 RPM, 50Hz, 230/400 Volts
	74U010HS423EN	Motor, 1.50 Hp (1.11Kw), 140 RPM, 50Hz, 230/400 Volts
	74U007HS423EN	Motor, 2.00 Hp (1.49Kw), 186 RPM, 50Hz, 230/400 Volts
	74U005HS423EN	Motor, 2.00 Hp (1.49Kw), 279 RPM, 50Hz, 230/400 Volts

# **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.
- 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.

A representative will discuss action to be taken on the returned items and provide a Returned Goods Authorization number for reference.

There will be a return charge on all new undamaged items returned for credit where Dorner was not at fault. Dorner is not responsible for return freight on such items.

#### Conveyors and conveyor accessories

Standard catalog conveyors

MPB Series, cleated and specialty belt conveyors

7400 & 7600 Series conveyors

Engineered special products

Drives and accessories

Sanitary stand supports

30%

non-returnable items

accessories

30%

#### **Parts**

Standard stock parts 30% MPB, 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 Technical Sales, Catalog Sales and Service Teams 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.



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. 2008

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