



7600 Series and 7600 Ultimate Series CE End Drive Packages

Installation, Maintenance and Parts Manual



Horizontal Mount



Vertical Mount

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Introduction

 CAUTION
<p>Some illustrations may show guards removed. DO NOT operate equipment without guards.</p>

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 .

Intralox is a registered trademark of Laitram L.L.C. in the United States and / or other countries.

Warnings – General Safety

⚠ DANGER

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

⚠ DANGER

EXPLOSION HAZARD!
<ul style="list-style-type: none"> • 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!
<ul style="list-style-type: none"> • 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!
<ul style="list-style-type: none"> • 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!
<ul style="list-style-type: none"> • 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. • Failure to comply could result in serious injury.

Product Description

Refer to **(Figure 1)** for typical gearmotor assembly components (vertical drive shown).

1	Conveyor
2	Mounting bar
3	Motor
4	Gear reducer
5	Gear reducer mounting bracket

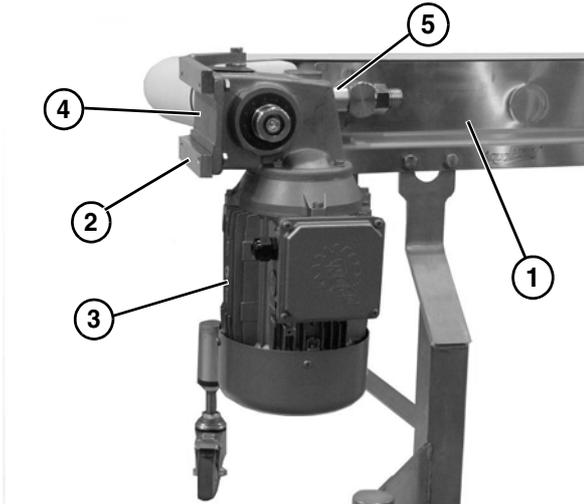


Figure 1

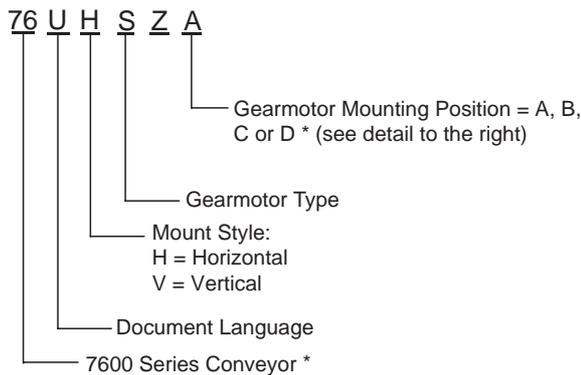
NOTE

The vertical drive package is shown above, but the horizontal and nose bar drive packages contain similar components.

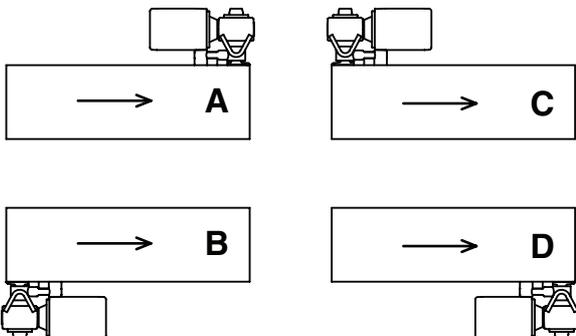
Specifications

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

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

Fixed Speed Gearmotor

Part Number	7600 Series m / min	7600 Ultimate Series m / min	RPM @50 Hz	N • m	Output Power	Input Voltage	Input Frequency	Gearmotor Ratios	Motor Type
74U060HS423FN	6.4	7.0	23	80.9	0.37 Kw	230 / 400	17-58 Hz	60:1	CE Rated, Painted Gearmotor
74U030HS423FN	12.8	14.0	46	101.9	0.74 Kw	230 / 400	12-80 Hz	30:1	
74U025HS423FN	15.2	16.8	55	93.9	0.74 Kw	230 / 400	12-80 Hz	25:1	
74U015HS423FN	25.9	28.3	93	88.9	1.11 Kw	230 / 400	12-80 Hz	15:1	
74U010HS423FN	39.0	43.0	140	63.9	1.11 Kw	230 / 400	12-72 Hz	10:1	
74U007HS423FN	51.8	57	186	67.0	1.49 Kw	230 / 400	12-75 Hz	7:1	
74U005HS423FN	78.0	85.3	279	46.0	1.49 Kw	230 / 400	25-50 HZ	5:1	

Variable Speed Gearmotor

Part Number	7600 Series m / min	7600 Ultimate Series m / min	RPM @50 Hz	N • m	Output Power	Input Voltage	Input Frequency	Gearmotor Ratios	Motor Type
74U060HS423EN	2.2 - 7.3	2.4 - 8.2	23	80.9	0.37 Kw	230 / 400	17-58 Hz	60:1	CE Rated, Painted Gearmotor
74U030HS423EN	3.0 - 20.4	3.4 - 22.6	46	101.9	0.74 Kw	230 / 400	12-80 Hz	30:1	
74U025HS423EN	3.7 - 24.4	4.0 - 26.8	55	93.9	0.74 Kw	230 / 400	12-80 Hz	25:1	
74U015HS423EN	6.1 - 41.5	6.7 - 45.4	93	88.9	1.11 Kw	230 / 400	12-80 Hz	15:1	
74U010HS423EN	9.4 - 56.1	10.4 - 66.9	140	63.9	1.11 Kw	230 / 400	12-72 Hz	10:1	
74U007HS423EN	12.5 - 77.7	13.7 - 85.3	186	67.0	1.49 Kw	230 / 400	12-75 Hz	7:1	
74U005HS423EN	39.0 - 78.0	42.7 - 85.6	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

Drive Package Installation

Horizontal Drive Package

 WARNING

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

PUNCTURE HAZARD! 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	Hex Head Cap Screw 5/16-18 x .75"
2	Hex Head Cap Screw M8-1.25 x 20 mm
3	Upper Gearhead Mounting Bar
4	Nut (7600 Series Only)
5	Motor Mounting Bracket
6	Upper Mounting Drive Spacer
7	Lower Mounting Drive Spacer
8	Hex Head Cap Screw 5/16-18 x 1.50"
9	Lower Gearhead Mounting Bar
10	Socket Head Screw M10-.50 x 35 mm
11	Gearmotor Assembly
12	Bore Plug

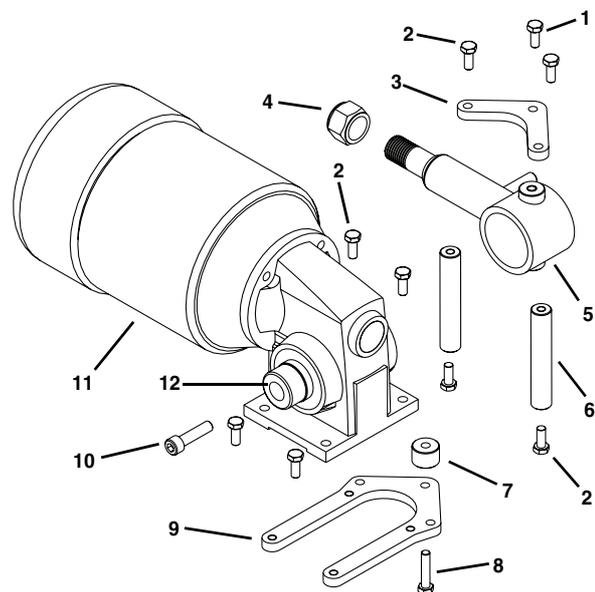


Figure 2

Installation

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

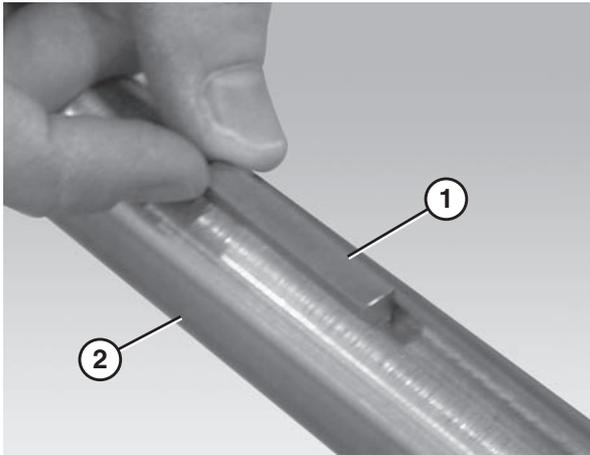


Figure 3

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

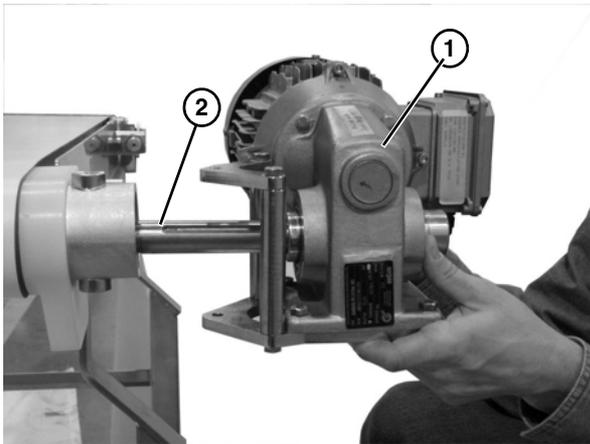


Figure 4

3. Attach the top gearhead mounting bar (Figure 5, item 1) to the motor mounting bracket (Figure 5, item 2).

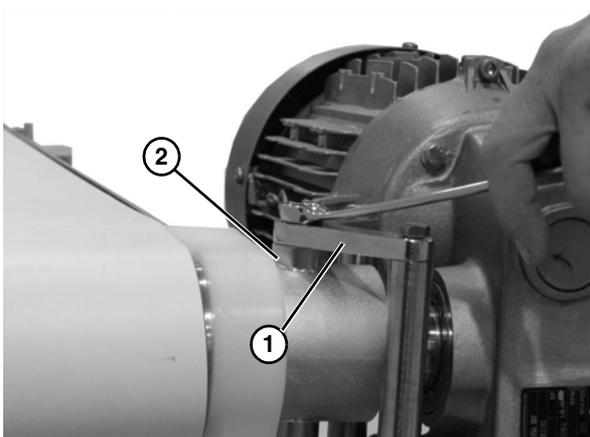


Figure 5

4. Attach the bottom gearhead mounting bar (Figure 6, item 1) to the motor mounting bracket (Figure 6, item 2) with spacer (Figure 6, item 3).

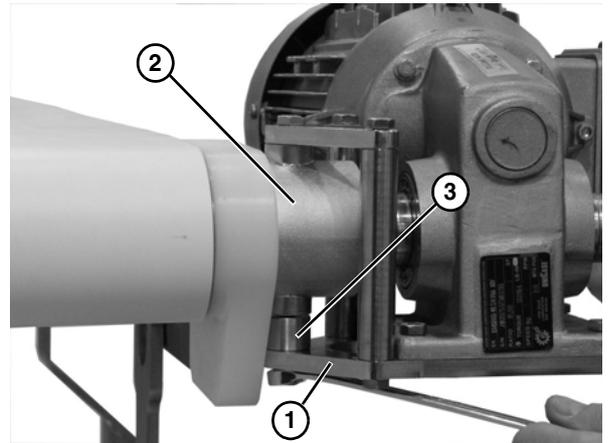


Figure 6

5. Attach the bore plug (Figure 7, item 1) and tighten the socket head screw (Figure 7, item 2). Snap cover onto bore plug (Figure 7, item 1).

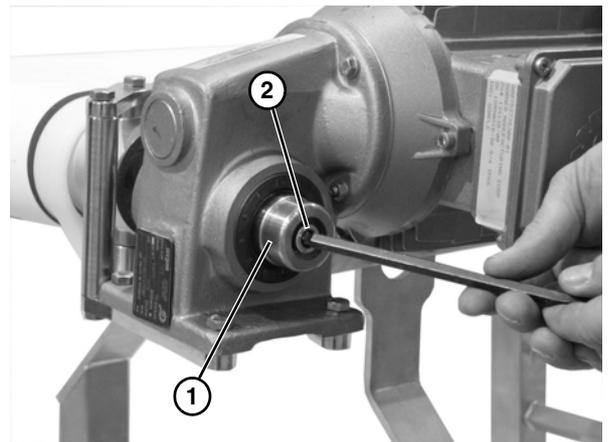


Figure 7

Installation

Vertical Drive Package

⚠ WARNING

SEVERE HAZARD! LOCK OUT POWER before removing guards or performing maintenance. Exposed moving parts can cause serious injury.
⚠ WARNING

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

Typical Vertical Drive Package Components (Figure 8)

1	Hex Head Cap Screw M8-1.25 x 25 mm
2	Nut (7600 Series Only)
3	Hex Head Cap Screw 5/16-18 x 1.00"
4	Motor Mounting Bracket
5	Vertical Drive Bent Bar Left Hand
6	Vertical Drive Bent Bar Right Hand
7	Gearmotor Assembly
8	Socket Head Screw M10-.50 x 35 mm
9	Bore Plug

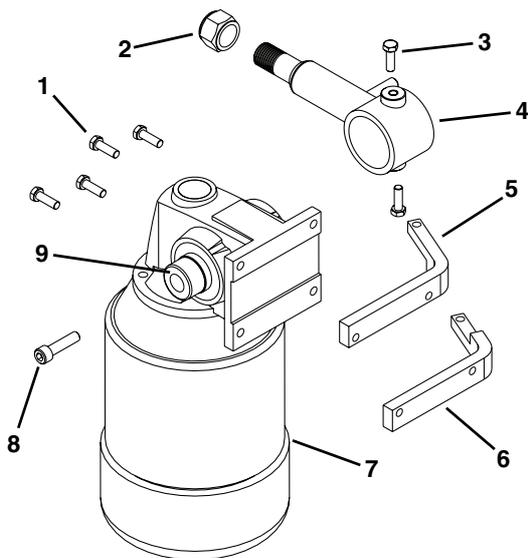


Figure 8

1. Insert the drive spindle key (Figure 9, item 1) into the drive spindle keyway (Figure 9, item 2).

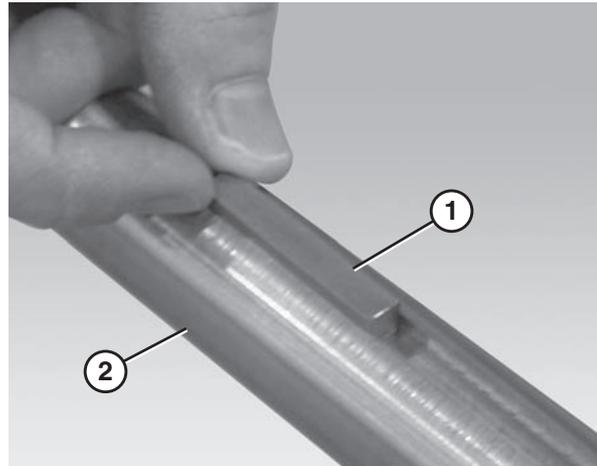


Figure 9

2. Slide the gearmotor assembly (Figure 10, item 1) onto the drive spindle (Figure 10, item 2).

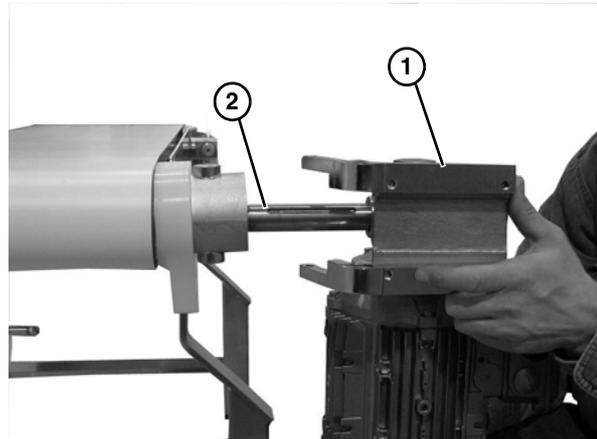


Figure 10

3. Attach the bent bars (**Figure 11, item 1**) to the motor mounting bracket (**Figure 11, item 2**).

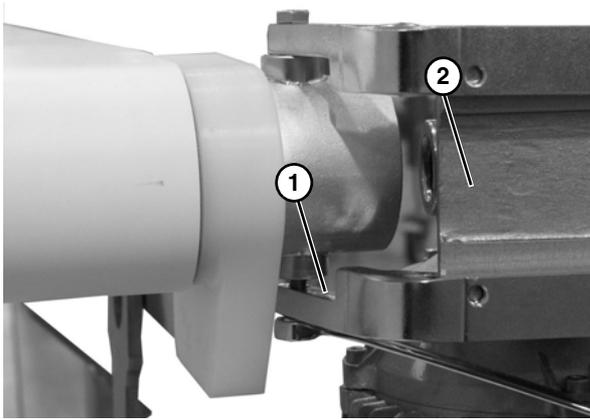


Figure 11

4. Attach the bore plug (**Figure 12, item 1**) and tighten the socket head screw. Snap cover onto bore plug (**Figure 12, item 1**)

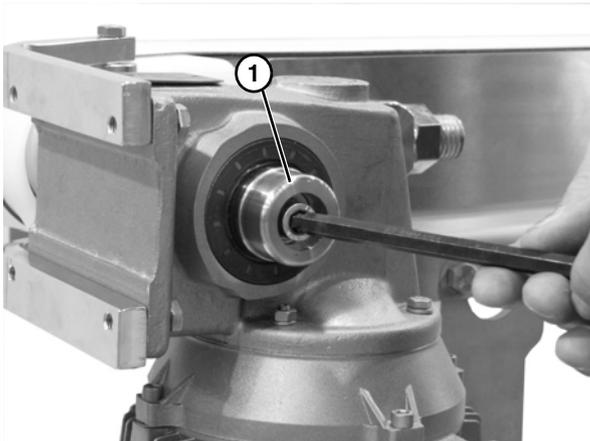


Figure 12

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 13 for recommendations.
- Replace any worn or damaged parts.

Gearmotor Replacement

⚠ 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.

⚠ DANGER

ELECTRICAL HAZARD! 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 13, item 1) from the junction box located on the side of the motor (Figure 13, item 2).

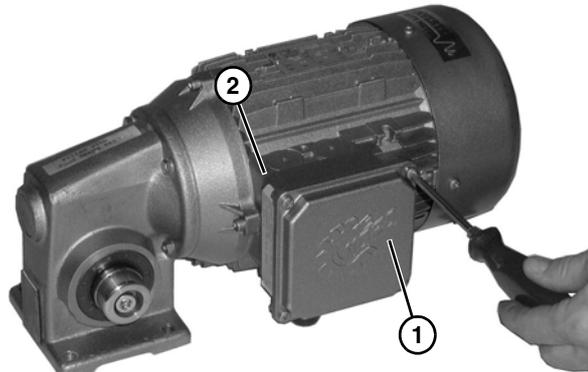


Figure 13

2. Refer to the wiring diagram (Figure 14, item 1) on the inside of the junction box cover.

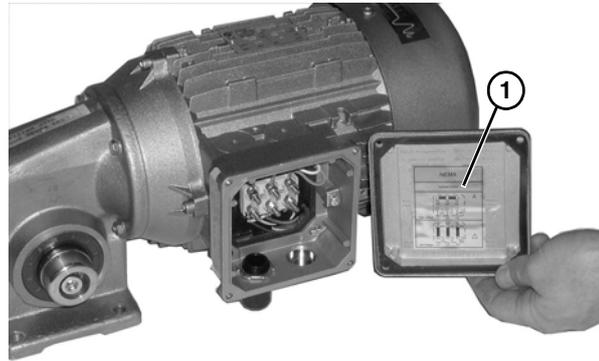


Figure 14

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

⚠ WARNING

CRUSH HAZARD! <ul style="list-style-type: none"> • 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 four bolts (**Figure 15, item 1**) that connect the gearmotor (**Figure 15, item 2**) to the gearhead mounting bar. (**Figure 15, item 3**)

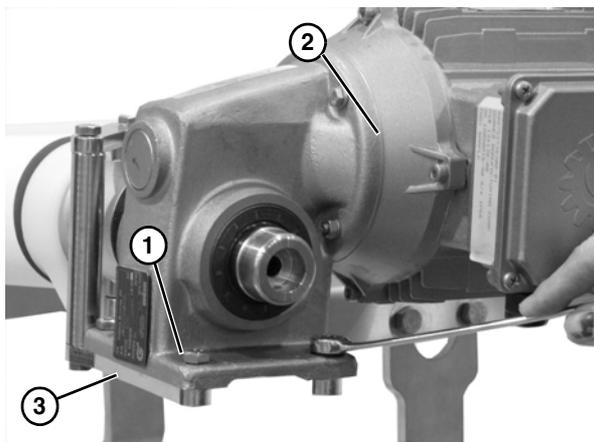


Figure 15

6. Remove the plastic cap on the end of the motor and remove the socket head screw and the bore plug. (**Figure 16, item 1**).

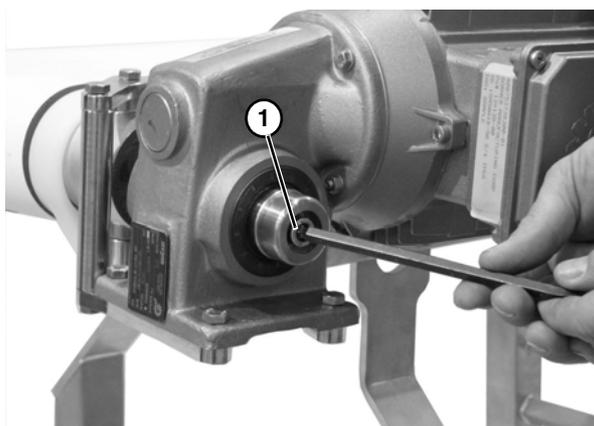


Figure 16

7. Slide the gearmotor assembly off of the drive spindle. (**Figure 16**).

NOTE

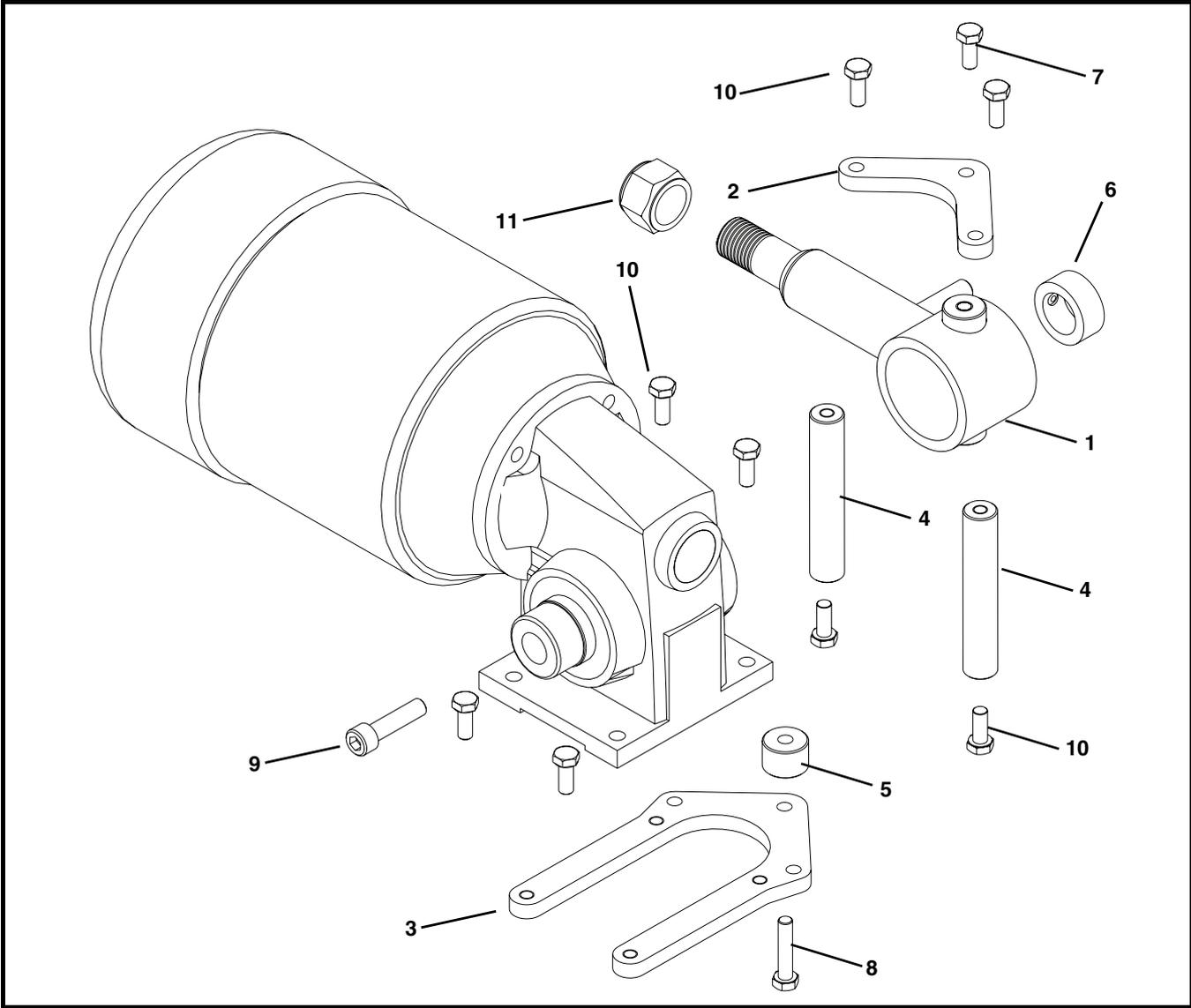
<i>Be sure to retain the motor output shaft key.</i>
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Notes

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.

Horizontal Drive

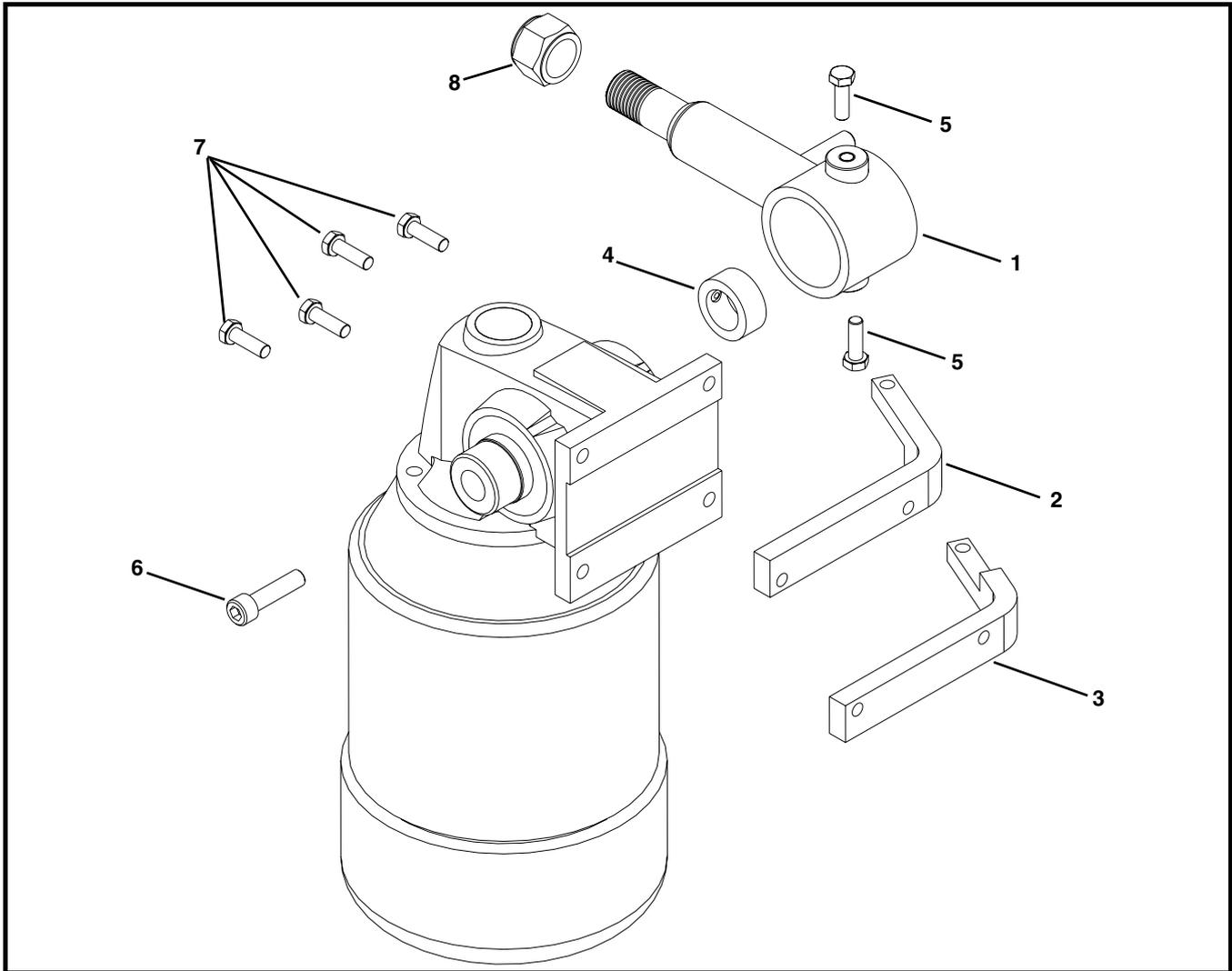


Item	Part Number	Description
1	500776	Motor Mounting Bracket (7600 Series)
	501193	Motor Mounting Bracket (7600 Ultimate Series)
2	506202	Upper Gearhead Mounting Bar
3	506203	Lower Gearhead Mounting Bar
4	506204	Upper Mounting Drive Spacer
5	506205	Lower Mounting Drive Spacer
6	807-1458	Set Screw Collar
7	906-061SS	Hex Head Cap Screw, 5/16-18 x .75

Item	Part Number	Description
8	906-064SS	Hex Head Cap Screw, 5/16-18 x 1.5
9	921040MSS	Socket Head Screw, M10 x 0.50 x 35 mm
10	960820MSS	Hex Head Cap Screw, M8 x 1.25 x 20 mm
11	500791	Nut (7600 Series Only)

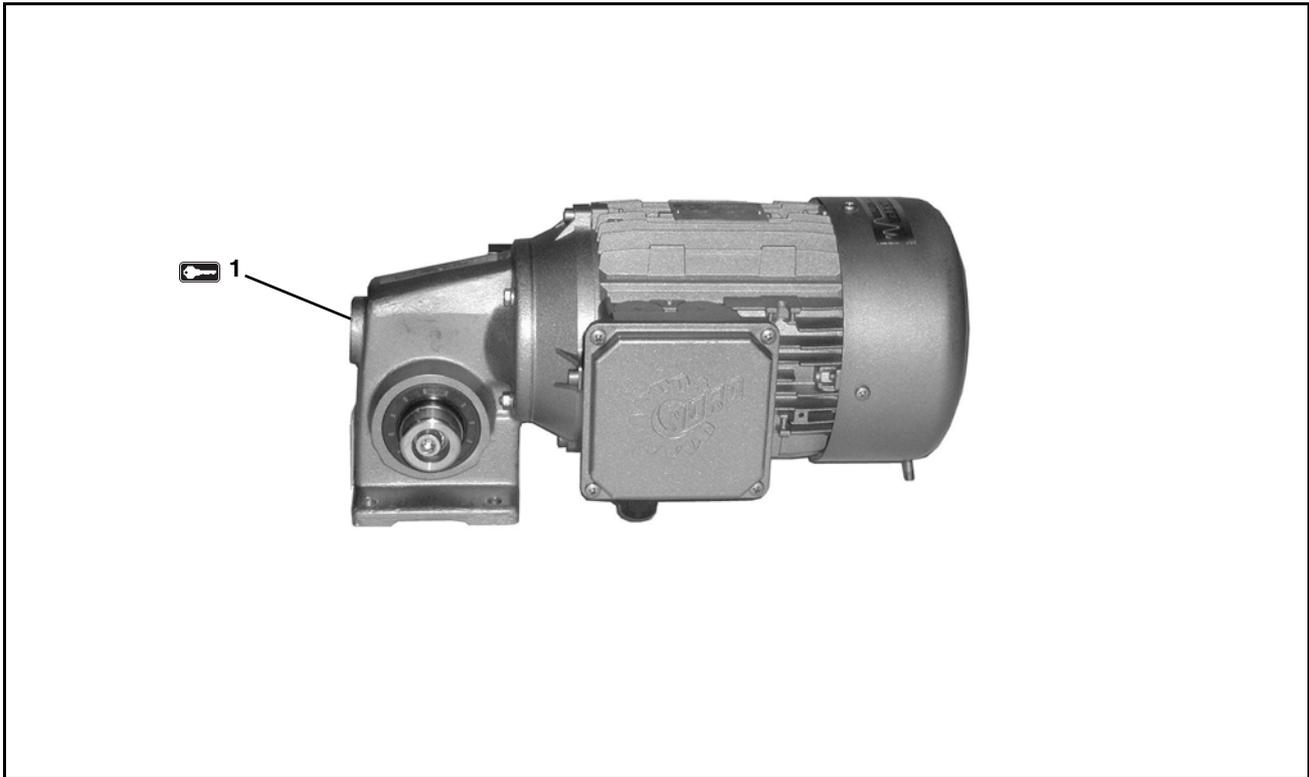
Service Parts

Vertical Drive



Item	Part Number	Description
1	500776	Drive Shaft Assembly (7600 Series)
	501193	Motor Mounting Bracket (7600 Ultimate Series)
2	506200	Vertical Drive Bent Bar Left
3	506201	Vertical Drive Bent Bar Right
4	807-1458	Set Screw Collar
5	906-063SS	Hex Head Cap Screw 5/16-18 x 1.00
6	921040MSS	Socket Head Screw, M10 x 0.50 x 35 mm
7	960825MSS	Hex Head Cap Screw, M8 x 1.25 x 25 mm
8	500791	Nut (7600 Series Only)

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.
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.

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	30%
MPB Series, cleated and specialty belt conveyors	50%
7400 & 7600 Series conveyors	non-returnable items
Engineered special products	case by case
Drives and accessories	30%
Sanitary stand supports	non-returnable items

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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