



7600 Series Center Drive Package

Installation, Maintenance and Parts Manual



DORNER MFG. CORP. P.O. Box 20 • 975 Cottonwood Ave. Hartland, WI 53029-0020 USA INSIDE THE USA TEL: 1-800-397-8664 FAX: 1-800-369-2440 OUTSIDE THE USA TEL: 262-367-7600 FAX: 262-367-5827

For other service manuals visit our website at: www.dorner.com/service_manuals.asp

Table of Contents

Introduction	2
Warnings – General Safety	3
Product Description	4
Specifications	4
7600 Series Gearmotor Mounting Package Models	
US Version 7600 Series Gearmotor Specifications	5
CE Version 7600 Series Gearmotor Specifications	5
US Version Fixed Speed Gearmotor	5
CE Version Fixed Speed Gearmotor	6
US Version Variable Speed Gearmotor	
CE Version Variable Speed Gearmotor	
Installation	7
Required Tools	7
US Version Center Drive Package Installation	

Introduction

CAUTION

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.

CE Version Center Drive Package Installation
Preventive Maintenance and Adjustment
Required Tools
Checklist
US Version Gear Reducer Replacement
CE Version Gearmotor Replacement 13
US Version Motor Replacement 14
Service Parts
US Version Center Drive 16
CE Version Center Drive 17
US Version Gearmotor Assembly 18
CE Version Gearmotor Assembly 19
Return Policy
-

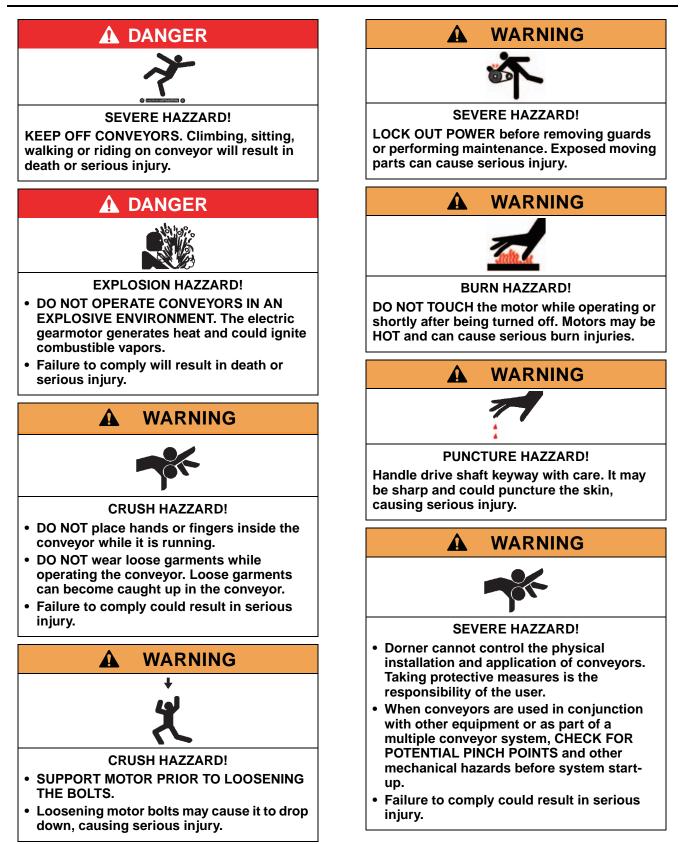
The Dorner Limited Warranty applies.

Dorner 7600 Series conveyors have patents pending.

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 \square .

Warnings – General Safety



Product Description

Refer to Figure 1 for typical gearmotor assembly components.

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

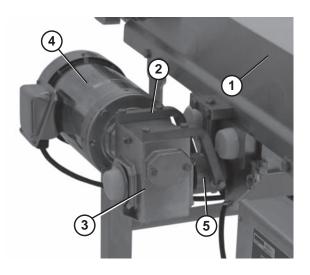
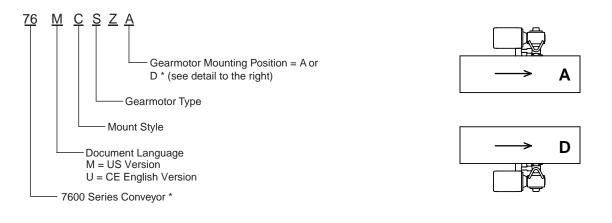


Figure 1

Specifications

7600 Series Gearmotor Mounting Package Models



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

Specifications

US Version 7600 Series Gearmotor Specifications

	Singe Phase	Three Phase		
Output Power	0.50 hp (0.37 kW)	.50 hp (.37 kW) /1 hp (.74 KW) / 1.5 hp (1.11 kW)		
Input Voltage	115 V A.C.	208 - 230 / 460 V.A.C.		
Input Frequency	60 Hz	6 – 60 Hz		
Motor RPM	22 - 44	22 - 233		
Gearmotor Ratios	5:1, 7:1, 10:1, 15:1, 20:1, 30:1, 40:1, 60:1, 80:1			
Frame Size	NEMA 56 C			
Motor Type	Totally Enclosed, Non-ventilated (Except 1.5 hp Stainless Steel Gearmotor = Totally Enclosed, Fan Cooled)			

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

CE Version 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.

US Version Fixed Speed Gearmotor

Part Number	ft / min	m / min	RPM	in • lb	N • m
74M080H(x)4(vp)FN	20	6.1	22	356	40.2
74M060H(x)4(vp)FN	27	8.2	29	442	49.9
74M040H(x)4(vp)FN	41	12.5	44	486	54.9
74M030H(x)4(vp)FN	54	16.5	58	487	55.0
74M020H(x)4(vp)FN	81	24.7	87	407	46.0
74M015H(x)4(vp)FN	109	33.2	117	470	53.1
74M010H(x)4(vp)FN	164	50.0	175	442	49.9
74M007H(x)4(vp)FN	218	66.4	233	360	40.7
74M005H(x)4(vp)FN	325	100.0	350	337	38.1

Specifications

CE Version 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,
74U030HS423FN	12.8	46	101.9	0.74 Kw	230 / 400	12-80 Hz	30:1	Painted 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	

US Version Variable Speed Gearmotor

Part Number	ft / min	m / min	RPM	in • lb	N • m
74M080H(x)4(vp)EN	2 - 20	0.6 - 6.1	22	356	40.2
74M060H(x)4(vp)EN	3 - 27	0.9 - 8.2	29	442	49.9
74M040H(x)4(vp)EN	5 - 41	1.3 - 12.5	44	486	54.9
74M030H(x)4(vp)EN	6 - 54	2.0 - 16.5	58	487	55.0
74M020H(x)4(vp)EN	9 - 81	2.6 - 24.7	87	407	46.0
74M015H(x)4(vp)EN	11 - 109	3.4 - 33.2	117	470	53.1
74M010H(x)4(vp)EN	17 - 164	5.2 - 50.0	175	442	49.9
74M007H(x)4(vp)EN	22 - 218	6.7 - 66.4	233	360	40.7
74M005H(x)4(vp)EN	34 - 328	10.4 - 100.0	350	337	38.1

CE Version 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	

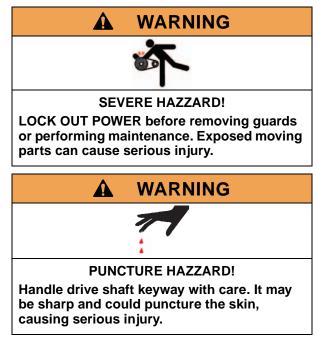
NOTE

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

Required Tools

- 5 / 16" wrench (or adjustable wrench)
- 4 mm hex wrench
- 8 mm hex wrench
- 13 mm open end wrench
- Flat blade screwdriver
- Torque wrench

US Version Center Drive Package Installation



Typical Horizontal Drive Package Components (Figure 2)

- 1 Bearing Cover
- 2 Cover bracket
- 3 Hex head cap screw 5 / 16 18 x .50 (x4)
- 4 Gearmotor assembly
- 5 Bent bar (x2)
- 6 Hex head cap screw 5 / 16 18 x 1.12 (x6)
- 7 Hex head cap screw M10-1.50
- 8 Center drive mounting bracket

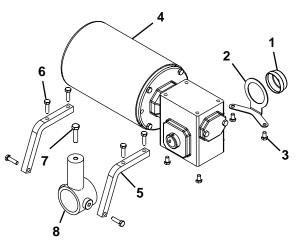


Figure 2

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

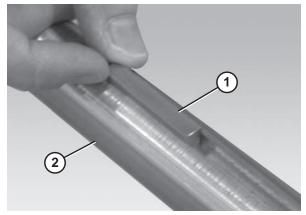


Figure 3

2. Slide the gear reducer (Figure 4, item 1) onto the drive spindle (Figure 4, item 2).

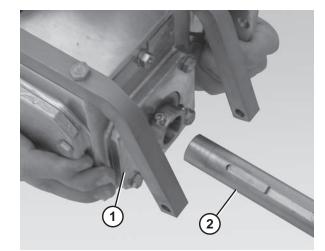


Figure 4

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

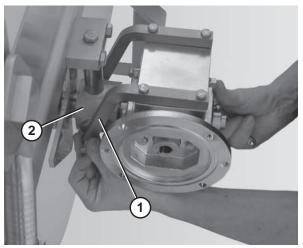


Figure 5

4. Use a 4 mm hex wrench to tighten the outside button head screws (**Figure 6, item 1**) and the inside button head screws (**Figure 6, item 2**) that connect the gearmotor to the drive spindle.

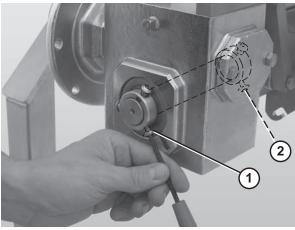


Figure 6

5. Attach the bearing cover (Figure 7, item 1).

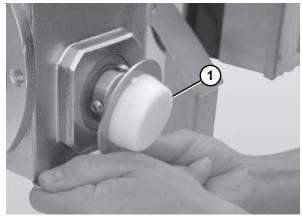


Figure 7



Ensure the gearmotor output shaft key (Figure 8, item 1) is situated properly before attaching the motor to the gear reducer.

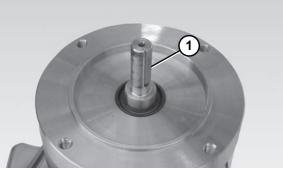
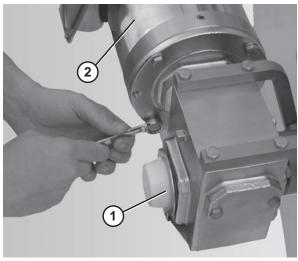


Figure 8

6. Attach the motor (Figure 9, item 2) to the gear reducer (Figure 9, item 1).





7. Remove the drainage plugs (**Figure 10, item 1**) on the bottom side of the motor.



Figure 10

CE Version Center Drive Package Installation



Typical Horizontal Drive Package Components (Figure 11)

- 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

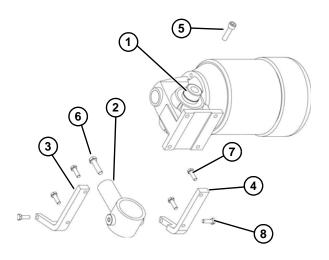


Figure 11

1. Insert the drive spindle key (Figure 12, item 1) into the drive spindle keyway (Figure 12, item 2).

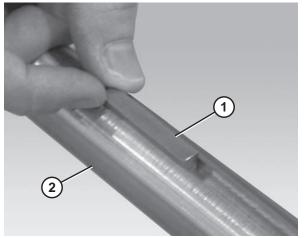


Figure 12

2. Slide the gearmotor assembly (Figure 13, item 1) onto the drive spindle (Figure 13, item 2).

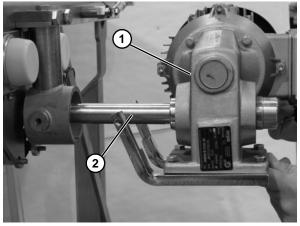
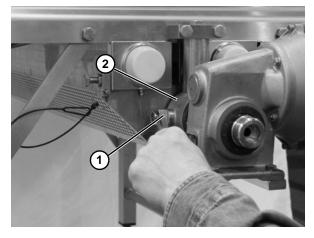


Figure 13

3. Attach the bent bars (Figure 14, item 1) to the motor mounting bracket (Figure 14, item 2).





4. Attach the bore plug (**Figure 15, item 1**) and tighten the socket head screw (**Figure 15, item 2**). Snap cover onto bore plug.

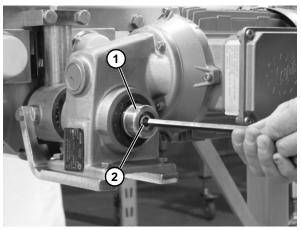


Figure 15

Required Tools

- 5 / 16" wrench
- 4 mm hex wrench
- 8 mm hex wrench
- 10 mm wrench
- 13 mm open end wrench
- Large flat-head screwdriver

Checklist

- Keep service parts on hand. Refer to the "Service Parts" section starting on page 16 for recommendations.
- Replace any worn or damaged parts.

US Version Gear Reducer Replacement



• Loosening motor bolts may cause it to drop down, causing serious injury.

 Remove the bolts (Figure 16, item 1) that connect the motor (Figure 16, item 2) to the gear reducer (Figure 16, item 3).

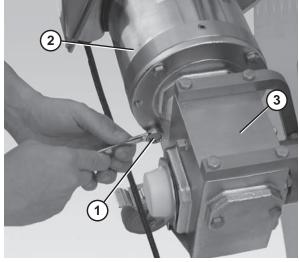


Figure 16

2. Disconnect the motor (Figure 17, item 1) from the gear reducer (Figure 17, item 2) and set the motor aside.

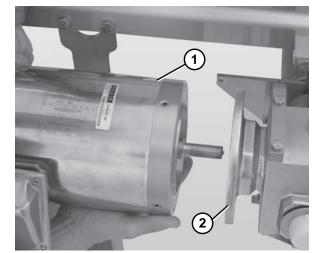


Figure 17

NOTE

Be sure to retain the motor output shaft key.

3. Remove the bearing cover (Figure 18, item 1).

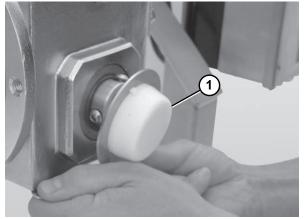
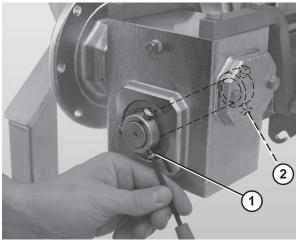


Figure 18

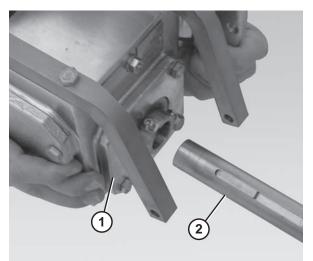
4. Loosen the drive spindle fasteners (**Figure 19, item 1**) located on the inside and outside of the gearmotor assembly using a 4 mm hex wrench (**Figure 19, item 2**).







5. Slide the gearmotor assembly (**Figure 20, item 1**) off the drive spindle (**Figure 20, item 2**).





NOTE

Be sure to retain the drive spindle key.

- 6. Replace the gear reducer.
- Insert the gearmotor output shaft key (Figure 21, item 1) into the gearmotor output shaft keyway (Figure 21, item 2).

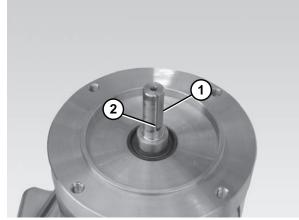


Figure 21



Ensure the gearmotor output shaft key (Figure 21, item 1) is situated properly before attaching the motor to the gear reducer.

- 8. Connect the new gear reducer to the motor.
- 9. Reinstall the gearmotor assembly. Refer to "US Version Center Drive Package Installation" starting on page 7.

CE Version Gearmotor Replacement



 Loosen the screws and remove the cover (Figure 22, item 1) from the junction box located on the side of the motor (Figure 22, item 2).

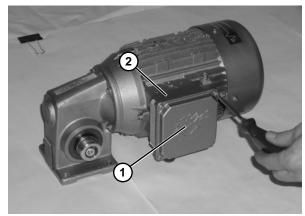
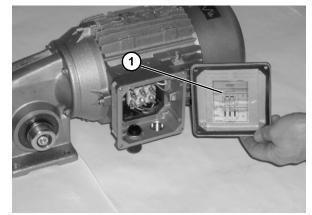


Figure 22

2. Refer to the wiring diagram (**Figure 23, item 1**) on the inside of the junction box cover.





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



5. Remove the bolts (Figure 24, item 1) that connect the gearmotor (Figure 24, item 2) to the bent bars.

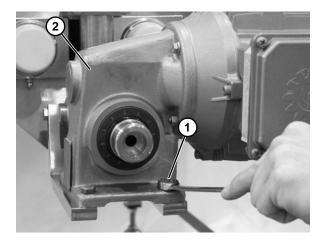
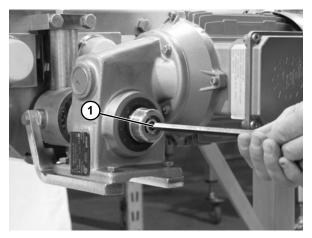


Figure 24

6. Remove the plastic cap on the end of the motor and remove the socket head screw (**Figure 25, item 1**) and the bore plug.



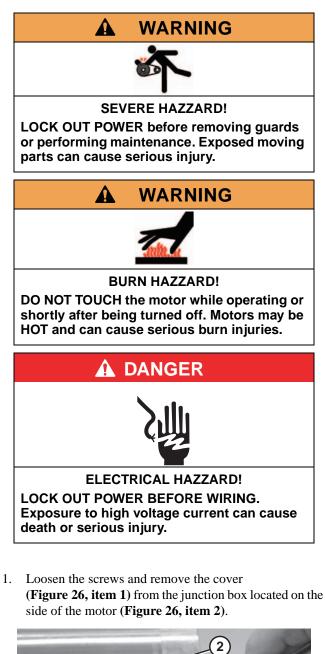


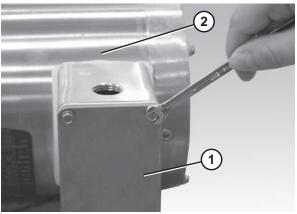
NOTE

Be sure to retain the motor output shaft key.

7. Slide the gearmotor off of the drive spindle (Figure 25).

US Version Motor Replacement







2. Refer to the wiring diagram (**Figure 27, item 1**) on the inside of the junction box cover.

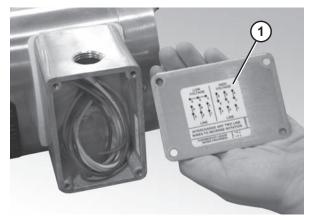


Figure 27

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



Remove the bolts (Figure 28, item 1) that connect the motor (Figure 28, item 2) to the gear reducer (Figure 28, item 3) (horizontal drive shown in figures).

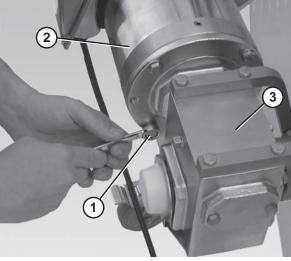


Figure 28

6. Detach the motor (Figure 29, item 1) from the gear reducer (Figure 29, item 2).

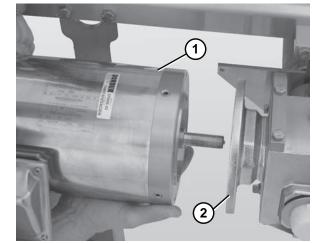


Figure 29

NOTE

Be sure to retain the motor output shaft key.

7. Insert the motor output shaft key (**Figure 30, item 1**) into the motor output shaft keyway (**Figure 30, item 2**).

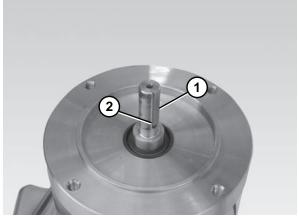
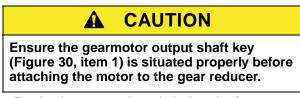


Figure 30

8. Align the motor output shaft key with the access hole in the gear reducer and connect the new motor to the gear reducer.

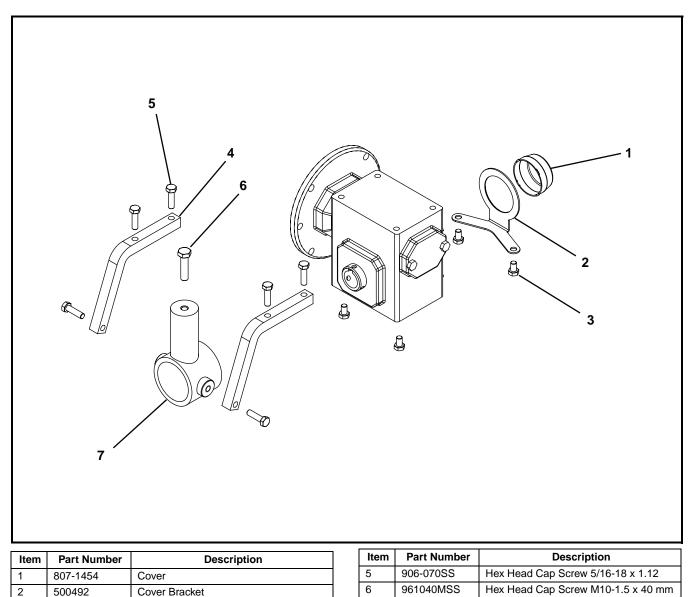


9. Rewire the motor and attach the junction box cover.

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.

US Version Center Drive



Hex Head Cap Screw 5/16-18 x .50

Center Drive Bent Bar

500687

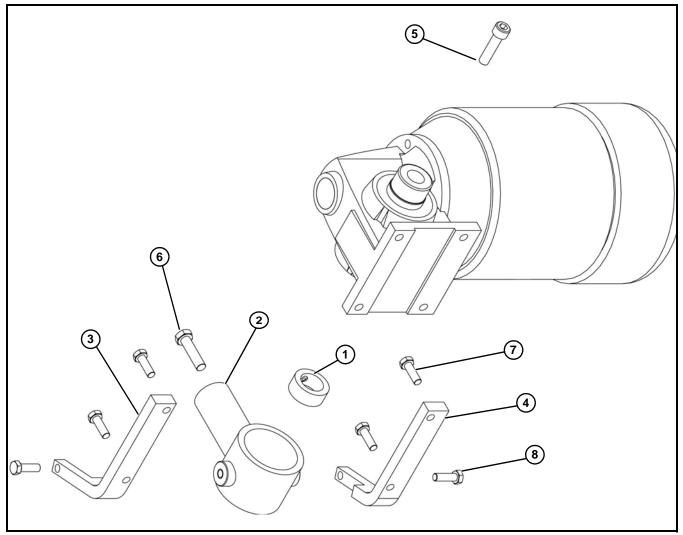
7

906-067SS

500381

3 4 Center Drive Shaft Assembly

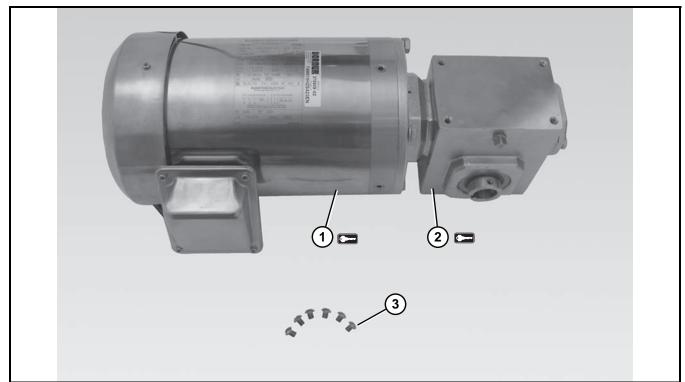
CE Version Center Drive



ltem	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

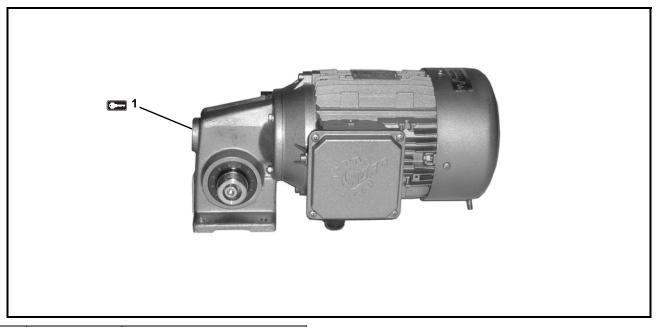
US Version Gearmotor Assembly



Item	Part Number	Description
1	62MZ411	Painted Motor, 0.50 Hp (0.37Kw) 115 Volts, 60Hz, 1 Phase
	62MZ423	Painted Motor, 0.50 Hp (0.37Kw) 208- 230/460 Volts, 6 to 60Hz, 3 Phase
	74MHS423-10	Painted Motor, 1.00 Hp (0.74Kw) 208- 230/460 Volts, 6 to 60Hz, 3 Phase
	74MHS423-15	Painted Motor, 1.50 Hp (1.11Kw) 208- 230/460 Volts, 6 to 60Hz, 3 Phase
	62MZS423	Stainless Steel Motor, 0.50 Hp (0.37Kw) 208-230/460 Volts, 6 to 60Hz, 3 Phase
	74MZS423-10	Stainless Steel Motor, 1.00 Hp (0.74Kw) 208-230/460 Volts, 6 to 60Hz, 3 Phase
	74MZS423-15	Stainless Steel Motor, 1.50 Hp (1.11Kw) 208-230/460 Volts, 6 to 60Hz, 3 Phase

Item	Part Number	Description
2	74M005HS	Painted Gear Reducer, 5:1, 56C
IJ	74M007HS	Painted Gear Reducer, 7:1, 56C
	74M010HS	Painted Gear Reducer, 10:1, 56C
	74M015HS	Painted Gear Reducer, 15:1, 56C
	74M020HS	Painted Gear Reducer, 20:1, 56C
	74M030HS	Painted Gear Reducer, 30:1, 56C
	74M040HS	Painted Gear Reducer, 40:1, 56C
	74M060HS	Painted Gear Reducer, 60:1, 56C
	74M080HS	Painted Gear Reducer, 80:1, 56C
	74M005HZ	Stainless Steel Gear Reducer, 5:1, 56C
	74M007HZ	Stainless Steel Gear Reducer, 7:1, 56C
	74M010HZ	Stainless Steel Gear Reducer, 10:1, 56C
	74M015HZ	Stainless Steel Gear Reducer, 15:1, 56C
	74M020HZ	Stainless Steel Gear Reducer, 20:1, 56C
	74M030HZ	Stainless Steel Gear Reducer, 30:1, 56C
	74M040HZ	Stainless Steel Gear Reducer, 40:1, 56C
	74M060HZ	Stainless Steel Gear Reducer, 60:1, 56C
	74M080HZ	Stainless Steel Gear Reducer, 80:1, 56C
3	917-104	Stainless Steel Socket Head Cap Screw
		10-32 x .25 for Painted Gearmotor
	916-126	Stainless Steel Button Head Cap Screw
		1/4-20 x .31 for Stainless Steel
		Gearmotor

CE Version Gearmotor Assembly



ltem	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 (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.

Conveyors and conveyor accessories

Standard catalog conveyors	30%
MPB, 7200, 7300 Series, cleated and specialty belt	50%
AquaGard & AquaPruf 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%

Standard stock parts Plastic chain, cleated and specialty belts 30% 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 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.



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. 2010

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

Outside the USA: TEL 1-262-367-7600 FAX 1-262-367-5827

Printed in U.S.A.