



7350 Series Side Mount Nose Bar Drive Packages

Installation, Maintenance and Parts Manual



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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.

The Dorner Limited Warranty applies.

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

DANGER



SEVERE HAZARD!

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

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 CONVEYOR SECTIONS PRIOR TO LOOSENING STAND HEIGHT OR ANGLE ADJUSTMENT SCREWS.**
- Loosening stand height or angle adjustment screws may cause conveyor sections 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 start-up.
- Failure to comply could result in serious injury.

Product Description

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

Typical Components	
1	Conveyor
2	Mounting bars
3	Motor
4	Gear reducer
5	Gear reducer mounting bracket

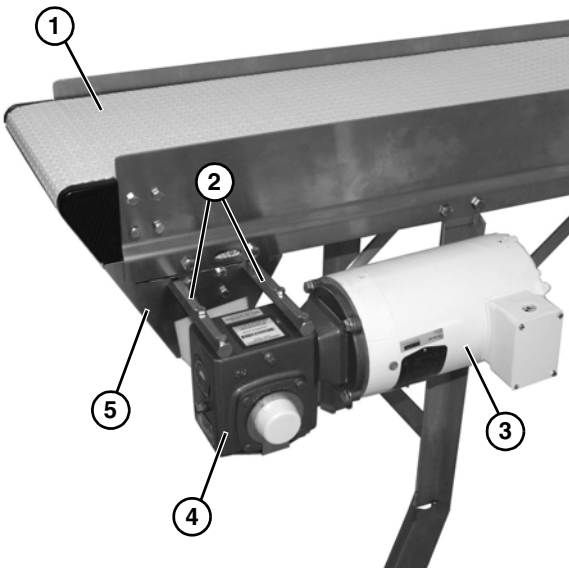
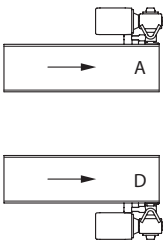
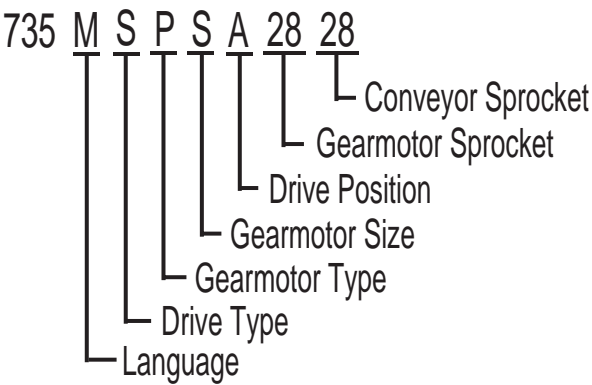


Figure 1

Specifications

Gearmotor Mounting Package Models



* Refer to “Ordering and Specifications” Catalog for details.

Specifications

Table 1: 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)	

Table 2: Belt Speeds for Fixed Speed 90° Painted Gearmotors

Part Number	Belt Speed		RPM	1 Phase			3 Phase			in-lbs	N-m
	Ft/min	M/min		HP	Kw	FLA	HP	Kw	FLA		
74M080HS4(vp)FN	22	6.7	22	0.5	0.37	6.8/3.7-3.4	0.5	0.37	1.6/0.8	356	40.2
74M060HS4(vp)FN	29	8.8	29	0.5	0.37	6.8/3.7-3.4	0.5	0.37	1.6/0.8	442	49.9
74M040HS4(vp)FN	44	13.2	44	0.5	0.37	6.8/3.7-3.4	0.5	0.37	1.6/0.8	486	54.9
74M030HS4(vp)FN	58	17.7	58	N/A	N/A	N/A	1	0.74	3.5-3.2/1.6	487	55.0
74M020HS4(vp)FN	87	26.5	87	N/A	N/A	N/A	1	0.74	3.5-3.2/1.6	407	46.0
74M015HS4(vp)FN	117	35.7	117	N/A	N/A	N/A	1	0.74	3.5-3.2/1.6	470	53.1
74M010HS4(vp)FN	175	53.3	175	N/A	N/A	N/A	1.5	1.11	4.6-4.2/2.1	442	49.9
74M007HS4(vp)FN	233	71.0	233	N/A	N/A	N/A	1.5	1.11	4.6-4.2/2.1	360	40.7

(vp) = voltage and phase

23 = 0.5 HP – 230/460 V, 3-phase

11 = 115/208-230, 1-phase

1.0 & 1.5 HP – 208-230/460 V, 3-phase

Table 3: Belt Speeds for Variable Speed 90° Painted Gearmotors

Part Number	Belt Speed		RPM	3 Phase				in-lbs	N-m
	Ft/min	M/min		HP	Kw	Volts	FLA		
74M080HS423EN	2 to 22	0.6 to 6.7	22	0.5	0.37	230/460	1.6/0.8	356	40.2
74M060HS423EN	3 to 29	0.9 to 8.8	29	0.5	0.37	230/460	1.6/0.8	442	49.9
74M040HS423EN	5 to 44	1.3 to 13.4	44	0.5	0.37	230/460	1.6/0.8	486	54.9
74M030HS423EN	6 to 58	2 to 17.7	58	1	0.74	208-230/460	3.5-3.2/1.6	487	55.0
74M020HS423EN	9 to 87	2.6 to 26.5	87	1	0.74	208-230/460	3.5-3.2/1.6	487	55.0
74M015HS423EN	12 to 117	3.6 to 35.7	117	1	0.74	208-230/460	3.5-3.2/1.6	470	53.1
74M010HS423EN	18 to 175	5.3 to 53.3	175	1.5	1.11	208-230/460	4.6-4.2/2.1	442	49.9
74M007HS423EN	23 to 233	7.1 to 71.0	233	1.5	1.11	208-230/460	4.6-4.2/2.1	360	40.7

Specifications

Table 4: Belt Speeds for Fixed Speed 90° Stainless Gearmotors

Part Number	Belt Speed		RPM	3 Phase				in-lbs	N-m
	Ft/min	M/min		HP	Kw	Volts	FLA		
74M080HZZS423FN	22	6.7	22	0.5	0.37	230/460	1.6/0.8	356	40.2
74M060HZZS423FN	29	8.8	29	0.5	0.37	230/460	1.6/0.8	442	49.9
74M040HZZS423FN	44	13.4	44	0.5	0.37	230/460	1.6/0.8	486	54.9
74M030HZZS423FN	58	17.7	58	1	0.74	208-230/460	3.2-3/1.5	487	55.0
74M020HZZS423FN	87	26.5	87	1	0.74	208-230/460	3.2-3/1.5	407	46.0
74M015HZZS423FN	117	35.7	117	1	0.74	208-230/460	3.2-3/1.5	470	53.1
74M010HZZS423FN	175	53.3	175	1.5	1.11	208-230/460	5.8-5.4/2.7	442	49.9
74M007HZZS423FN	233	71.0	233	1.5	1.11	208-230/460	5.8-5.4/2.7	360	40.7

Table 5: Belt Speeds for Variable Speed 90° Stainless Gearmotors

Part Number	Belt Speed		RPM	3 Phase				in-lbs	N-m
	Ft/min	M/min		HP	Kw	Volts	FLA		
74M080HZZS423EN	2 to 22	0.6 to 6.7	22	0.5	0.37	230/460	1.6/0.8	356	40.2
74M060HZZS423EN	3 to 29	0.9 to 8.8	29	0.5	0.37	230/460	1.6/0.8	442	49.9
74M040HZZS423EN	5 to 44	1.3 to 13.4	44	0.5	0.37	230/460	1.6/0.8	486	54.9
74M030HZZS423EN	6 to 58	2 to 17.7	58	1	0.74	208-230/460	3.2-3/1.5	487	55.0
74M020HZZS423EN	9 to 87	2.6 to 26.5	87	1	0.74	208-230/460	3.2-3/1.5	487	55.0
74M015HZZS423EN	12 to 117	3.6 to 35.7	117	1	0.74	208-230/460	3.2-3/1.5	470	53.1
74M010HZZS423EN	18 to 175	5.3 to 53.3	175	1.5	1.11	208-230/460	5.3-5.4/2.7	442	49.9
74M007HZZS423EN	23 to 233	7.1 to 71.0	233	1.5	1.11	208-230/460	5.3-5.4/2.7	360	40.7



NOTE

For belt speed other than those listed, contact factory for details.

Required Tools

- 5/16" wrench
- 4 mm wrench
- 13 mm wrench
- 14 mm wrench
- Large flat head screwdriver
- Torque wrench

Nose Bar Drive Package

⚠ WARNING

<p style="text-align: center;">SEVERE HAZARD!</p> <p>LOCK OUT POWER before removing guards or performing maintenance. Exposed moving parts can cause serious injury.</p>
⚠ WARNING

<p style="text-align: center;">PUNCTURE HAZARD!</p> <p>Handle drive shaft keyway with care. It may be sharp and could puncture the skin, causing serious injury.</p>

Nose Bar Drive Mounting Positions

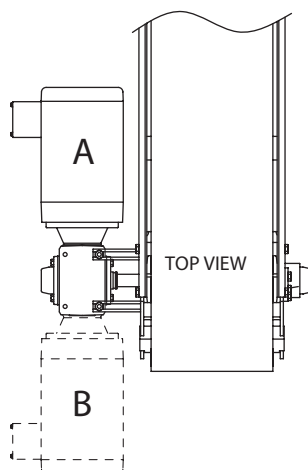


Figure 2

Typical Nose Bar Drive Package Components (Figure 3)

- | | |
|---|--|
| 1 | Cover |
| 2 | Cover bracket |
| 3 | Hex head cap screw 5 / 16 - 18 x .50" (x4) |
| 4 | Nose bar gear reducer hex mounting post (x2) |
| 5 | Hex head cap screw 5 / 16 - 18 x 1.12" (x4) |
| 6 | Hex head cap screw M10 - 1.5 x 16 mm (x2) |
| 7 | Gearmotor assembly |

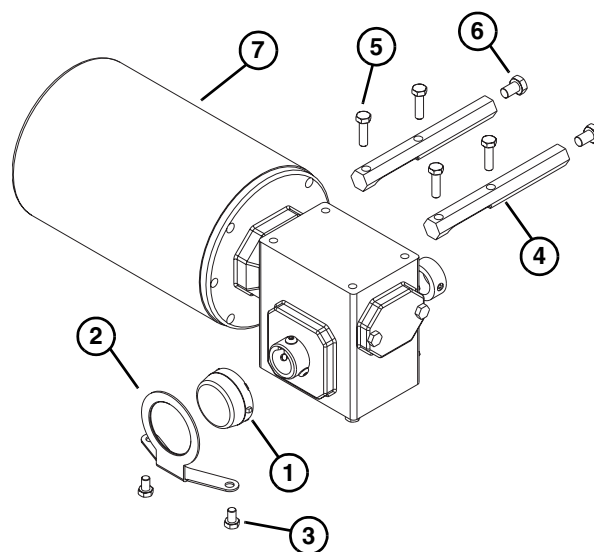


Figure 3

1. Attach the gear reducer hex mounting posts (Figure 4, item 1) to the nose bar side plate (Figure 4, item 2).

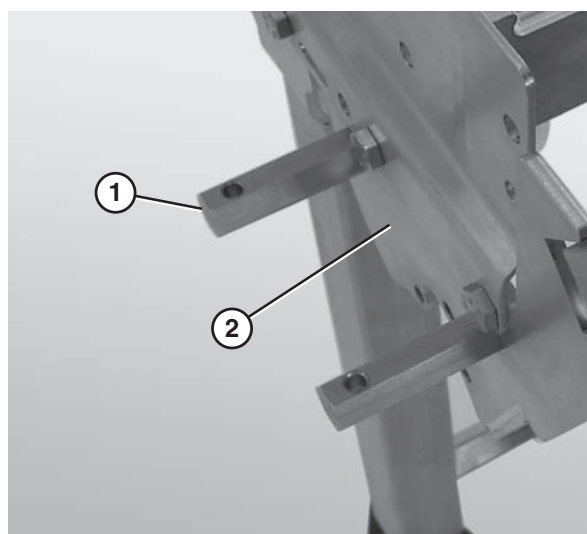


Figure 4

Installation

2. Insert the drive spindle key (**Figure 5, item 1**) into the drive spindle keyway (**Figure 5, item 2**).

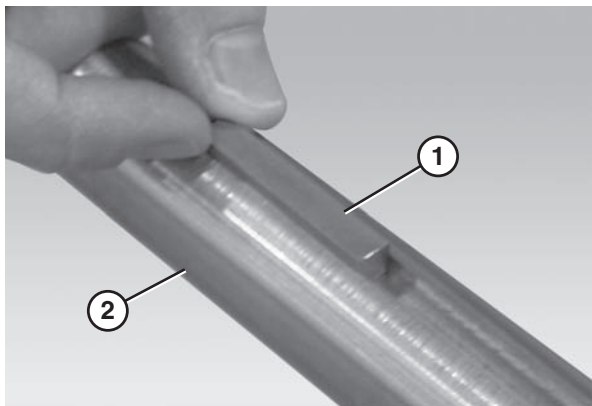


Figure 5

3. Slide the gearmotor assembly (**Figure 6, item 1**) onto the drive spindle (**Figure 6, item 2**).

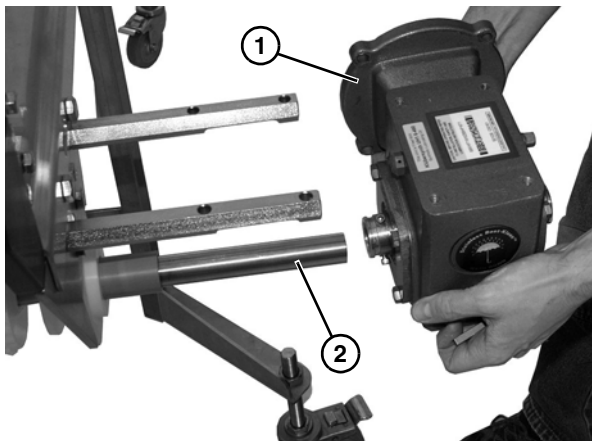


Figure 6

4. Attach the gearmotor assembly (**Figure 7, item 1**) to the gear reducer hex mounting posts (**Figure 7, item 2**) with four bolts (**Figure 7, item 3**).

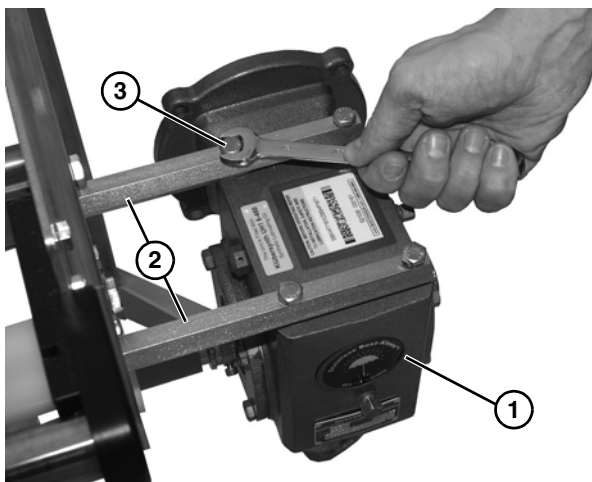


Figure 7

5. Tighten the drive spindle fasteners (**Figure 8, item 1**) located on the inside and outside of the gearmotor using a hex wrench (**Figure 8, item 2**).

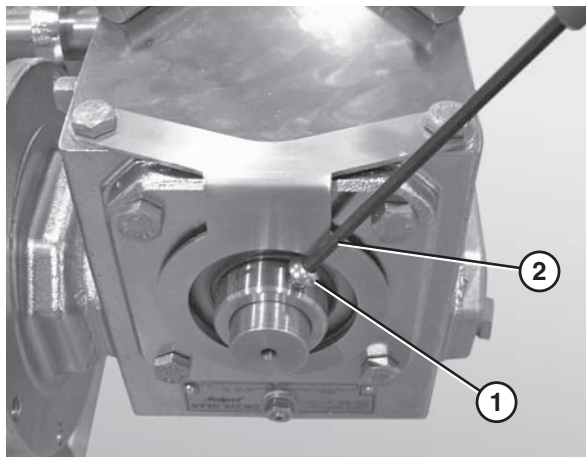


Figure 8

6. Attach the gearmotor cover (**Figure 9, item 1**).

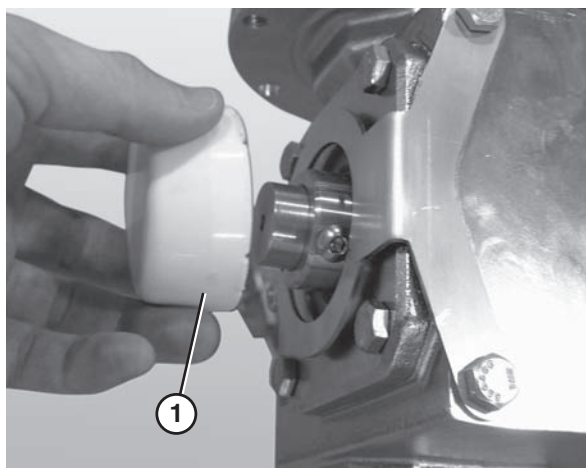


Figure 9

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

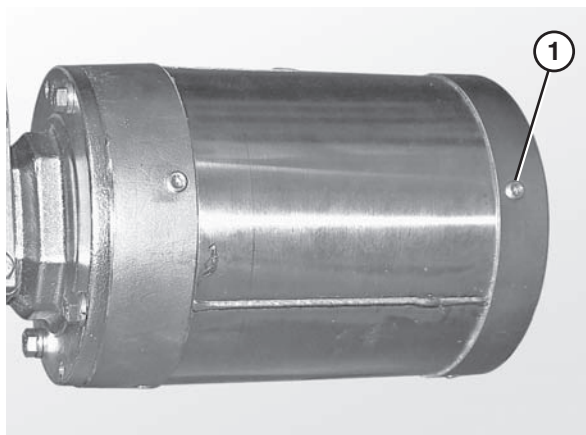


Figure 10

Preventive Maintenance and Adjustment



Required Tools



- 5/16" wrench
- 4 mm wrench
- 13 mm wrench
- 14 mm wrench
- Large flat head screwdriver
- Torque wrench

Checklist

- Keep service parts on hand. Refer to the "Service Parts" section starting on page 13 for recommendations.
- Replace any worn or damaged parts.

Gear Reducer 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.

1. Remove the bolts (**Figure 11, item 1**) that connect the motor (**Figure 11, item 2**) to the gear reducer (**Figure 11, item 3**).

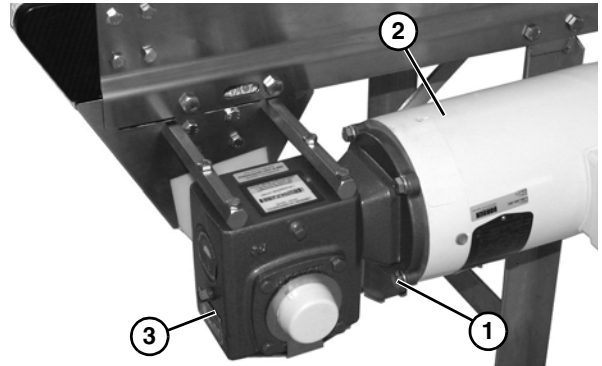




Figure 11

 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.

2. Detach the motor (**Figure 12, item 1**) from the gear reducer (**Figure 12, item 2**) and set the motor aside.

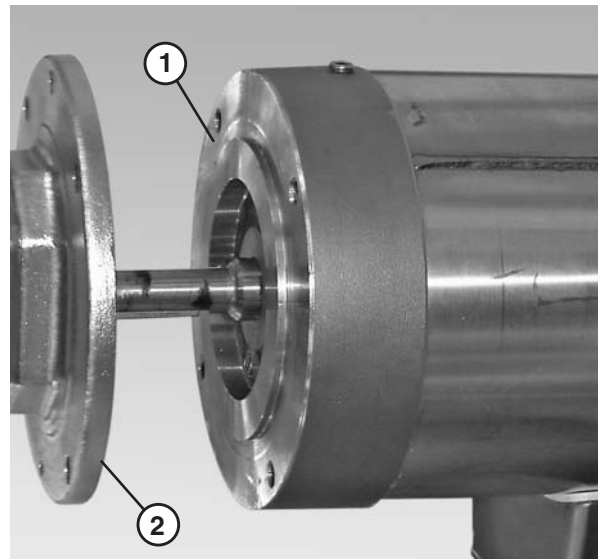


Figure 12

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

Preventive Maintenance and Adjustment

3. Remove the gearmotor cover (**Figure 13, item 1**). Use a screwdriver to pry it loose, if necessary.

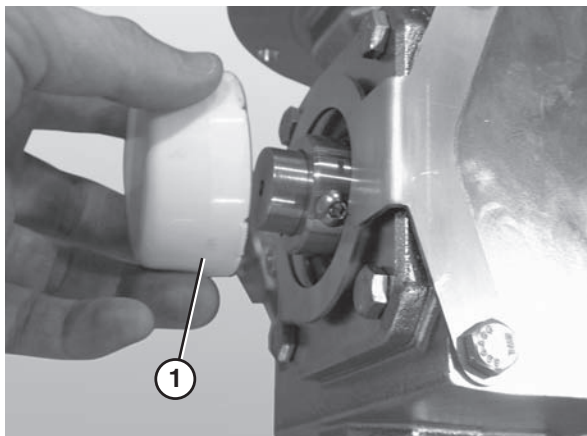


Figure 13

4. Loosen the drive spindle fasteners (**Figure 14, item 1**) located on the inside and outside of the gearmotor assembly using a hex wrench (**Figure 14, item 2**).

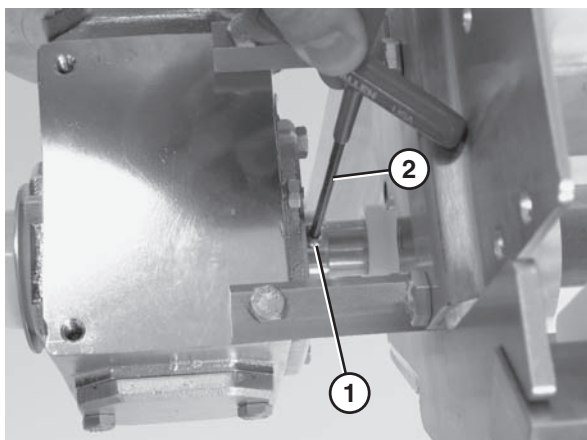


Figure 14

5. Unbolt the gear reducer hex mounting posts (**Figure 15, item 1**) from the gear reducer (**Figure 15, item 2**).

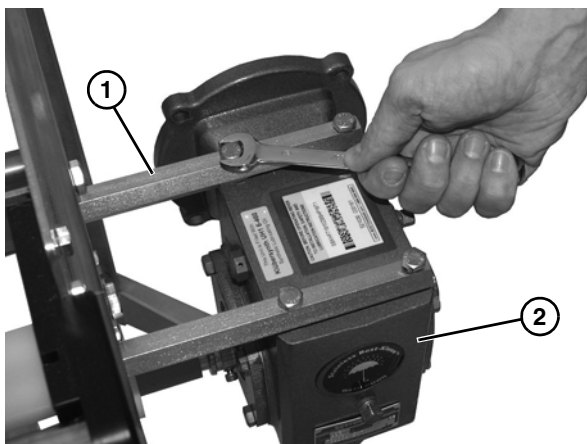


Figure 15



WARNING



PUNCTURE HAZARD!

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

6. Slide the gearmotor assembly (**Figure 16, item 1**) off the drive spindle (**Figure 16, item 2**).

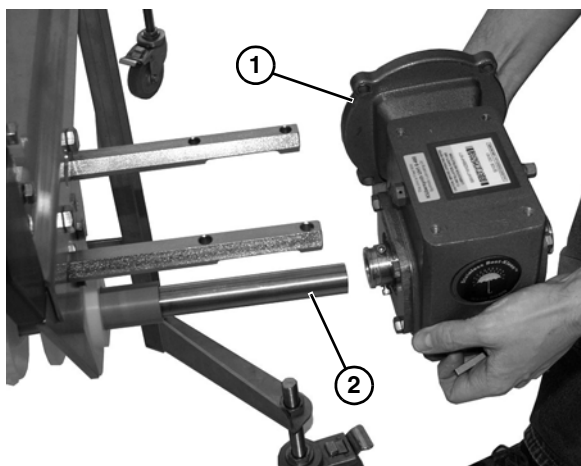


Figure 16

NOTE

Be sure to retain the drive spindle key.

7. Replace the gear reducer.
8. Insert the gearmotor output shaft key (**Figure 17, item 1**) into the gearmotor output shaft keyway (**Figure 17, item 2**).

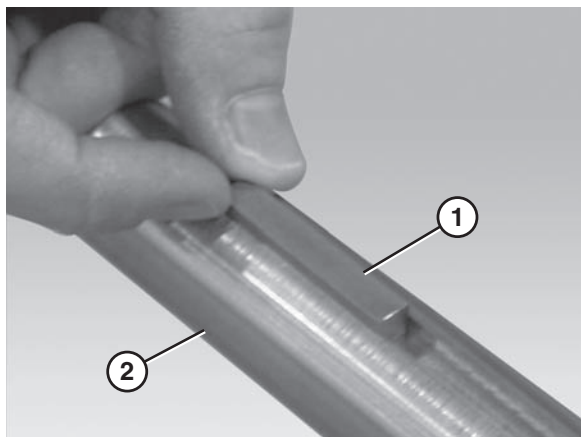


Figure 17

9. Connect the new gear reducer to the motor.

Preventive Maintenance and Adjustment

⚠ CAUTION

Ensure the O-ring (Figure 18, item 1) and gearmotor output shaft key (Figure 17, item 1) are situated properly before attaching the motor to the gear reducer.

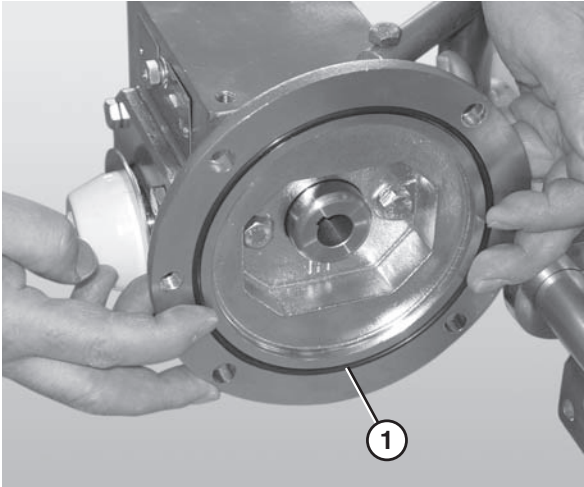


Figure 18

10. Reinstall the gearmotor assembly. Refer to "Nose Bar Drive Package" installation, starting on page 7.

Motor 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 19, item 1) from the junction box located on the side of the motor (Figure 19, item 2).

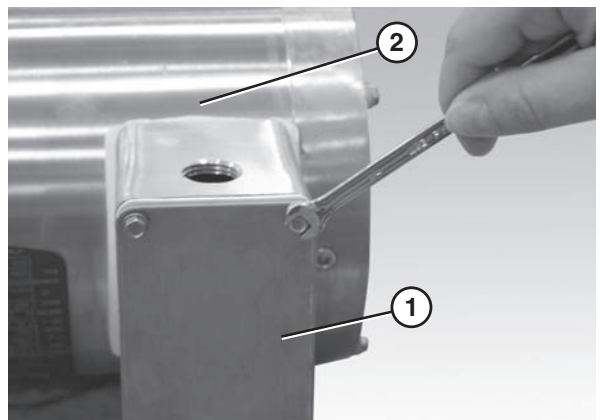


Figure 19

2. Refer to the wiring diagram (Figure 20, item 1) on the inside of the junction box cover.

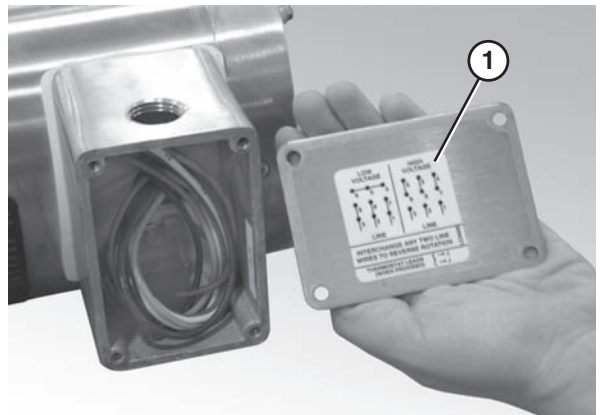


Figure 20

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

Preventive Maintenance and Adjustment

⚠ WARNING



CRUSH HAZARD!

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

5. Remove the bolts that connect the motor (Figure 21, item 1) to the gear reducer (Figure 21, item 2).

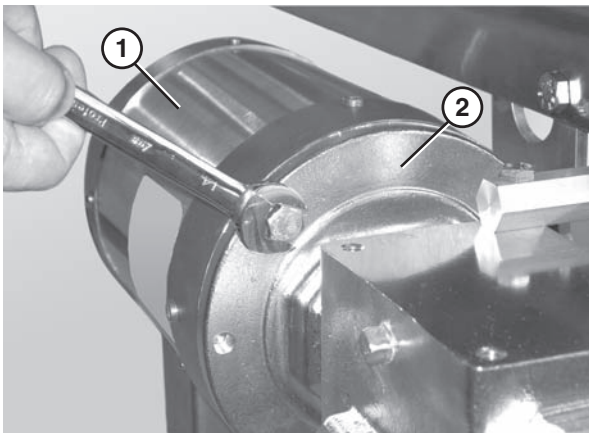


Figure 21

6. Detach the motor (Figure 22, item 1) from the gear reducer (Figure 22, item 2).

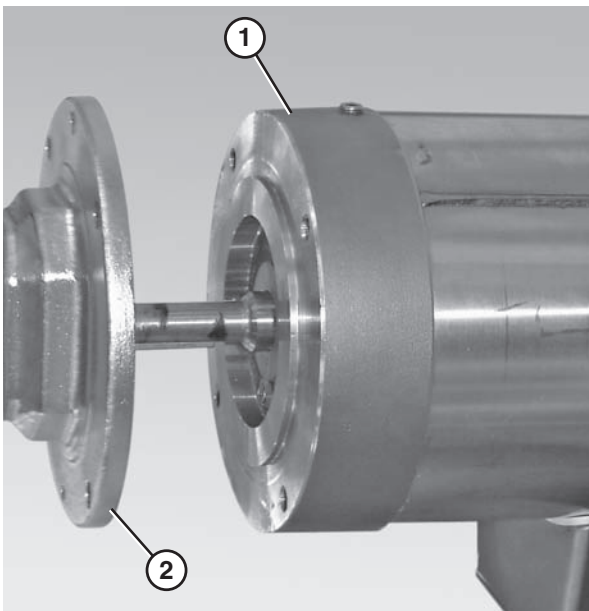


Figure 22

NOTE

Be sure to retain the motor output shaft key.

7. Insert the motor output shaft key (Figure 23, item 1) into the motor output shaft keyway (Figure 23, item 2).

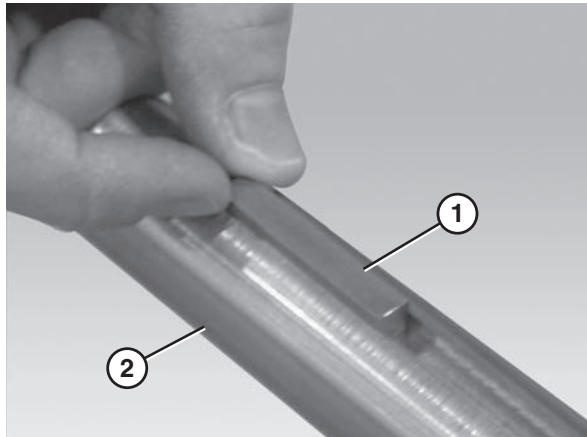


Figure 23

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

⚠ CAUTION

Ensure the O-ring (Figure 24, item 1) and motor output shaft key (Figure 24, item 1) are situated properly before attaching the motor to the gear reducer.

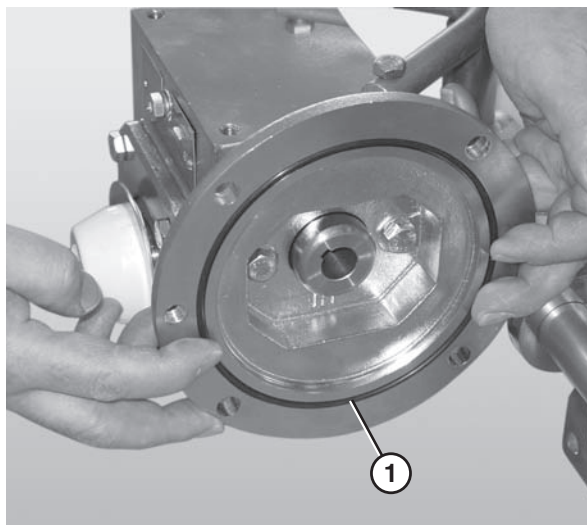



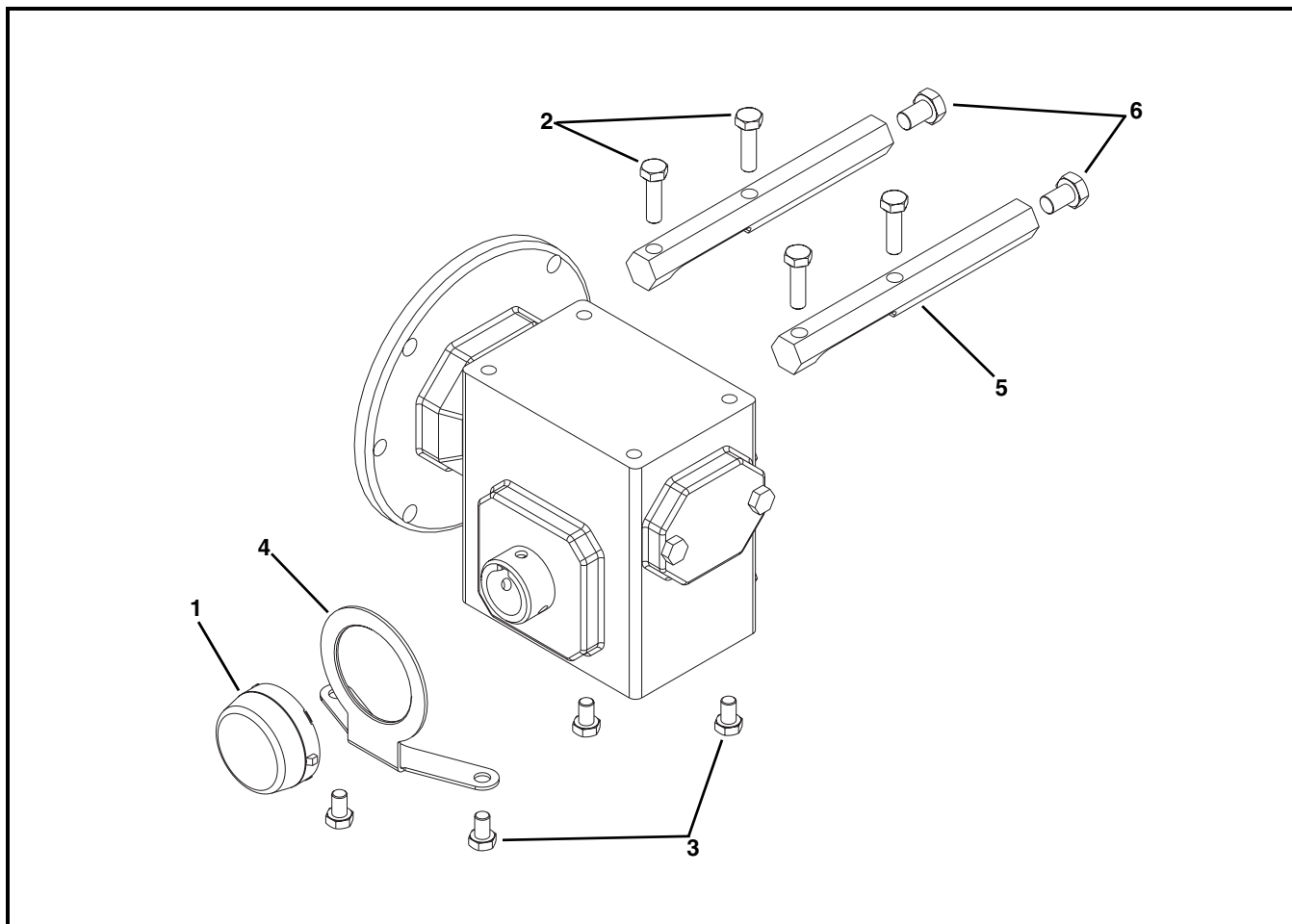
Figure 24

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

Horizontal Nose Bar Drive

NOTE

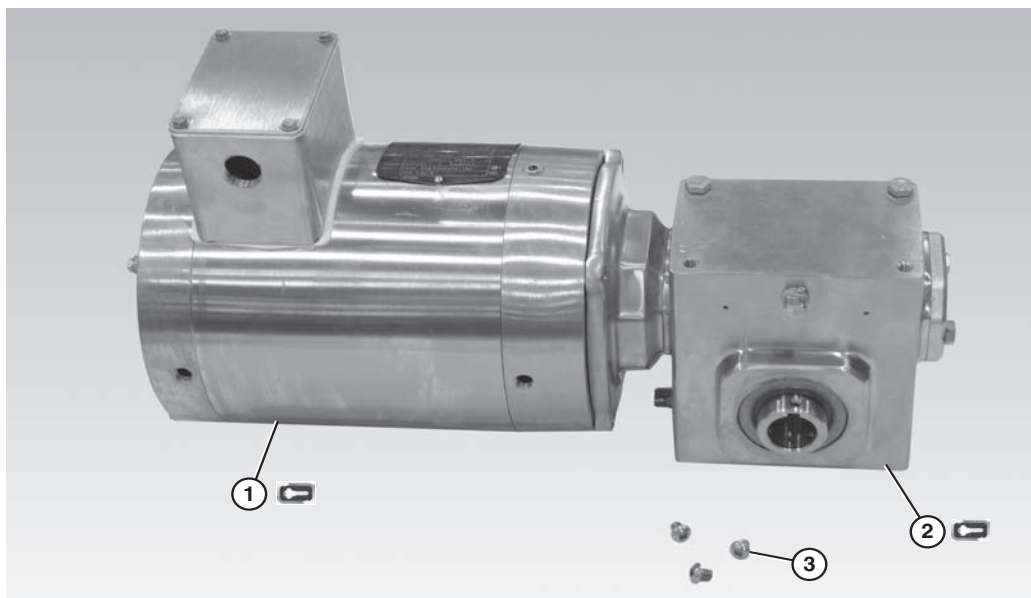
For replacement parts other than those shown in this section, contact an authorized Dorner Service Center or the factory. Key Service Parts and Kits are identified by the Performance Parts Kits logo . Dorner recommends keeping these parts on hand.



Item	Part Number	Description
1	807-1454	Cover
2	906-070SS	Hex Head Cap Screw 5/16-18 x 1.12"
3	906-067SS	Hex Head Cap Screw 5/16-18 x .50"
4	500492	Cover Bracket
5	500485	Hex Mounting Posts
6	961016MSS	Hex Head Cap Screw M10-1.50 x 16 mm

Service Parts

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
	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

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%
Plastic chain, 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 Customer 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. 2009

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