



## *Installation Instructions*

# Shaft Seal Kits

Catalog Numbers: MPL-SSN-xxxx, TL-SSN-x, 0041-5060, and 0041-5061

## **About This Publication**

This publication contains shaft seal kit installation instructions for the MP-Series Low Inertia motors, TL-Series motors, and F-Series motors.

## Important User Information

Solid state equipment has operational characteristics differing from those of electromechanical equipment. Safety Guidelines for the Application, Installation and Maintenance of Solid State Controls (publication SGI-1.1 available from your local Rockwell Automation sales office or online at <http://literature.rockwellautomation.com>) describes some important differences between solid state equipment and hard-wired electromechanical devices. Because of this difference, and also because of the wide variety of uses for solid state equipment, all persons responsible for applying this equipment must satisfy themselves that each intended application of this equipment is acceptable.





In no event will Rockwell Automation, Inc. be responsible or liable for indirect or consequential damages resulting from the use or application of this equipment.

The examples and diagrams in this manual are included solely for illustrative purposes. Because of the many variables and requirements associated with any particular installation, Rockwell Automation, Inc. cannot assume responsibility or liability for actual use based on the examples and diagrams.

No patent liability is assumed by Rockwell Automation, Inc. with respect to use of information, circuits, equipment, or software described in this manual.

Reproduction of the contents of this manual, in whole or in part, without written permission of Rockwell Automation, Inc., is prohibited.

Throughout this manual, when necessary, we use notes to make you aware of safety considerations.

<p><b>WARNING</b></p> 	<p>Identifies information about practices or circumstances that can cause an explosion in a hazardous environment, which may lead to personal injury or death, property damage, or economic loss.</p>
<p><b>IMPORTANT</b></p>	<p>Identifies information that is critical for successful application and understanding of the product.</p>
<p><b>ATTENTION</b></p> 	<p>Identifies information about practices or circumstances that can lead to personal injury or death, property damage, or economic loss. Attentions help you to identify a hazard, avoid a hazard, and recognize the consequences.</p>
<p><b>SHOCK HAZARD</b></p> 	<p>Labels may be located on or inside the equipment, for example, a drive or motor, to alert people that dangerous voltage may be present.</p>
<p><b>BURN HAZARD</b></p> 	<p>Labels may be located on or inside the equipment, for example, a drive or motor, to alert people that surfaces may be dangerous temperatures.</p>

## Required Tools

When installing the shaft seal kit, you'll need a soft face hammer, arbor press, or other soft work piece (such as wood).

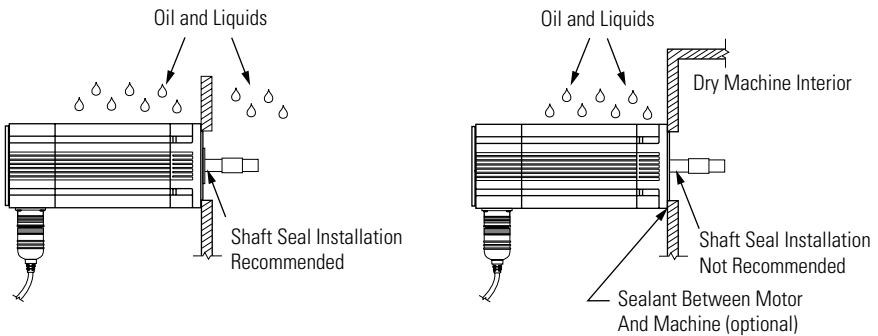
## When to Use the Shaft Seal

Use of the shaft seal kit depends on the environmental conditions where the motor is installed. Installation of the shaft seal kit is recommended when the motor shaft area is exposed to external oils or liquids.

### IMPORTANT

Installation of the shaft seal kit is not recommended if the motor shaft area is relatively dry and external oils or liquids are not present.

## When to Use the Shaft Seal



## Install the Shaft Seal Kit

### ATTENTION

To avoid injury or damage to equipment, remove power or disable the motor before installing the shaft seal kit.



To install the shaft seal kit:

1. Verify that power is removed from the motor.
2. Remove the shaft key (if installed).
3. Remove any dirt or grease from the motor shaft and the area around the front endbell near the bearing.
4. Remove any nicks or burrs from the motor shaft using an abrasive cloth.
5. Cover sharp edges of keyway with tape to protect the seal lip from damage.
6. Lubricate the inner and outer shaft seal lip using lubricant supplied with kit.
7. Position the shaft seal so that the sealing lip faces outward on the shaft.
8. Slide the shaft seal onto the motor shaft until the outer diameter of the seal is flush with the front surface of the motor, leaving a slight clearance between the shaft seal and motor bearing.

---

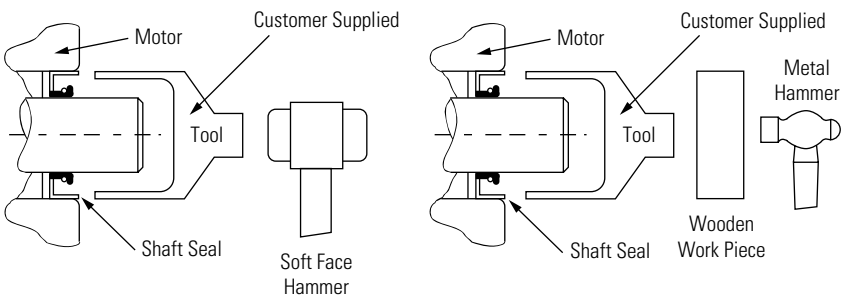
**IMPORTANT**

Do not hammer directly on the shaft seal. Gently apply force evenly around the outer edge of the seal with a soft face tool, arbor press, or soft wooden work piece (refer to diagram below).

When painting the motor, avoid getting paint on the shaft seal lip and motor shaft. This can decrease the life of the shaft seal.

---

### Shaft Seal Installation Methods



## Catalog Numbers and Product Dimensions

Complete catalog numbers and dimensions for shaft seal kits with the compatible motors are listed in the tables below.

### MP-Series Low Inertia Motors

Motor Series	Shaft Seal Kit Catalog Number	Inside Diameter mm (in.)	Outside Diameter mm (in.)	Width mm (in.)
MPL-A15xx and -B15xx	MPL-SSN-F63F75	12 (0.47)	24 (0.95)	7 (0.28)
MPL-A2xx and -B2xx				
MPL-A3xx and -B3xx	MPL-SSN-A3B3	17 (0.67)	47 (1.85)	7 (0.28)
MPL-A4xx and -B4xx	MPL-SSN-A4B4	20 (0.79)	52 (2.05)	7 (0.28)
MPL-A45xx and -B45xx	MPL-SSN-A5B5	25 (0.98)	62 (2.44)	7 (0.28)
MPL-A520 and -B520 MPL-A540 and -B540 MPL-A560 and -B560	MPL-SSN-F165	30 (1.18)	72 (2.83)	8 (0.31)
MPL-B580	MPL-SSN-F165-32 MM	35 (1.38)	72 (2.83)	8 (0.31)
MPL-B6xx	MPL-SSN-A6B6	40 (1.57)	90 (3.54)	8 (0.31)
MPL-B8xx	MPL-SSN-A8B8	45 (1.77)	75 (2.95)	8 (0.31)
MPL-B9xx	MPL-SSN-A9B9	52 (2.05)	72 (2.83)	8 (0.31)

### TL-Series Motors

Motor Series	Shaft Seal Kit Catalog Number	Inside Diameter mm (in.)	Outside Diameter mm (in.)	Width mm (in.)
TL-A1xx	TL-SSN-1	8.9 (0.35)	16 (0.71)	3 (0.20)
TL-A2xx	TL-SSN-2	14 (0.55)	24 (0.95)	5 (0.20)
TL-A25xx	TL-SSN-3	19.8 (0.78)	30 (1.18)	5 (0.20)
TL-A4xx	TL-SSN-4	24.0 (0.95)	40 (1.57)	10 (0.39)

## F-Series Motors

Motor Series	Shaft Seal Kit Catalog Number	Inside Diameter mm (in.)	Outside Diameter mm (in.)	Width mm (in.)
F-4000	0041-5060	22.225 (0.875)	36.4998 (1.437)	6.35 (0.25)
F-6000	0041-5061	36.525 (1.438)	53.975 (2.125)	7.874 (0.31)

## Additional Resources

For additional information regarding the installation of these shaft seal kits with the compatible motors, refer to these publications.

For		Read This Publication	Publication Number
MP-Series Motors	MPL-A/B15xx...-A/B2xx	MP-Series Small Frame Servo Motor Installation Instructions	MP-IN006
	MPL-A/B3xx...-A/B5xx	MP-Series Servo Motor Installation Instructions	MP-IN001
	MPL-A/B6xx...-A/B9xx	MP-Series Large Frame Servo Motor Installation Instructions	MP-IN002
TL-Series Motors		TL-Series Servo Motor Installation Instructions	TL-IN001
F-Series Motors		F-Series Servo Motor Installation Instructions	1398-IN516

You can view or download publications at <http://literature.rockwellautomation.com>. To order paper copies of technical documentation, contact your local Rockwell Automation distributor or sales representative.



# Rockwell Automation Support

Rockwell Automation provides technical information on the Web to assist you in using its products. At <http://support.rockwellautomation.com>, you can find technical manuals, a knowledge base of FAQs, technical and application notes, sample code and links to software service packs, and a MySupport feature that you can customize to make the best use of these tools.

For an additional level of technical phone support for installation, configuration, and troubleshooting, we offer TechConnect Support programs. For more information, contact your local distributor or Rockwell Automation representative, or visit <http://support.rockwellautomation.com>.

## Installation Assistance

If you experience a problem with a hardware module within the first 24 hours of installation, please review the information that's contained in this manual. You can also contact a special Customer Support number for initial help in getting your module up and running.

United States	1.440.646.3223 Monday – Friday, 8am – 5pm EST
Outside United States	Please contact your local Rockwell Automation representative for any technical support issues.

## New Product Satisfaction Return

Rockwell tests all of its products to ensure that they are fully operational when shipped from the manufacturing facility. However, if your product is not functioning, it may need to be returned.

United States	Contact your distributor. You must provide a Customer Support case number (see phone number above to obtain one) to your distributor in order to complete the return process.
Outside United States	Please contact your local Rockwell Automation representative for return procedure.

Rockwell Automation is a trademark of Rockwell Automation, Inc.

[www.rockwellautomation.com](http://www.rockwellautomation.com)

### Power, Control and Information Solutions Headquarters

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444  
Europe/Middle East/Africa: Rockwell Automation, Vorstlaan/Boulevard du Souverain 36, 1170 Brussels, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640  
Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846

Publication 2090-IN012A-EN-P — May 2006

PN-10003

Copyright © 2006 Rockwell Automation, Inc. All rights reserved. Printed in the U.S.A.