

StakMax Magazine Loading and Unloading Tool

User Guide

5005757 Rev A
April 2010



This document is provided to customers who have purchased Molecular Devices, Inc. ("Molecular Devices") equipment, software, reagents, and consumables to use in the operation of such Molecular Devices equipment, software, reagents, and consumables. This document is copyright protected and any reproduction of this document, in whole or any part, is strictly prohibited, except as Molecular Devices may authorize in writing.

Equipment, software, reagents, and consumables that may be described in this document are protected under one or more patents filed in the United States, Canada, and other countries. Additional patents are pending.

Software that may be described in this document is furnished under a license agreement. It is against the law to copy, modify, or distribute the software on any medium, except as specifically allowed in the license agreement. Furthermore, the license agreement may prohibit the software from being disassembled, reverse engineered, or decompiled for any purpose.

Portions of this document may make reference to other manufacturers and/or their products, which may contain parts whose names are registered as trademarks and/or function as trademarks of their respective owners. Any such usage is intended only to designate those manufacturers' products as supplied by Molecular Devices for incorporation into its equipment and does not imply any right and/or license to use or permit others to use such manufacturers' and/or their product names as trademarks.

Molecular Devices makes no warranties or representations as to the fitness of this equipment for any particular purpose and assumes no responsibility or contingent liability, including indirect or consequential damages, for any use to which the purchaser may put the equipment described herein, or for any adverse circumstances arising therefrom.

For Research Use Only. Not for use in diagnostic procedures.



STAKMAX is a registered trademark of Molecular Devices, Inc. These trademarks may not be used in any type of promotion or advertising without the prior written permission of Molecular Devices, Inc.

Equipment built by Molecular Devices, Inc.

1311 Orleans Drive, Sunnyvale, California, United States of America 94089.

Molecular Devices, Inc. is ISO 9001 registered.

© 2010 Molecular Devices, Inc.

All rights reserved.

Printed in the USA.

Introduction

The optional StakMax® Magazine Loading and Unloading Tool assists in loading and unloading a group of microplates to and from a StakMax magazine.

The tool assembly comes as two parts:

- The Plate Loading Base, labeled **Load Plates**
- The Unload Plate Ring, labeled **Unload Plates**

The Unload Plate Ring fits in the recessed channel of the Plate Loading Base for unloading plates and for storage of the tool.

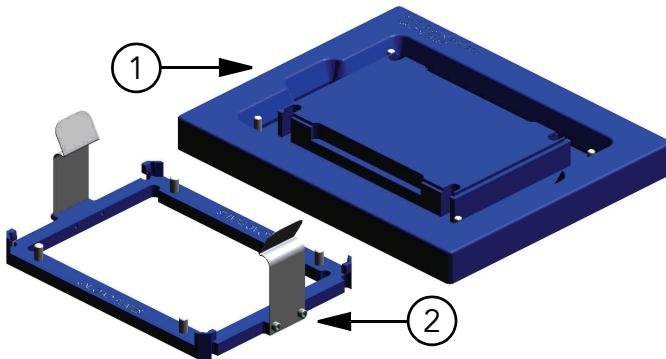


Figure 1-1 Two parts of the tool assembly

Item	Name
1	Plate Loading Base
2	Unload Plate Ring

Loading Plates in a Magazine

1. Remove the Unload Plate Ring from the Plate Loading Base and set it aside on the bench. The Unload Plate Ring is not used for loading plates.

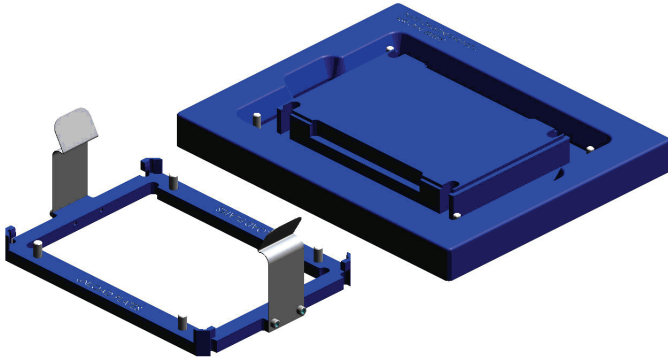


Figure 1-2 Unload Plate Ring removed from Plate Loading Base

2. Carefully place your stack of plates on the Plate Loading Base, making sure they are seated on the central riser portion of the base.
3. Make sure that the stack of plates is stable before continuing.

4. Carefully slide the magazine over the top of the stack of plates.

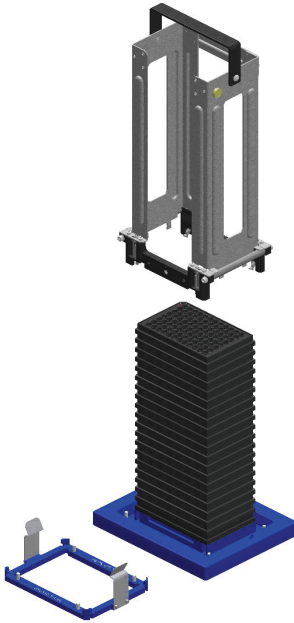


Figure 1-3 Loading a Stack of Plates

5. Gently press down on the top of the magazine until the black metal base is fully seated into the recessed channel of the Plate Loading Base.

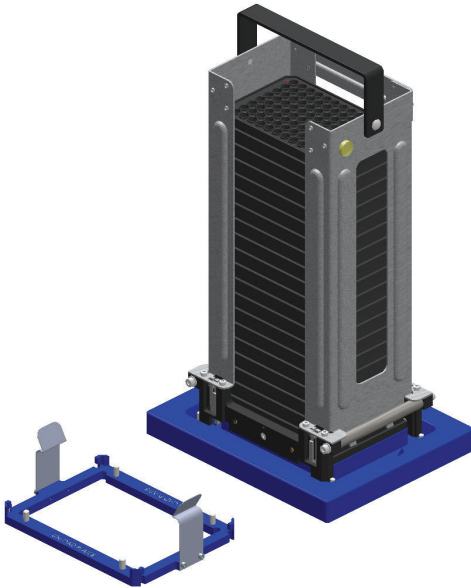


Figure 1-4 Magazine seated on Plate Loading Base

When the empty magazine is fully seated on the Plate Loading Base, four (4) hooks at the four (4) corners on the bottom of the magazine are released to stop the plates from falling off the magazine.

6. Lift the magazine and plate stack off the Plate Loading Base and relocate the magazine and plate stack to an appropriate location.

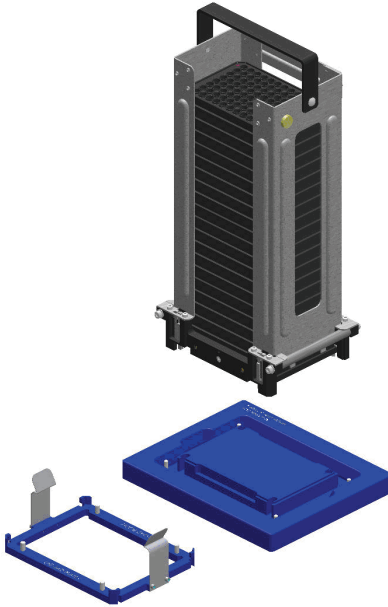


Figure 1-5 Lifting magazine off Plate Loading Base

To load another magazine with plates, repeat [Step 2](#) through [Step 6](#).

7. Replace the Unload Plate Ring in the recessed channel of the Plate Loading Base to store the tool.

Unloading Plates from a Magazine

1. Firmly seat the Unload Plate Ring in the recessed channel of the Plate Loading Base.

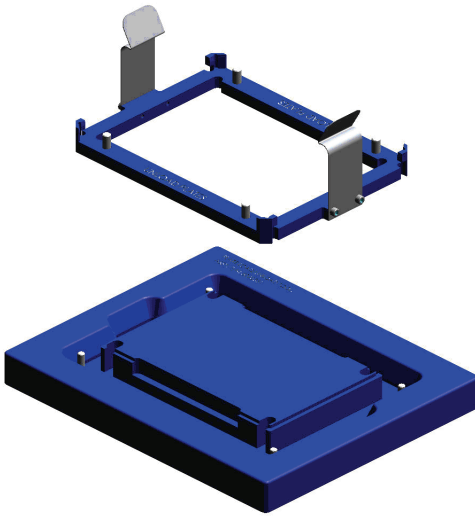


Figure 1-6 Placing Unload Plate Ring on Plate Loading Base

2. Pick up your magazine loaded with plates and carefully lower the magazine over the plate loading and unloading tool.

3. Place the corners of the black aluminum magazine base into the blue raised corners of the Unload Plate Ring.

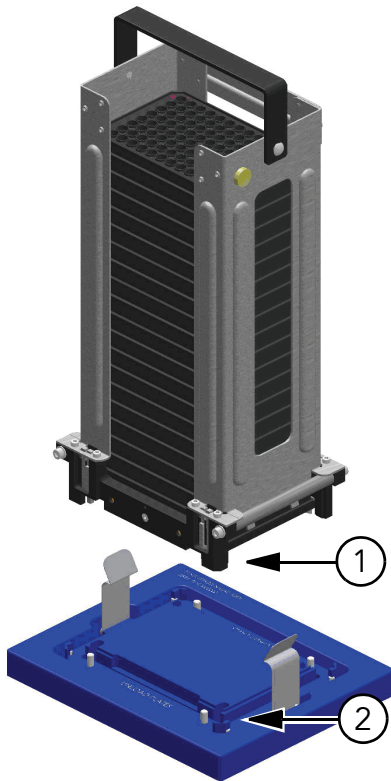


Figure 1-7 Lowering magazine on Unload Plate Ring

Item	Name
1	Black aluminum magazine base
2	Blue raised corners of Unload Plate Ring

4. Fully seat the loaded magazine on the Unload Plate Ring, so that the two spring clips on the Unload Plate Ring are securely clipped on the crossing bar on each side of the magazine.

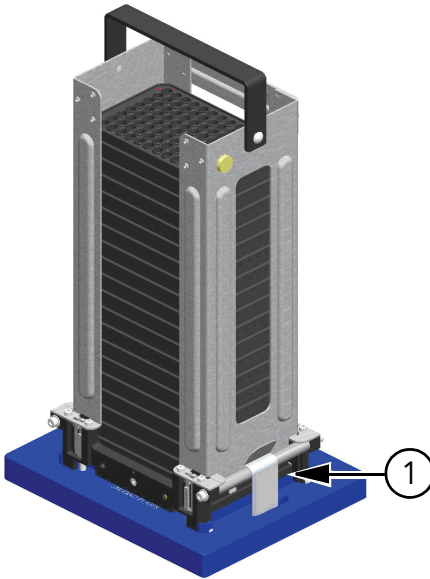


Figure 1-8 Magazine seated on Unload Plate Ring

Item	Name
1	Spring clip securely clipped on crossing bar

When the full magazine is fully seated on the Unload Plate Ring, four (4) hooks at the four (4) corners on the bottom of the magazine retract to allow the plates to slide out from the bottom of the magazine.

5. Carefully lift up the empty magazine along with the Unload Plate Ring until you fully clear the plate stack. Avoid bumping the stack of plates as they are now unsupported.

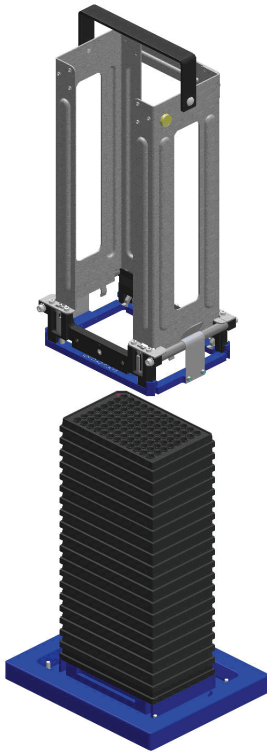


Figure 1-9 Magazine lifted above plate stack

6. Place the empty magazine with the Unload Plate Ring on the bench.
7. Carefully remove the stack of plates from the Plate Loading Base and dispose of them as required.

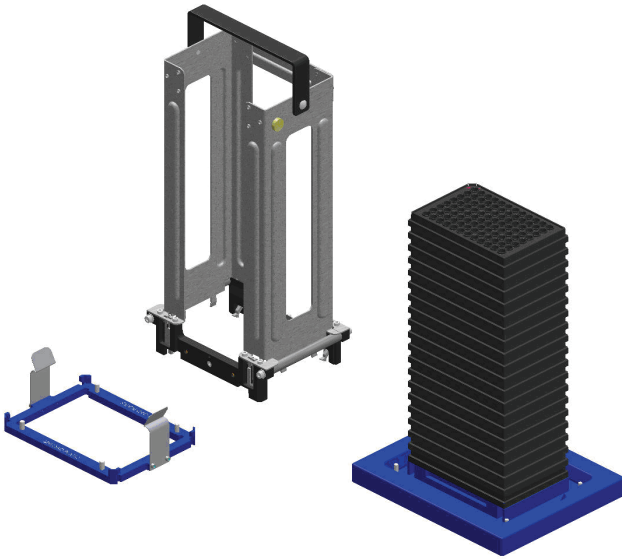


Figure 1-10 Unload Plate Ring removed from empty magazine

8. Use your thumbs to push the two (2) spring clips on the Unload Plate Ring away from the metal bars on the magazine.
9. Remove the Unload Plate Ring from the magazine.
To unload another magazine of plates, repeat [Step 1](#) through [Step 9](#).
10. Replace the Unload Plate Ring in the recessed channel of the Plate Loading Base to store the tool.