# Semi-Automated Screw Cap Decapper User Manual



337442 Revision B

## Azenta US, Inc.

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Original manual printed in English.

These are the original instructions for the Semi-Automated Screw Cap Decapper.



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## **Revision History**

#### Part Number: 337442

#### Semi-Automated Screw Cap Decapper User Manual

Revision	ECO Number	Date	Explanation of Changes
Revision A	EC119082	03/02/2020	Initial completion of the manual.
Revision B	EC132461	10/26/2021	Updated branding.

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# 1. Safety



This product is intended for laboratory use and should be serviced only by Azenta or Azenta trained representatives. The manuals and related materials are provided in English at no charge and are intended for use by experienced lab technicians. It is the responsibility of the user to obtain and assure the accuracy of any needed translations of manuals. If you require assistance please contact Azenta service department. Contact information can be found at www.azenta.com.

If additional safety related upgrades or newly identified hazards associated with the Semi-Automated Screw Cap Decapper are identified, Azenta Technical Support notifies the owner of record with a Technical Support Bulletin (TSB).

### **General Safety Considerations**

The Semi-Automated Screw Cap Decapper may be used as a decapper and recapper only, to be used with assay tubes. The unit is set up for a specific size of tube, the user should not attempt to make any changes to these settings.

## 

#### **Unauthorized Service**

Personal injury or damage to equipment may result if this product is operated or serviced by unauthorized personnel.

- Only qualified personnel are allowed to transport, assemble, operate, or maintain the Product.
- Properly qualified personnel are those who have received certified training and have the proper qualifications for their jobs.

## 

#### Inappropriate Use

Use of this product in a manner or for purposes other than for what it is intended may cause equipment damage or personal injury.

- Only use the product for its intended application.
- Do not modify this product beyond its original design.
- Always operate this product with the covers in place.

## 

#### **Damaged Components**

The use of this product when components or cables appear to be damaged may cause equipment malfunction or personal injury.

- Do not use this product if components or cables appear to be damaged.
- Place the product in a location where it will not get damaged.
- Route cables and tubing so that they do not become damaged and do not present a
  personal safety hazard.



#### **Regulatory Compliance and Declaration of Conformity**

The Semi-Automated Screw Cap Decapper meets the requirements of the European Union's Machinery Directive 2006/42/EC, Electromagnetic Compatibility Directive 2014/30/EU, and 2011/65/EU Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment. In accordance with the directives, Azenta Life Sciences has issued a Declaration of Conformity and the Semi-Automated Screw Cap Decapper has a CE mark affixed.

DOCUMENT NUMBER:	TITLE:		0	
337137	Declaration of	Conformity, Machinery Directive		<b>ΔΖΕΝΤΔ</b>
REVISION: C	DOCUMENT CLASSIFIC	CATION:		LIFE SCIENCES
ECO# EC132455	04-Form, Template or	Other		3
	D	ECLARATION OF CONFORMIT	Y	
Description:	Description: Semi-Automated Screw Cap Decapper, 1-channel, with interchangeable cap drivers and multiple torque settings			
Function: The device is a compact semi-automatic single tube decapper/recapper designed for de-capping/re-capping handheld test tubes. This device is compatible with all standard size tubes with either screw caps or septum caps. Specific configurations are required for each rack model. The unit is set up for a specific tube size. Suitable for use in a laminar flow cabinet.				
Product code:	46-6001			
Business name and full ad Azenta Life Scient	dress of the manufacture ces, Northbank, I	er of the machinery. Irlam, Manchester M44 5AY, Unite	ed Kingdom	
Name and address of the Azenta Life Scien	person, established in the ces (Germany) G	e Community, authonized to compile the relevant to mbH, Im Leuschnerpark 1B, 6434	echnical document: 17 Griesheim	ation: I, Germany
The manufacturer de That this machin	eclares: hery fulfills all the rel 00:2010 Safety of n 14121-2:2012 ED2 is 10-1:2010+A1:201 pry use. General requ	evant provisions of Directive 2006/42/ nachinery. General principles for design. Safety of machinery. Risk assessment. 9. Safety requirements for electrical equ uirements	EC (Machinery I Risk assessme Practical guida ipment for mea	Directive) ent and risk reduction nce and examples of asurement, control, and
<ul> <li>That this machinery fulfils all the relevant provisions of Directive 2014/30/EU (EMC Directive)</li> <li>EN 61326-1:2021 Electrical equipment for measurement, control and laboratory use. EMC requirements. General requirements</li> </ul>				
<ul> <li>That this machinery is in conformity with Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment and amendment 2015/863/EU.         <ul> <li>BS EN IEC 63000 2018 Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances.</li> </ul> </li> </ul>				
Year CE Marking Affi Signed for and on the	xed to Product: behalf of Azenta Li	2011 ife Sciences:		
Rob Wool	dward			
Rob Woodward (C Print name: Rob Woodwar Position: Senior Vice Presi Place: Irlam, Manchester	Oct 25, 2021 05:58 d dent, Global Quality Exec	3 GMT+1) utive Management		
Confidential: The	information is con art of it is to be dis	nfidential and is to be used only in c closed to others without prior written	onnection wit permission f	h matters authorized by rom Azenta.
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# 2. Overview

Semi-Automated Screw Cap Decapper is designed to reduce the risk of injury resulting from of repetitive movements.

Compatible with all standard size tubes with screw caps.

To use, simply place the tube into the gripping system. The Semi-Automated Screw Cap Decapper will start automatically while the operator gently holds the tube in place.

Cycle time is less than 3 seconds.

Suitable for use in a laminar flow cabinet.

# 3. Specifications and Site Requirements

#### **Materials**

All components that may come into contact with samples are manufactured from stainless steel, aluminum, or resistant plastic.

Cabinet is soft steel mold with gray powder coating.

Cabinet ingress protection grade IP20.

### **Unit Dimensions**

#### Table 3-1: Space Requirements

Parameter	Specification
Width	110 mm
Depth	338 mm
Height	295 mm
Weight	5.5 kg



Figure 3-1: Unit Dimensions

#### **Electrical Requirements**

The system must only operate with the power supply and frequency specified on the system identification stickers mounted on the side of the device. Operating the system with any other power supply or frequency can result in damage to the equipment.

#### Table 3-2: Electrical Requirements

Parameter	Specification	
Supply Voltage	AC 100 - 240V, 26W	
Supply Frequency	50/60 Hz	

# 4. Installation

## Unpacking

Step	Action		
1.	Check the integrity of the box for external damage.		
2.	Place the box on a flat firm surface and open the box.		
3.	Remove the top foam insert.		
4.	Remove the small box containing the Semi-Automated Screw Cap Decapper associated items.		
5.	Remove the unit out of the box and place on a clean, dry flat work bench.		

# 5. Operation

#### **Overview**

This chapter provides complete operation directions for the Azenta Life Sciences Semi-Automated Screw Cap Decapper. The operation of the Semi-Automated Screw Cap Decapper is covered for both normal operating conditions and emergency conditions.



## **Theory of Operation**

Step	Action
1.	Prepare the cap driver and set the necessary torque.
2.	Decap the tube and process the samples.

Step	Action		
3.	Recap the tube after processing is complete.		
4.	Change the cap driver for a new tube (if necessary) and set the appropriate torque.		
5.	Decap the tube and process the samples.		

Theory of Operation

Step	Action		
6.	Recap the tube after processing is complete.		
7.	Change the cap driver for a new tube (if necessary) and set the appropriate torque.		
8.	Decap the tube and continue as necessary.		

## **Operation Procedure**

Step	Action		
1.	Plug in the power cable and turn on. <b>NOTE:</b> The Semi-Automated Screw Cap Decapper requires a power supply of 100-240 VAC (50/60Hz)		
2.	Select the mode of the Semi-Automated Screw Cap Decapper: "o" - alternates automatically between capping and decapping. "I" - decap multiple tubes. "II" - cap multiple tubes. "II" - cap multiple tubes.		
3.	Place a capped or uncapped tube smoothly onto the gripping system.		
4.	The decapping/recapping process starts automatically.		

## 6. Preventative Maintenance

#### **Overview**

The Semi-Automated Screw Cap Decapper needs only minimum maintenance to operate.

#### **Schedules and Procedures**

Periodic CleaningClean the unit using alcohol wipes, non-bleach disinfecting wipes, or germicidal disposable wipes.GripperRemove the gripper from the unit by unlocking the handle that holds the part and ensure it is<br/>clean of dust and debris. See "Gripper Check" on page 19.

#### **Gripper Check**



# 7. Appendices

The following contains appendices to the manual.

#### **Appendix A: Warranty**

The Semi-Automated Screw Cap Decapper is covered by a 1 year warranty. Contact Azenta Life Sciences for more details.

#### Appendix B: WEEE Statement (European Union)



The symbol above indicates that Waste Electrical and Electronic Equipment (WEEE) is not to be disposed of as unsorted municipal waste. Equipment marked with this symbol is to be collected separately.

The objectives of this program are to preserve, protect and improve the quality of the environment, protect human health and utilize natural resources prudently and rationally. Specific treatment of WEEE is indispensable in order to avoid the dispersion of pollutants into the recycled material or waste stream. Such treatment is the most effective means of protecting the customer's environment.

The waste collection, reuse, recycling, and recovery programs available to Azenta Life Sciences customers, vary by customer location. Please contact the responsible body (e.g., your laboratory manager) for information about local requirements.

### **Appendix C: Tube Grippers**

A common list of compatible grippers is displayed in the following table. For more information about the complete list of compatible grippers, please contact your Azenta representative.

Tube	Cap Driver	Description
Carlos Ca		<b>46-6002-1</b> : Gripper kit, TRP tube 50ml Cap (Fujifilm)
		<b>46-6002-2</b> : Gripper kit, BD Falcon tube 50ml Cap
( Barnet		<b>46-6002-3</b> : Gripper kit, BD Greiner tube Cap
		<b>46-6002-4</b> : Gripper kit, Sarstedt 0.5 & 1.5 & 2.0ml Cap
		<b>46-6002-5</b> : Gripper kit, Azenta 6 & 10ml Automation-Friendly Cap
		<b>46-6002-6</b> : Gripper kit, Corning 21mm Cap
		<b>46-6002-7</b> : Gripper kit, Azenta 6.0 & 10ml External Cap
		<b>46-6002-8</b> : Gripper kit, Azenta 4.0ml Glass Jacket Tube Cap
		<b>46-6002-9</b> : Gripper kit, Ø 50mm Cap for glass container

Tube	Cap Driver	Description
		<b>46-6002-10</b> : Gripper kit, Azenta / Greiner Ext & Sarstedt Internal Cap
		<b>46-6002-11</b> : Gripper kit, Greiner/Corning 1.2ml – 5.0ml Cap
		<b>46-6002-12</b> : Gripper kit, Fisher Custom Tube Cap dia. 16mm
and the second s		<b>46-6002-13</b> : Gripper kit, Falcon 15mm dia. centrifuge tube
<b>5</b>		<b>46-6002-14</b> : Gripper kit, Azenta 96-format External & Internal Co-Molded Caps
		<b>46-6002-15</b> : Gripper kit, Sarstedt 12ml screwcap tube (60.9922.937); dia. 16mm
		<b>46-6002-16</b> : Gripper kit, 3.5ml 14mm dia. False Bottom MarketLab Tube (Inpeco tube, EXT)
A LIANA A		<b>46-6002-17</b> : Gripper kit, Glass Vials, 4ml (dia. 15mm,length 48mm, GNF)
- Martine -		<b>46-6002-18</b> : Gripper kit, 50ml, green cap, dia. 35.8mm, customized tube for optimum processing