

Contents

Introduction.....	3
Holder and Rack Installation	4
Syringe Sampling Unit Set-up ..	10
Conical Tube 15 mL Sampling Unit Set-up	11
Sampling.....	12
Storage.....	15
Sample Recovery	16

NovaSeptum® and NovaSeptum® GO Sampling Units

User Guide

Introduction

This user guide provides installation and use instructions for:

- Single and multi-unit NovaSeptum® Sampling Units with Bottles
- Single and multi-unit NovaSeptum® Sampling Units with High Purity Bags
- Single unit NovaSeptum® Sampling Units with Autoclavable Bags
- Single and multi-unit NovaSeptum® Sampling Units with Accurate Volume Syringes
- Single and multi-unit NovaSeptum® GO Sampling Units with Conical Tubes 15 mL
- NovaSeptum® GO preloaded Sampling Unit Holder
- NovaSeptum® Sampling Unit Holder
- NovaSeptum® GO Sampling Unit Holder
- Transfer Tubes

User Supplied Materials

The following items are available from your local representative:

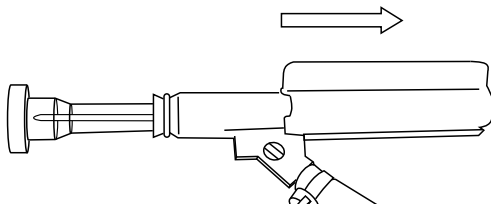
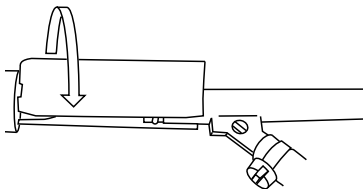
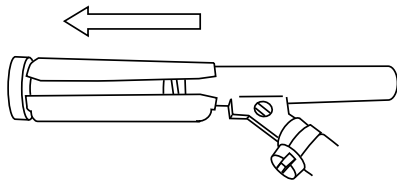
- A NovaSeal™ Crimping Tool, needed to use the NovaSeptum® Sampling Unit
- Crimp covers, which are placed over the crimped tubing ends
- First actuation locking ties for the NovaSeptum® GO Sampling Unit Holder

Holder and Rack Installation

NovaSeptum® or NovaSeptum® GO Sampling Unit Holder Trigger Installation

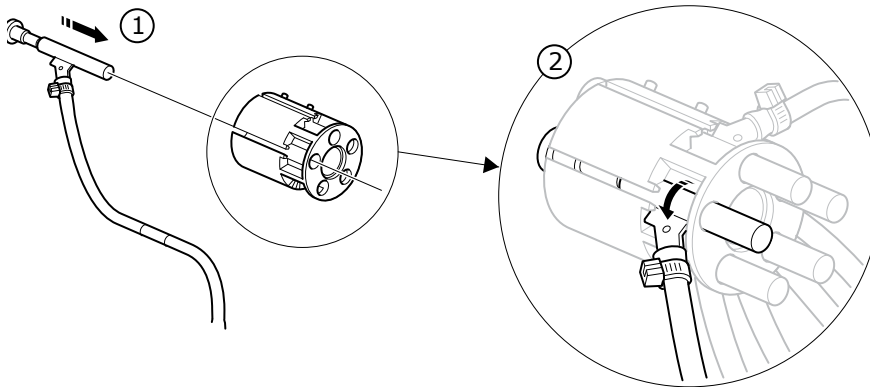
NOTE NovaSeptum® GO preloaded Sampling Unit Holders do not require trigger installation.

1. Remove the trigger protector from the trigger on the NovaSeptum® or NovaSeptum® GO Sampling Units before inserting them into the holder. NovaSeptum® Sampling units are shown below.



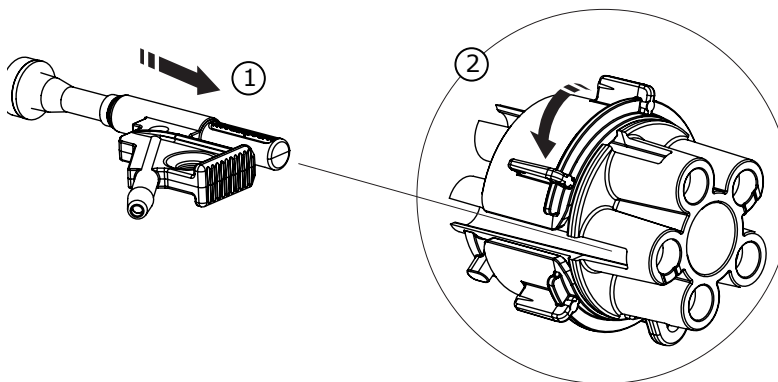
2. NovaSeptum® Sampling Unit Holder

Insert the trigger into the holder and turn the trigger so that the collar locks into place. Repeat for each trigger required for the installation.



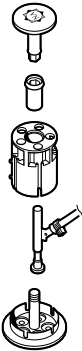
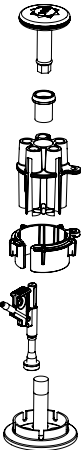
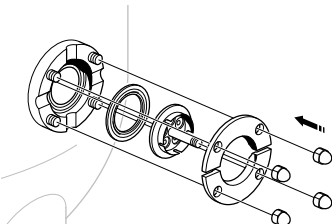

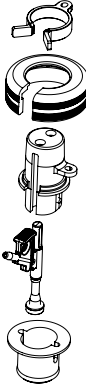
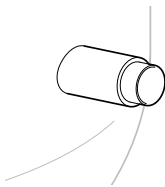
NovaSeptum® GO Sampling Unit Holder


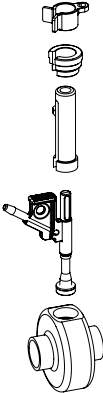
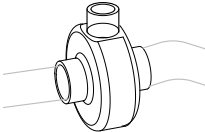
Insert the trigger into the holder and turn the holder collar so that the collar locks the trigger into place. Do not squeeze the tabs on the collar as that will prohibit turning the collar. Repeat for each trigger required for the installation.



NovaSeptum® or NovaSeptum® GO Sampling Unit Holder Installation

1. Install the holder onto the sample source as described in the holder user guide. Any of these holders may be used:

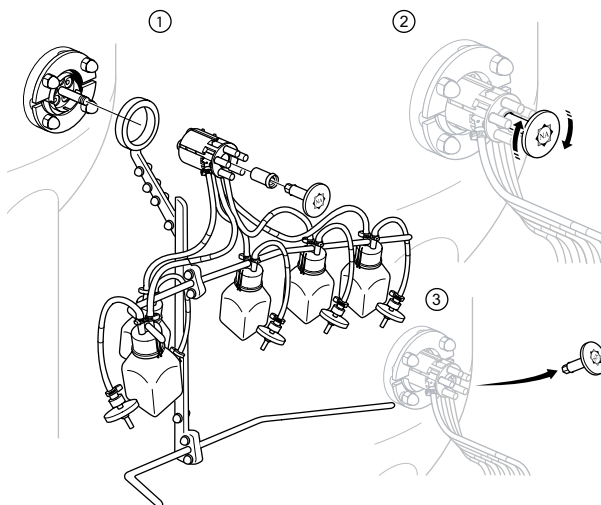
NovaSeptum® Sampling Unit	NovaSeptum® GO Sampling Unit	Installation
Multi-port Holder		
		
Ingold® Holder		
		

NovaSeptum® Sampling Unit	NovaSeptum® GO Sampling Unit	Installation
Single Port In-line Holder		
		

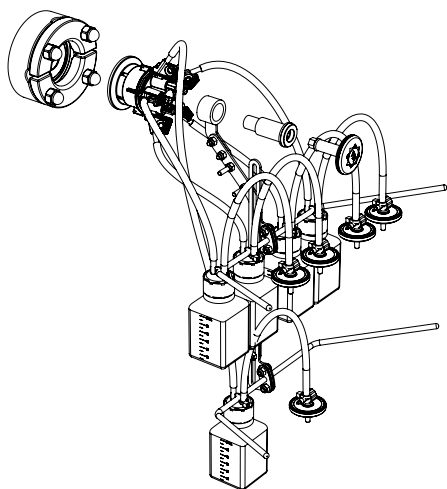
Contact Technical Service for NovaSeptum® or NovaSeptum® GO preloaded Single Use Holders installation.

- 2. When a rack is used, install the rack then hang the bottles, conical tubes or bags on the rack. Refer to the rack user guide for complete installation instructions.

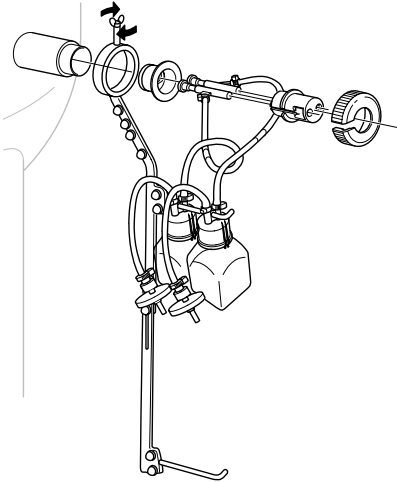
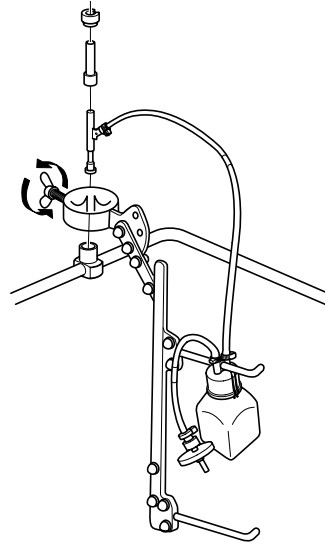
NOTE Rack installation is the same for bags, conical tubes or bottle.



NovaSeptum® Holder



NovaSeptum® GO Holder

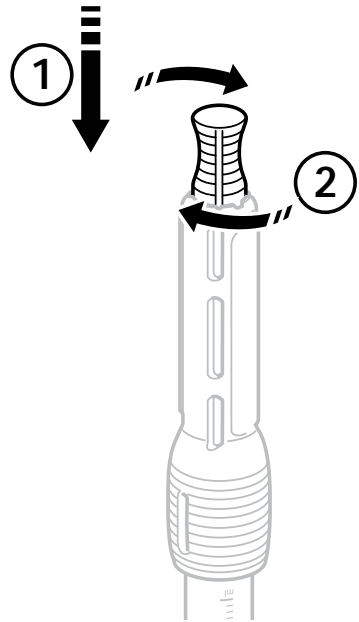
**Ingold® Holder****Single Port In-line Holder**

3. When the NovaSeptum® GO Holder is loaded, secure the holder using the first actuation locking tie.
4. After the loaded septum holder and rack have been installed, clean the vessel by Clean-in-Place (CIP) and/or Steam-in-Place (SIP), following the standard operating procedures (SOPs), if required. The sampling unit is now ready for use.

Syringe Sampling Unit Set-up

The syringe sampling units may be autoclaved prior to use. Ensure that the syringe is locked in the closed position prior to autoclaving by following the instructions here:

1. Push top of syringe down.
2. Turn the top clockwise until it goes into the closed position and locks, ensuring the plunger cannot be moved.



Conical Tube 15 mL Sampling Unit Set-up

The conical tube sampling units are very fragile and should be handled with caution. To regulate the flow, it is recommended to close the clamp, then press the trigger before slowly opening the clamp.



Sampling

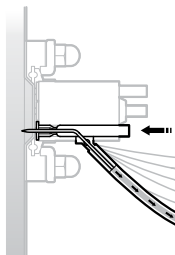
Volume and Pressure Specifications

NovaSeptum® Sterile Sampling Units	Sampling Unit Volume (mL)	Maximum Pressure Conditions (at 25 °C)
Bottle	60 to 500	0.50 bar (7.25 psi) (single unit)
		0.30 bar (4.35 psi) (multi-sampling)
High Purity Bag	50 to 1000	0.50 bar (7.25 psi) up to 250 mL
		0.30 bar (4.35 psi) for 1000 mL and multi-sampling
Autoclavable Bag	50 to 1000	0.30 bar (4.35 psi)
Syringe	5 and 20	0.50 bar (7.25 psi)
Conical Tube	15	0.50 bar (7.25 psi)

Single Sampling Units

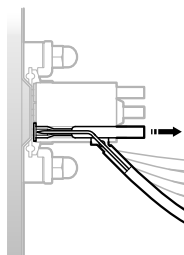
1. NovaSeptum® GO Sampling Unit Holders have a first actuation locking tie that must be removed by either using the easy tear-off tab or by twisting the tie.

2. Depress the trigger on the NovaSeptum® Sampling Unit to insert the needle into the source being sampled.



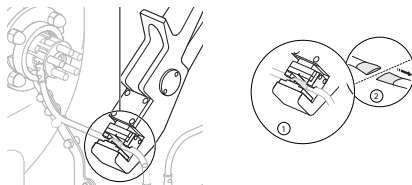
3. Fill the sampling unit with the required volume. Do not exceed the maximum volume of the unit.

Once the required sample volume is in the unit, retract the needle from the source.

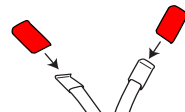


4. Use the NovaSeal™ Crimping Tool to crimp the pinch pipe on the tubing and separate it from the source. If desired, remove the vent filter from the unit using the NovaSeal™ Crimping Tool to crimp the pinch pipe

on the tubing and separate it from the unit. For conical tube sampling units, crimp both tubes after sampling.



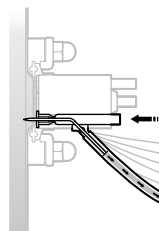
5. Once the tubing has been crimped, install the red crimp covers onto the crimped ends of the tubing if desired.



Syringe Sampling Units

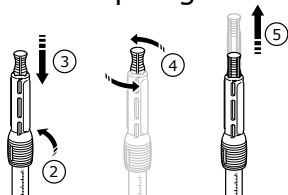
1. NovaSeptum® GO Sampling Unit Holders have a first actuation locking tie that must be removed by either using the easy tear-off tab or by twisting the tie.

2. Depress the trigger on the NovaSeptum® Sampling Unit to insert the needle into the source being sampled.



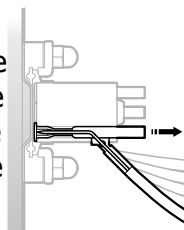
3. Invert the syringe.
4. Push top of syringe down.

5. Turn the top counter clockwise until it goes into the open position.
6. Pull the plunger out.

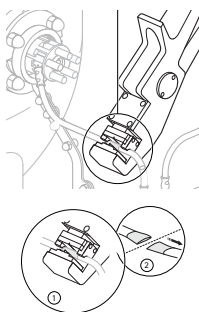


7. Fill the sampling unit with the required volume. Do not exceed the maximum volume of the unit.

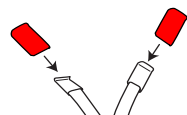
8. Once the required sample volume is in the unit, retract the needle from the source.



9. Use the NovaSeal™ Crimping Tool to crimp the pinch pipe on the tubing and separate it from the source.



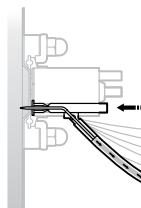
10. Once the tubing has been crimped, install the red crimp covers onto the crimped ends of the tubing if desired.



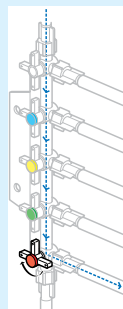
Manifold Sampling Units

1. NovaSeptum® GO Sampling Unit Holders have a first actuation locking tie that must be removed by either using the easy tear-off tab or by twisting the tie.

2. Depress the trigger on the NovaSeptum® Sampling Unit to insert the needle into the source being sampled. The needle must remain in the source for the entire sampling process. **DO NOT retract the needle between samples.** Use the valves on the manifold to start and stop the flow to each unit as outlined below.

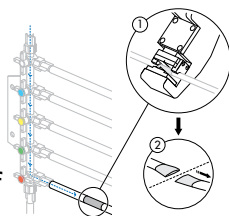


NOTE The valves are colored. Sampling should be done from the bottom to the top in this order: red, green, yellow, blue and white.



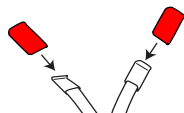
3. Ensure the green, yellow, blue and white valves are closed. Open the red valve and fill the sample unit. Close the red valve.

4. Use the NovaSeal™ Crimping Tool to crimp the pinch pipe on the tubing to seal the unit and separate it from the manifold. Crimp the vent on the unit as well if desired.

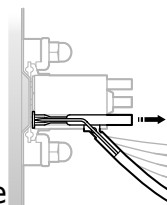


5. Repeat steps 2 through 4 as required, for each sampling unit installed on the manifold.

6. Once the tubing has been crimped, install the red crimp covers, if desired, onto the crimped ends of the tubing. The sample is ready for storage.



7. When all the samples have been taken, pull the trigger to remove the needle from the sample source.



Storage

Store bottles in the upright position.

High Purity Bags, up to 250 mL, may be stored flat in a NovaSeptum® Case.

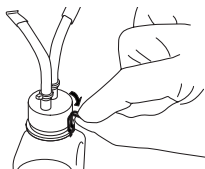
NOTE Bottles, bags and syringes are fragile when frozen.

Conical tubes may be stored vertically on the lab rack in temperature between 2°C to 50°C.

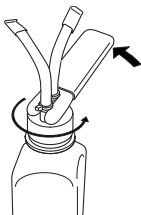
Sample Recovery

NovaSeptum® Bottles

1. Pull the tabs on the protective wrap covering the bottle cap.



2. Use a wrench provided with the bottle to remove the cap from the bottle.



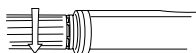
NovaSeptum® GO Conical Tube

1. Crimp both tubes after sampling.
2. Easy opening with ears for lab work, turn the cap to the right to break the seal and open the container.

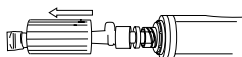
NOTE The NovaSeptum® GO Conical Tube cap is not recommended for centrifugation applications.

NovaSeptum® Accurate Volume Syringes

1. Twist the tamper-proof cover on the trigger until it separates from the syringe.



2. Pull the cover off of the syringe.



We provide information and advice to our customers on application technologies and regulatory matters to the best of our knowledge and ability, but without obligation or liability. Existing laws and regulations are to be observed in all cases by our customers. This also applies in respect to any rights of third parties. Our information and advice do not relieve our customers of their own responsibility for checking the suitability of our products for the envisaged purpose.

**For technical assistance
please visit:**

www.sigma-aldrich.com

**For additional information and
documentation please contact:**

Merck KGaA, Darmstadt, Germany
Corporation with General Partners
Frankfurter Str. 250
64293 Darmstadt, Germany
Phone: + 49 6151-72 0

**For requests from USA and Canada
please contact:**

MilliporeSigma
A subsidiary of Merck KGaA, Darmstadt, Germany
400 Summit Drive
Burlington, MA 01803 USA
Phone: 1-800-645-5476

The Vibrant M, NovaSeptum and NovaSeal are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources.

©2021 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.