

# Instructions for repeating adaptor RAX

### Introduction

The repeating adaptor RAX is ideal for customers wanting to ensure reproducibility of sample volumes with repeatedly accurate injections. It offers improved precision for users of manual syringes and can be set to any desired volume within the capacity of the chosen syringe. Additionally, the RAX can be used as added protection against both plunger blowout at elevated pressures and plunger bending.



The RAX is suitable for use on syringes with capacities from 0.5  $\mu$ L through to 500  $\mu$ L.

## Important

## 

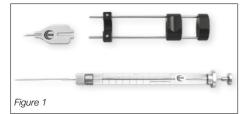
Always loosen the cover nut before removing or inserting a NanoVolume syringe plunger (0.5  $\mu$ L, 1  $\mu$ L and 5  $\mu$ L syringes with plunger in the needle). Never tighten cover nut unless plunger is fully inserted

#### 

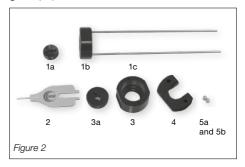
Caution must be taken when fitting repeating adaptor to the NanoVolume (plunger in needle) syringe to prevent damage to plunger.

#### Instructions

 The RAX is supplied pre-assembled as shown in Figure 1. Before fitting the adaptor to a syringe the adaptor needs be disassembled using the double-ended tool provided, the component parts of the adaptor are shown in Figure 2.



To disassemble the adaptor loosen the grub screws (5a and 5b) and slide off adjustable stop (4). Slide the adaptor body (3) off the rods and unscrew the insert (3a) from the adaptor body (3). Unscrew the plunger insert (1a) from the plunger guide (1b).



2. Remove the plunger from the syringe (loosen the front cover nut if using a NanoVolume syringe). Slide the adaptor body (3) onto the glass barrel so that the back flange of the syringes sits in the recess of the adaptor. Using the tool, screw the insert (3a) over the syringe back flange (Figure 3). Align the scale with the finger grips on the adaptor before tightening the insert.



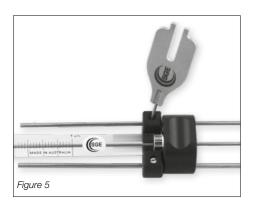
Align the guide rods (1c) to the holes in the adaptor body (3) (Figure 4).



3. Slide the plunger guide (1b) as far as it goes towards the adaptor body (3). Insert the syringe plunger. Care needs to be taken when inserting the plunger to prevent damage to the tip and plunger stem (when using a NanoVolume syringe with plunger in the needle, fully depress plunger before tightening the syringe front cover nut).

Pull back the plunger guide (1b), as required to ensure the syringe plunger button is seated at the bottom of the guide (1b). Screw the plunger insert (1a) into the guide (1b) and tighten.

4. Fit the adjustable stop (4) to the plunger guide rods (1c). Withdraw the plunger to the desired volume. Slide the adjustable stop (4) so that it butts up against the adaptor body. Tighten screws (5a and 5b) (Figure 5). Check for a free sliding action. The syringe and repeating adaptor are now ready for use.



## Removing repeating adaptor

To remove repeating adaptor, loosen the grub screws (5a and 5b) and slide off adjustable stop (4). Unscrew plunger insert (1a) and remove plunger from syringe (loosen the front cover nut if using a NanoVolume syringe). Slide off plunger guide with rods. Unscrew insert (3a) from adaptor body (3) and slide adaptor body (3) off syringe. Carefully insert the plunger back into the syringe.

## Information and support

Visit www.trajanscimed.com or contact techsupport@trajanscimed.com

Specifications are subject to change without notice.

Analytical syringes manufactured by Trajan Scientific and Medical are intended for analytical and laboratory use only and are not intended or approved for use with food, including the production or packaging of food, nor medical or human in-vivo use..