

# 13.400 Kajak Sediment Sampler

## Manual

**KC** Denmark A/S

Research Equipment  
Limnology • Oceanography • Hydrobiology

# Kajak Sediment Sampler



The KC Kajak Sediment Core sampler is based on the Kajak design, and it is operated by hand.

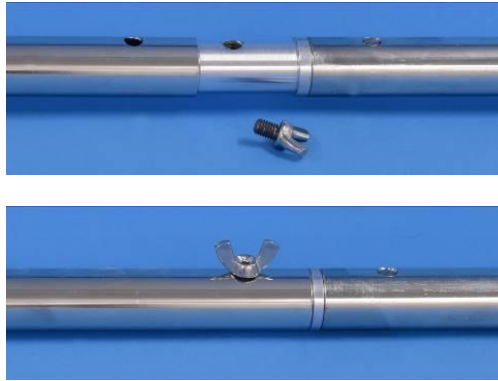
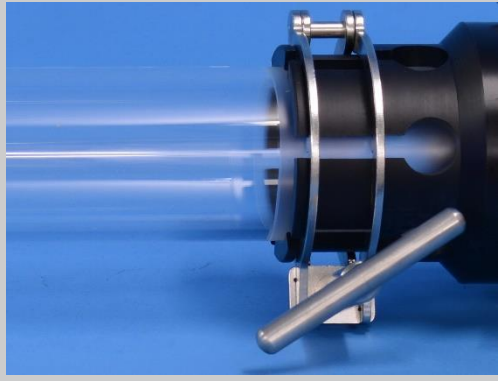
The quick-change functionality speeds up the changing of corer tubes, and it is very useful if you need many samples. The sampler can also be equipped with AISI 316 stainless steel corer tubes.



The shafts are made of AISI 316 stainless steel tubes, each 2,0 m. They can be assembled to a maximum length of 6,0 m; however, this length is not recommended when working from small boats.






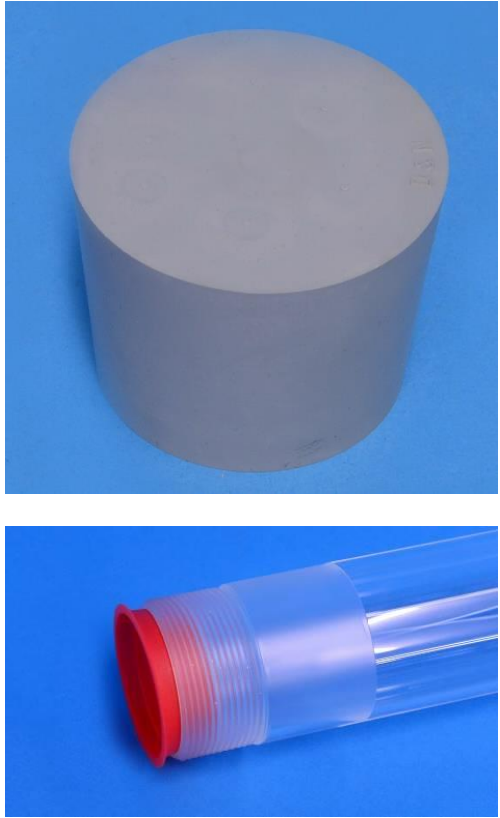
**Do not use alcohol for cleaning acrylic parts**

KC Denmark A/S is not, and cannot be held, responsible for any damage(s) made to equipment or to operators who ignore safety precautions or because of misuse or wrong operation.


Item	Preparation	
1	<p>Assembling the shaft:</p> <p>Push the shafts together and align the holes. Insert the wingnut and fasten it.</p>	
2	<p>Hold the corer in horizontally position and insert the sample tube into the core head; turn the quick lock in clockwise position. Be sure to fasten the handle to avoid losing the sample tube in the sea.</p>	

3	 <p><b>Caution</b></p> <p><b>IMPORTANT</b> Lift the rubber bung and smear the lower end of the bung with a thin layer of silicone grease before use.</p>	
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<b>Taking the sample</b>		
4	<p>Keep the white line taut, so the sampler is open while taking the sample and excess air will disappear.</p>	
5	<p>When slacking the line, the spring-loaded rubber bung closes the sampler assuring the sample tube has a vacuum to prevent exit of the sample.</p>	
6	<p>We recommend, if possible, that you force the sample tube into some hard sediment, so it will operate as a "bung" at the end of the tube to prevent a sample exit. For a very sandy sediment you may lose the sample (or part hereof), as the vacuum may not hold the entire sample.</p>	
7	<p><b>Hard seabed:</b> Taking samples in a hard seabed demands a carver (13.004) to protect the sample tube. Mount the carver by turning clockwise and secure. You will need tubes with threaded end (13.002/13.012) to mount the carver.</p>	


8	<p>When the sampling has been finished, you can seal it for later research by inserting rubber bungs or red plastic caps at each end of the tube.</p>	 <p>The top image shows a grey, cylindrical cap with a slightly textured surface. The bottom image shows a clear plastic tube with a red, ribbed cap inserted into one end.</p>
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<b>Use of stainless steel tube</b>		
9	<p>The Kajak also supports a stainless steel tube (13.533), in which you can add an internal liner, either made of acrylic or polypropylene. The following setups can be achieved:</p> <ol style="list-style-type: none"> <li>1. Stainless steel tube 13.533 + carver 13.525.</li> <li>2. Stainless steel tube 13.533 + carver 13.525 + orange peel system 13.524.</li> <li>3. Stainless steel tube 13.533 + carver 13.525 + orange peel system 13.524 + liner 13.425 or 13.426. The sample remains in the liner and can be stored for later analysis.</li> <li>4. Stainless steel tube 13.533 + carver 13.525 + steering ring 13.527 + liner 13.425 or 13.426. The sample will remain in the liner and can be stored for later analysis.</li> </ol>	

10	<p>Assemble the items as shown to the right. The orange peel (3) can be left out and replaced with steering ring 13.527 (not shown) as mentioned in item 9.4.</p>	 <p>1 - Steel tube 2 - Liner 3 - Orange peel 4 - Carver</p>
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<b>Emptying the sample tube</b>		
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11	<p>After raising the corer, dismount the carver and the orange peel system. Take out the internal acrylic or PP tube.</p> <p>For later analysis, you can secure the samples with rubber bungs or caps at the tube's end(s).</p> <p>For ejecting the sample into smaller parts, adjust the small crossbar accordingly.</p> <p>Due to small variations in the inside diameter of the pipe, it may be necessary to adjust the nut at the end of the piston. Check regularly that the nut does not come loose, so the steel bar may fall off.</p> <p><i>Due to the construction of the stainless steel tube, the piston rod cannot be used for extruding the sample.</i></p>	
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12	<p>Attach the fraction tray to the end of the sample tube and secure it by turning the wing nut. Insert the piston into the tube and push out the sample. The small plate can be used for cutting a small, thin sample of a few mm.</p>	
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## Storing and Maintenance



**Caution**

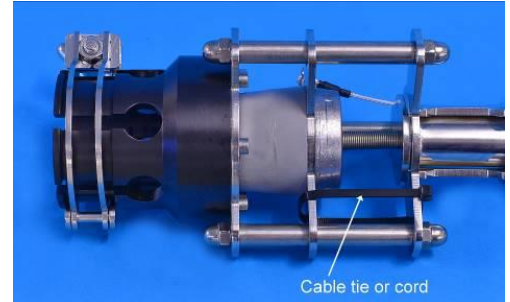
Remove the sample tube from the core head. Before storing, we recommend a thoroughly cleaning with fresh water.

**Do not use alcohol for cleaning acrylic parts.**

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**Items, like PP/PVC/acrylic tubes, rubber seals, motor houses with or without Fluorinert, etc., and a long exposure to direct sunlight or lack of clean up for salt water might affect the durability and stability of the products and will remain uncovered by the warranty.**

*For storing the Kajak, please ensure the rubber bung is not inserted into the core head; otherwise, it is very difficult to separate the parts as the bung might expand a little. Secure the bung by means of a cable tie or a thin cord as shown to the right.*



## Safety Regulations

KC Denmark A/S is not, and cannot be held, responsible for any damage(s) made to equipment or to operators who ignore safety precautions or because of misuse or wrong operation.

An expert maintenance technician fully familiar with the attendant hazards must only do all maintenance, inspection and repairs.

When working with the unit in areas, which are difficult to access or hazardous, ensure to take adequate safety precautions for the operator and others in compliance with the provisions of law on health and safety at work.

Replace worn component with original spare parts.

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