

Ekman Grab – 225 cm²
Model 12.000

Manual

KC Denmark A/S

Research Equipment
Limnology • Oceanography • Hydrobiology

Ekman Grab – 225 cm²


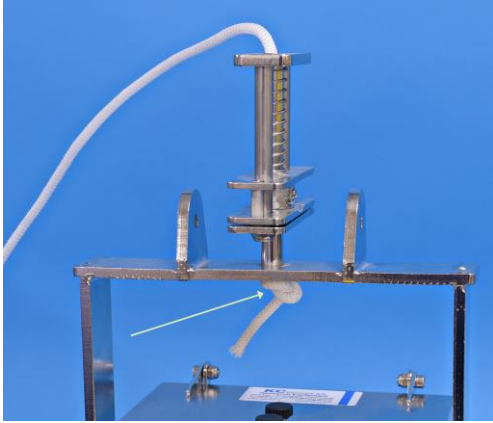
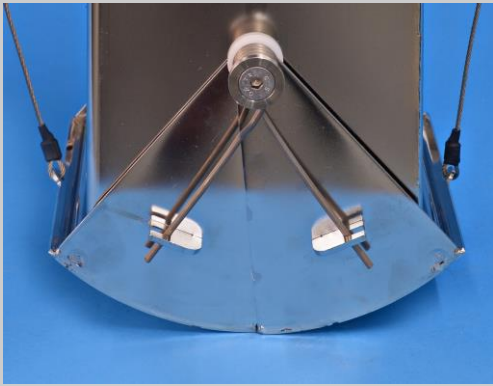






Caution

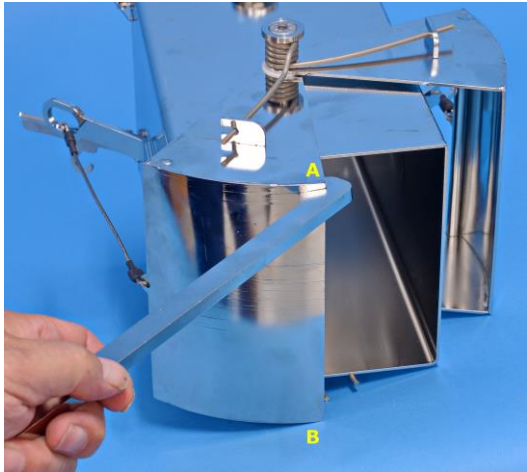
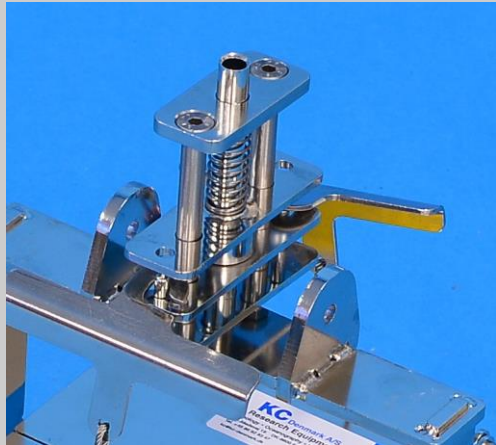

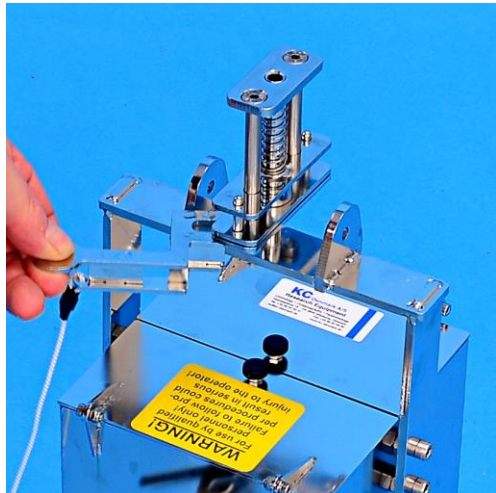
KC Denmark A/S is not, and cannot be held, responsible for any damage(s) made to equipment or to operators who ignore safety precautions or because of misuse or wrong operation.

In shallow water, you can operate the Ekman grab by means of a 4 m pole (13.006).



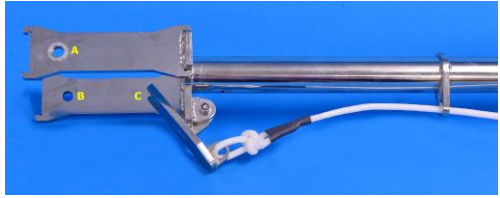
Item	Description	
1	<p>Attach the line through the tube at the middle of the release mechanism. Secure with knots at the bottom. We recommend a 5 mm line.</p> <p> Caution</p> <p>Secure the knots properly; otherwise, you may lose the grab at the sea floor.</p>	
2	Mount the springs as shown on the photo.	


3	To load the grab, you will need the enclosed fork key and the small security bracket.	
4	Mount the security bracket under the release hanger, see next photo. It will lock the sampler to avoid an unattended release causing injury.	
5	Attaching the security bracket beneath the release mechanism.	
6	The security bracket is in place.	

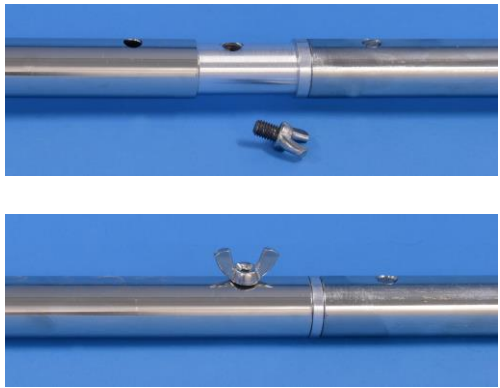
7	Load one of the shovels, pulling the locking mechanism upwards and at the same time attaching it to the release mechanism.	
8	<p>Attach the fork key on the shovel blade and force up the shovel, so the locking plate can slide down on the top of the releaser.</p> <p>Use the fork key in pos. A or B, close to the outer side; otherwise you may bend the shovel.</p>	
9	The grab is now loaded.	
10	<p>To ensure your personal safety, remove the security bracket first when the sediment sampler is ready for lowering to the sea.</p>  <p>Caution</p> <p>Once you remove the security bracket from its position, avoid any unintended release by touching the release mechanism. Serious injury to personnel may occur.</p>	


11	<p>Lower the grab to the sea floor and release the drop messenger along the line. The release mechanism is active, as soon as the drop messenger hits the upper plate and once you hoist the grab, it will take the sample.</p> <p>To empty the grab completely, you must force the shovels into open position.</p>	
----	---	--

Mounting the pole


12	<p>In shallow water, you can use the pole 13.006 for manual insertion into the sediment.</p> <p>If a line is present, see item 1, please remove it.</p> <p>Mount the pole on the Ekman and fasten with two bolts, A and B.</p> <p>Ensure that pawl C is located on top of the spring-loaded release mechanism.</p>	
----	--	---

13	<p>Correct mounting of the pole.</p>	
----	--------------------------------------	--


14	<p>Assembly of the shaft: Push the shafts together and align the holes. Insert the wingnut and fasten it.</p>	
----	---	---

15	<p>Load the grab as described in items 5-10. Insert the grab into the sediment and pull the line to release the grab.</p>	
----	---	---

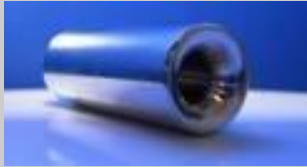
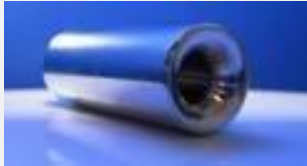

Maintenance




16	<p>Before storing the grab, it is important to rinse all parts with fresh water to ensure a smooth operation. Operate all parts individually and wash out dirt and sediment from the moveable parts.</p> <p>When storing for a long time and to keeping the strength of the springs, please remove them from the brackets, see photo.</p>	
----	---	---

Other Parts Recommended

12.006	<p>Shaft</p> <ul style="list-style-type: none"> • The 12.000 Ekman can be operated by shaft • The grab is released by pulling the cord • AISI 316 stainless steel • Length: 2 + 2 m • Weight: 3,2 kg 		
--------	--	---	--

Spare Parts

10.001	<p>Drop messenger</p> <ul style="list-style-type: none"> • For model 12.000 • Brass (standard delivery) • Weight 500 g 		
10.002	<p>Drop messenger</p> <ul style="list-style-type: none"> • For model 12.000 • AISI 316 stainless steel • Weight 500 g 		
60.001	<p>Drop messenger, 400 gr.</p> <ul style="list-style-type: none"> • Construction: Open/close • Stainless steel • Max. Ø6 mm wire • To be attached to the line at any point. Turn one part of the messenger, insert the line and close the messenger 		

12.003	<p>Spring</p> <ul style="list-style-type: none"> • For model 12.000 only • Requirement: 2 pcs • Weight: 0,2 kg 		
12.004	<p>Loading tool</p> <ul style="list-style-type: none"> • Tool for loading the 12.000 Ekman grab • Security split and line • AISI 316 stainless steel 		
Tran-01	<p>Transport box</p> <ul style="list-style-type: none"> • Support for 12.000 Ekman grab • Room for deployment line • IPPC certified • Inner dimensions: L x W x H: 670 x 250 x 250 mm • Outer dimensions: L x W x H: 690 x 280 x 300 mm • Weight: 4,5 kg 		

Safety Regulations



Caution

This grab is very dangerous in unskilled hands and you must take serious precautions to avoid accidents.

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.

When working on 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.

Rev.: August 13, 2018 - lkj

KC Denmark A/S

Research Equipment
Limnology • Oceanography • Hydrobiology

E-mail: sales@kc-denmark.dk website: <http://www.kc-denmark.dk/>

Holmbladsvej 17-19, DK 8600 Silkeborg, Denmark. Tel. +45 86 82 83 47

Bank: Sydbank. SWIFT: SYBKDK22 - IBAN DK5070460000104832

VAT no. DK 29 61 96 62