



# Kajak with Vibrator Model 13.040

## Manual

**KC** Denmark A/S

Research Equipment  
Limnology • Oceanography • Hydrobiology

# Kajak with Vibrator






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.**

Item	Power Supply	
1	<p>Requested power supply: 230 V AC, single phase. Power consumption: 180 W.</p> <p>The cable comes with a 3 conductor cable for the power supply:</p> <p>Blue: (N) Neutral Brown: (L) Load/Live (phase) Green/yellow: (PE) Protection earth</p> <p>Mount a suitable connector that fits for the power supply.</p> <p>Check that the power supply is fitted with an appropriate fuse; the control box for the vibrator does not contain a fuse.</p>	

	Preparation	
2	<p>Assembly of the corer tube:</p> <ol style="list-style-type: none"> <li>1. Insert the liner (2) into the steel tube (1)</li> <li>2. Insert the orange peel (2) into the liner</li> <li>3. Screw the carver (4) onto the steel tube</li> </ol>	
3	<p>Slide the tripod over the steel tube.</p>	

4	<p>Attach the steel corer tube to the vibrator unit and fasten it by turning the handle clockwise.</p> <p>You may attach a thin steel wire between the eye on the tube and the vibrator to avoid losing the sample tube and the tripod (not shown).</p> <p>Remove the SubConn dummy and connect the orange power cable.</p> <p>See pg. 5-8 for handling the SubConn connectors.</p>	
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<b>Deployment</b>		
5	<p>It is important to deploy the Kajak corer using a steel wire or similar.</p> <p>Do not use the electrical cable for the deployment, as its strength is not sufficient to hold the Kajak's weight.</p> <p>Fasten the cable relief to avoid damage to the cable.</p>	
6	<p>Once the Kajak hits the seabed, hold the deployment line taut, so the Kajak does not tilt over.</p> <p>Push the green button to activate the vibrator and the red lamp is on. Slacken the steel wire and the electrical cable according to the Kajak's penetration.</p> <p>Before raising the sampler, stop the vibrator by pushing the green knob.</p> <p>The reverse side of the box has a bracket allowing you to fasten the box by means of 2 bolts.</p> <p>Press the emergency knob and the vibrator stops immediately.</p>	

7	<p>Once you have pressed the emergency knob you must pull it backwards and push the green button to reactivate the vibrator.</p> <p>If any doubt, look beneath the red knob; if activated, you will only see the black ring.</p>	
8	<p>The knob is now pulled backwards, and you can see the yellow ring, indicating that the emergency stop is not activated.</p>	



# SubConn® Handling instructions

Follow these instructions carefully to ensure correct use of your SubConn® connectors.

## Handling

- Connectors must be greased with Molykote 44 Medium before every mating
- Always grease O-rings on BH, BCR and FCR connectors with Molykote 111
- Disconnect by pulling straight out, not at an angle
- Do not pull on the cable and avoid sharp bends at cable entry
- When using a bulkhead connector, ensure that there are no angular loads
- Make sure to apply the recommended torque when tightening bulkhead nuts
- SubConn® connectors should not be exposed to extended periods of heat or direct sunlight. If a connector becomes very dry, it should be soaked in fresh water before use

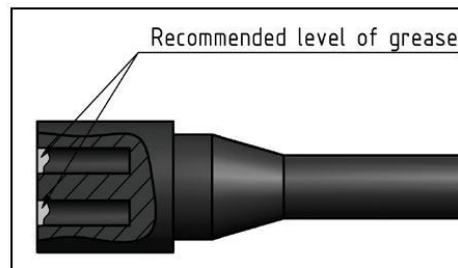
Scan to access  
SubConn® greasing  
and cleaning  
instruction videos



## Greasing products

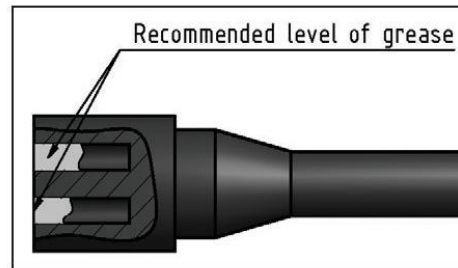


## Greasing and mating above water (dry mate)



- Connectors must be greased with Molykote 44 Medium before every mating
- A layer of grease corresponding to a minimum of 1/10 of the socket depth should be applied to the female connector
- The inner edge of all sockets should be completely covered, and a thin transparent layer of grease left visible on the face of the connector
- After greasing, fully mate the male and female connector in order to secure optimal distribution of grease on all pins and in the sockets
- To confirm that grease has been sufficiently applied, de-mate and check for grease on every male pin. Then re-mate the connector

## Greasing and mating under water (wet mate)



- Connectors must be greased with Molykote 44 Medium before every mating
- A layer of grease corresponding to approximately 1/3 of a socket depth should be applied to the female connector
- All sockets should be completely sealed, and a transparent layer of grease left visible on the face of the connector
- After greasing, fully mate the male and female connector and remove any excess grease from the connector joint

## Cleaning products



- \* General cleaning and removal of any accumulated sand or mud on a connector should be performed using spray based contact cleaner (isopropyl alcohol)
- New grease must be applied again prior to mating

## Use of Loctite

- Always use Loctite 5910 to lock non-metallic (PEEK) connectors
- For locking metallic connectors, the use of Loctite 243 is recommended



### COAX connector

- Only grease the rubber parts - do not grease coax pin and socket
- Do not mate under water. To be used with locking sleeves only

### Bulkhead Connectors - Tightening force

Type	Material	Rec. Torque - Nm
3/8" - 24 UNF	Brass, aluminium	4.0
	Stainless steel, titanium	6.0
	PEEK	2.0
7/16" - 20 UNF	Brass, aluminium	10.0
	Stainless steel, titanium	14.0
	PEEK	4.2
1/2" - 20 UNF	Brass, aluminium	15.0
	Stainless steel, titanium	21.0
	PEEK	5.2
5/8" - 18 UNF	Brass, aluminium	29.0
	Stainless steel, titanium	41.0
	PEEK	10.0
3/4" - 16 UNF	Brass, aluminium	44.0
	Stainless steel, titanium	63.0
	PEEK	15.0
7/8" - 14 UNF	Brass, aluminium	60.0
	Stainless steel, titanium	80.0
	PEEK	20.0
1" - 14 UNF	Brass, aluminium	75.0
	Stainless steel, titanium	100.0
	PEEK	25.0

### Recommended oil for pressure balanced systems

- MacArtney recommend DC-200/350 or PMX-200/350 in oil compensated systems

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## Safety Regulations

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**Disconnect power supply to avoid any unattended operation causing accident to personnel.**

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

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.

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