



2400, 2401 K-BTM Corer Instructions

Warranty and Parts:

We replace all missing or defective parts free of charge. All products guaranteed free from defect for 90 days. This guarantee does not include accident, misuse, or normal wear and tear. **Please note warranty limitation, below.**

Important Note:

Due to the wide variety of substrates that may be sampled by coring instruments, Wildco[®] does not warrant the core tubes except for initial production errors. An example of a valid warranty claim would be: "The K-B head would not screw onto the coring tube when I received my shipment." Examples of invalid warranty claims would be: "The threads on the core tube deformed on the K-B during use," or, "The nosepiece hit a large rock, bent and can no longer be removed from the tube."

When inserting or removing the coring sampler, do not rock it back and forth when it is embedded in the ground. Excessive lateral force may bend components, making them unusable. Only forces that are vertical in nature should be applied to these coring instruments.

Do not use wrenches to affix nosepiece, head or couplers. Excessive tightening of these components can lead to warping of the core tube and/or binding of the components. If mechanical means are used to tighten the components, it may become impossible to disassemble them again.

Make certain each and every time the core tubes are threaded into the head, nosepiece or coupler, that the threads are very clean on all parts. Grains of sand, dirt or other foreign substances will cause the components to bind together, making it very difficult or impossible to separate them.

Operation requires winch and winch mount such as **66-C10** and **66-C52**, respectively, manufactured by Wildlife Supply[®]



Description:

This corer is intended to be used in deep fresh, salt, or brackish waters over 100m. Our design incorporates improvements by *Dr. R. O. Brinkhurst, Institute of Ocean Sciences.* Because the valve is locked open during descent, there is little frontal wave and minimal warning to fauna at the water/ bottom interface. Messenger-operated, it can be kept open until you have a sample.

Aircraft cable fits into a closing trip mechanism at the top of the head assembly. When a messenger strikes the trip lever, a neoprene valve drops and seals the core tube under the head assembly. A suction, formed between the top valve and the core sample, creates a partial vacuum inside the core tube as the sampler is raised. This partial vacuum helps hold the sample in the liner tube, with the help of a core catcher.



Introduction:

The Wildco[®] K-BTM Core Sampler is shipped with the head assembly of the unit assembled (cable, trip mechanism, messenger rubber cup, and base casting). The core tube, liner tube, core catcher and nose piece must be attached to the head assembly prior to sampling. We recommend checking all cable attachments thoroughly before using, as they may have become loose during shipment.

Use common safety precautions when assembling and using this unit.

How To Assemble:

- 1. (See *Diagram*) Attach core tube to the head assembly by screwing the tube into the head assembly until the tube bottoms out in the head assembly. If the tube does not bottom out, then the tube will leak air and the sample will not stay in the core tube.
- 2. With the core tube in a horizontal position, place the core liner tube inside the core tube. Next the core catcher is inserted into the liner tube. Finally, screw the nosepiece on the bottom of the core tube until it is snug.
- 3. The unit is ready to attach to the winch by securing the cable end to the winch drum and winding it on the drum. Check all connections, including those on the unit for tightness. Failure to do so may result in loss of the sampler.
- 4. If you are assembling the unit after it has been used, make sure all components, especially threads, are clean prior to assembly.

How to use:

- 1. Prior to lowering the corer into the water, the rubber cup should be in the locked in the "up" position. As the corer is lowered, the water flows freely through the core tube, minimizing the amount of bow wave shock to the substrate/water interface.
- 2. As the corer begins to penetrate the bottom surface, the EggshellTM core catcher fingers are pushed open by the entering core material.
- 3. Since the K-B[®] is a gravity corer, the weight of the unit is intended to provide the force for penetration of the substrate.

- 4. After penetration, put the messenger (**45-B10**) on the cable and let it drop. This will trip the rubber cup that seals the top of the base casting, creating a partial vacuum allowing the unit to be raised without losing the sample.
- 5. After the unit is on board, keep it in a somewhat vertical position and remove the nosepiece. The liner can now be removed and capped on both ends for later testing.
- 6. Please check the condition of the core catcher prior to taking the next sample, because it may have been damaged and may not be suitable for continued use.

Accessories:

- K-BTM Conversion Bases (2402-E97/ 2402-E99) -Convert a medium K-BTM corer to a heavy or vice - versa by exchanging the head assembly bases into which the core tubes are threaded
- K-B[™] Top Weight (2402-E18) An easy way to obtain more penetration with both medium or heavy K-B[™] corers. This 5.4 kg (12 lb) lead weight attaches to the head assembly with clamping bolts, included. *Cannot be used with* 2407-E17 *fin.*
- K-BTM Stabilizing Fin (2402-E17) The fin holds the corer upright so it strikes the bottom more squarely in strong currents. Corer can be dropped from 2-10 m (6 30'). *Cannot be used with* 2407-E18 *top weight*.
- 45-B10 Split Messenger 11 oz, 316 stainless steel
- **2449-A11** Lexan[®] Nosepiece plastic to avoid trace metal contamination.
- **2449-B13** Eggshell[™] core catchers, pack of 3
- 66-C10 Winch Zinc plated steel, holds 1,000 lbs.
- **66-C52** Winch Mount Clamps to the side boards or transom of a small boat. Clamp opening is 51 mm (2"). For use with winch above.
- 61-B14 Aircraft cable, 100', stainless steel.
- 910-G34 Plastic carry case
- 2449-A21 Stainless steel nosepiece
- 2449-B31 Stainless steel core catcher

Order on-line at <u>www.wildco.com</u>! Check out our website for prices, replacement parts, new products and more!

P/N 24-2401

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