

## HC-Mtg-Kit Installation for Kayaks Installation:

This **HC Installation Kit** provides both the electrical and mechanical hardware for fitting **HC** into kayak. The **HC Mounting Bracket** is permanently fitted with double sided tape and connects via cable to the **speed sensor**. The bracket has a special plate which can be formed to the shape of the kayak. Normally the bracket is attached on top of kayak at a convenient point in front of paddler. The HC is pushed on to mounting and can be quickly fitted and removed. The mounting bracket has two hinges and can be folded out of harm's when not required.

The following parts are included in Kit:

- Mounting Bracket with speed sensor attached:
- Speed Impeller, including:
  - Micro Impeller, fitted with double sided tape
  - Spare piece of double sided tape
- Double sided tape and fixings for installation:
  - 2 x ~25x50mm (Black) for connecting speed sensor (pick up) to boat - one spare
  - 3 x 25x25mm self adhesive cable tie pads
  - 3 x 100mm cable ties
  - 3 x alcohol swabs for cleaning surfaces

**Mounting Bracket/ Hinged Arm**: The adjacent picture shows the mounting bracket. At the base is a thin aluminium plate with double sided tape attached. The aluminium plate is designed so that each side can be bent down such that the maximum area of double sided tape will adhere to kayak. Make sure kayak surface is clean and dry before applying double sided tape. A light rubbing with Scotchbrite<sup>™</sup> or similar will help prepare surface and alcohol swabs are provided to clean surface. Be careful not to apply too much stress to double sided tape bond for first 24 hours.



## Speed Sensor:

The impeller/pick up should be mounted in front of paddler, approx 1-1.5m from bow. The mounting of the impeller and speed sensor pick up is shown in following diagrams. Four mounting arrangements, two with the speed pick up longitudinal and two transverse to boat. To assist in positioning the sensor in respect to the impeller, a magnet may be helpful – place magnet on inside of hull and determine position on outside of hull with a small piece of magnetic material eg a paperclip.



The alignment of the impeller fin is critical – it must be in line with the hull. It is helpful to use a long straight edge to align fin. It is generally recommended for the fin to be mounted at or within  $\sim$ 100mm from the centreline of the hull.

The fin is affixed with double sided tape – thin transparent tape. Carefully mark intended position of fin on hull with a pencil. It is important to position fin correctly first time - once backing tape is removed from fin, and it is stuck to boat, it is difficult to reposition it. The hull must be clean and dry. If surface is not clean, a gentle rub with Scotchbrite<sup>™</sup> or similar, and a wipe with an alcohol swab should be adequate. If the fin is to be removed from boat, then apply a steady force, to ease fin off. A knife can be used to separate fin from hull, but care should be taken to avoid hull damage. Wrenching fin off without care may result in damage to the gel coat or paint finish. **Note:** The fin already has double sided tape affixed. The loose piece is spare. To fix fin, remove the pink protective layer.

The speed Pick Up is also attached with double sided tape black tape  $\sim 1$ mm thick. Again it is important to have a clean dry surface. Sometimes it is difficult to achieve this as the inside of boats is sometimes hard to dry. If the double sided tape does not work, then standard adhesive sealants can be used – some commonly available acrylic sealants are suitable for wet surfaces.

To test speed sensor before putting boat in water, plug **HC** unit into **mounting bracket**, and start timer. Blow on impeller to cause it to spin. The **HC** should then register some distance. Remember the timer will stop if it does not sense a stroke for 30 seconds. If this happens, then press 'start' button to restart timer. When the impellers spin there will be a feint 'whirring' noise. This is normal.



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