Plastic Weld Repair Kit

Plastic Weld Repair

This is usually a land-based repair that requires approximately 5 minutes to cool and then harden. However, the repair could possibly be completed on-water, with one kayak pulled across another.

Warning

Blowtorch: there is a slight delay between the operating trigger being released and the flame going out – make sure the flame is fully extinguished before putting the device down or handing it to someone. The blowtorch nozzle also remains hot for sometime after use – use it carefully and place it in a safe area to allow it to cool.

Advice

The key to this repair is to apply the heat evenly to the kayak plastic and to the welding rod **at the same time**. The kayak may need a little more heat to form a strong bond.

1 Dry the area; in the sun or with the blowtorch (keep the flame moving to avoid scorching the boat).

2 Take the blowtorch in one hand and the welding rod in the other.

First run the flame gently along the end of the split and the welding rod, to warm the plastic.

When they are both hot (the end of the welding rod will turn clear) place the tip of the welding rod beyond (1cm) the furthest end of the split to 'tack' it into place.

3 Run the flame up and down the split and the welding rod at the same time, working towards the flame until the rod begins to melt/fuse into the kayak plastic. This is known as pendulum welding.

4 As the rod melts, gently apply pressure until it bends towards the flame and along the split. A small bead of molten plastic should form at the junction of the bent welding rod and kayak plastic.

5 Continue the weld to approximately 1cm beyond the end of the split. This will strengthen it.

If the kayak plastic starts to scorch/char (surface discolour or turn black) move the nozzle of the welding torch back slightly to reduce the heat.

6 Cut or melt the end of the rod.

If the split requires further welding, repeat the process.

7 The area will remain warm for about 5 minutes after welding.

The weld will turn white/opaque once it has cooled.