

## **Tools Required:**

- Tools to disassemble the kayak
- Drill with 2mm Drill Bit
- Heat Gun or Miniature Butane Gas Torch [paint strippers or hair dryers are not suitable]
- Welding Strips [Specialist strips are available from your local Pyranha dealer or your Pyranha representative]
- Alcohol Wipes
- Sharp Knife
- Sand Paper

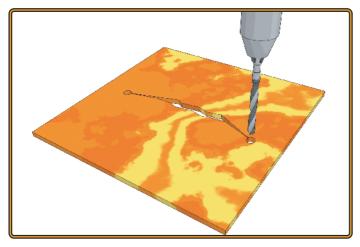
**NOTE: Plastic Suitability -** All recent Pyranha kayaks are suitable for welding repairs. Older kayaks may not be as suitable. If you are unsure about welding suitability, contact your Pyranha representative before you begin.

# **Welding Repair Instructions**

#### **Preparation**

- Remove any outfitting that may impede access to the damaged area of the kayak.
- Ensure the kayak is dry and then clean the damaged area on both sides, preferably with an alcohol wipe.
- Drill a hole using a 2mm drill bit at each end of the crack to stop it spreading.

**NOTE:** It is important to align the drill so that the hole contains the end of the crack. If this is not completed correctly, the crack will spread once the kayak is put back into use.



#### Welding

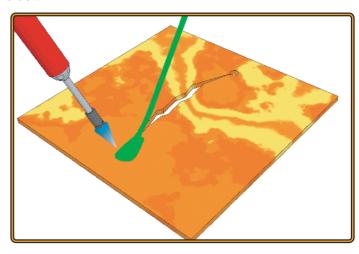
- Hold the welding strip as you would a pen, close to one end of the crack. Heat both the end of the welding strip and the end of the crack at the same time.

**NOTE:** It is best to heat the plastic with a waving motion to avoid over-heating one area.

- Once the plastic turns glossy, it has reached the correct temperature and you should push the corner of the welding strip into the end of the crack, whilst continuing to heat the plastic.
- Apply a continuous pressure to the welding strip and guide it along the crack.
- Stop the weld at the end of the crack

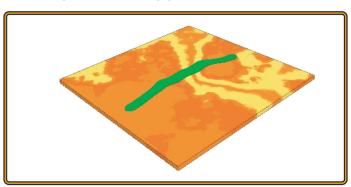
**NOTE:** It may be necessary to weld the crack more than once. Repeat the process until a smooth weld that covers the whole crack is achieved.

- Where possible, weld both the internal and external faces of the crack.



## **Finishing**

- Trim the excess weld strip with a sharp knife, taking care not to score any of the surrounding plastic.
- Sand the newly welded plastic to ensure that it is smooth and that no sharp edges are exposed. The final weld should be thicker than the original skin, tapering gently in every direction.



# **Trouble Shooting**

Problem

The Weld falls out or doesn't bond properly Solution

Under-heating during welding may cause insufficient fusion of the plastic. If a weld fails due to under-heating, the repair can be cut back and welded again.

### Problem

The Plastic is glossy, darkened in colour or melts Solution

Over-heating is a non-reversible condition with only two possible remedies. Either the whole of the affected area has to be cut out and a new panel welded in place or the whole part has to be replaced.

### Problem

The crack continues to spread after welding Solution

The crack has not been contained. Repeat the welding process again and ensure that holes have been drilled at each end.