

Making Repairs to A PVC or Hypalon Inflatable Boat



Before you start your repair, it is important that you have the correct materials beforehand. Without using the right solvent and adhesives you risk damaging your inflatable boat further. To make a repair on your PVC or Hypalon inflatable, here is what you will need:

- Cleaner Solvent specific to either PVC or Hypalon fabric (**Solvent is not essential but advised for larger repairs**)
- 2-Part Adhesive specified for the material of your boat.
- A small stiff brush such as a painter's brush or a glue brush.
- Clean, lint-free mutton cloth.
- Material for your hypalon or PVC boat.
- Masking Tape (**optional but reduces glue excess on surrounding areas**)
- Polythene
- Fine Sandpaper (**Skip sanding steps when working with PVC**)
- A Seam Roller

PREP THE WORKPLACE

Having the right work area is extremely important. To ensure that nothing goes wrong with the repair make sure the area is well ventilated, dry (less than 60% humidity), and between 18-25 degrees C. Do not use any adhesives that were mixed together more than 4 hours prior to use, due to the flammable nature of the adhesives, do not be near an open flame performing repairs.

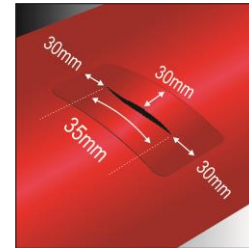
MIXING THE ADHESIVE

2-Part adhesives are for permanent fixes (where as temporary fixes can be used with 1-part adhesives). It is important that you mix the curing agent and the adhesive in a specific ration of 25 parts adhesive to 1 part curing agent. The tins are already created

at this ratio, using half the tin of adhesive requires half the bottle of curing agent.

PATCHING THE HOLE/TEAR

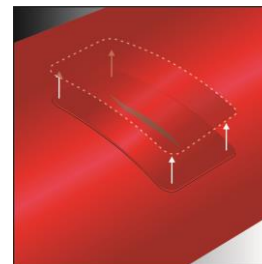
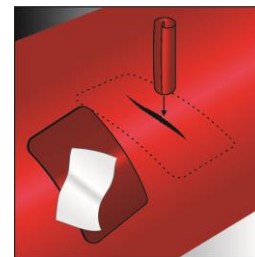
If you are repairing a tear or rip that is longer than 35mm in any direction you will need to apply an inside patch. If the hole is less than 35mm you can apply just an outside patch. The technique to repair is the same but due to the position of the tube, an inside patch is slightly more difficult.



IF YOUR HOLE/TEAR IS LESS THAN 35MM SKIP TO OUTSIDE PATCH

INSIDE PATCH

- Measure the hole and cut your patch to be 30mm longer in every direction over the hole. Make sure when cutting the material that all of the corners are rounded.
- PVC will not require sanding but If you are repairing a Hypalon inflatable boat you will need to sand the top surface around the hole until it has a matt finish. The same process needs to be repeated to sand down the inside surface of the tube and the patch. Using the solvent cleaner, wipe down the area that was sanded and allow the solvent sufficient time to evaporate until the surface is dry.
- Following the directions on the adhesive tin, mix half. Using the small stiff brush, thinly apply a layer of adhesive onto both surfaces so that it looks wet.
- Allow the surfaces to dry for approximately 30 minutes.
- Add a second coat of adhesive to both surfaces and allow it to dry for an additional 5/15 minutes. At this point the adhesive should feel tacky when lightly touched.
- With the inside patch, apply a piece of polythene onto the adhesive on the patch so that it can be rolled up and pressed into the hole. Place it

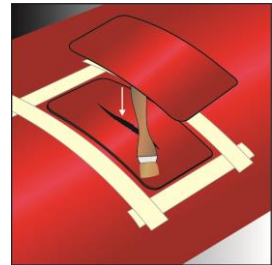


inside the tube and put it in position.

- Using the seam roller, roll from the middle to the outside of the patch. It is important to make sure that no air is trapped between the patch and the adhesive.
- Let the adhesive dry for at least 12 hours.
- Once the adhesive has dried, inflate the tube and check for any leaks.

OUTSIDE PATCH

- **Follow the steps with a deflated tube if you haven't needed an inside patch.** Inflate the tube and prepare for the patch by measuring and cutting your material so that it has a 30mm gap around each edge of the hole.
- Trace round the patch and sand down the surface surrounding the area to be patched until it has a matt finish. Sand the back of the patch as well so that it has a similar look. If you are repairing a PVC boat you will not have to sand your fabric.
- Using a solvent cleaner, wipe down the area so that it is free from particles and debris.
- Place masking tape around the area that will have adhesive applied with an extra 3mm to allow for the fabrics natural stretch.
- Apply a single coat of adhesive after mixing it and allow it to dry for 30 minutes.
- Apply a second coat of adhesive and wait 5/15 minutes or until tacky.
- Place the patch carefully then use the seam roller to roll it firmly. Make sure that all edges are stuck down and that there is no air between the patch and the adhesive.
- Remove the tape and use the solvent cleaner to get rid of any excess debris left by the tape or any excess adhesive.
- Let it dry for 12 hours before inflating your boat. A full cure takes at least 48 hours.



Then you're free to hit the water :)