

Minor Repairs



Photo #1 – Note - this scratch is 2-3 mils. wide by 8 – 10 cms. long.



Photo #2

Even though wood strip hulls are strong, durable and resistant to damage, small dings and scratches are inevitable. The most common requirement is a new coat of a good marine grade spar varnish with ultra-violet (UV) protection, but sometimes the scratches are deeper and cannot be covered by a simple coating of varnish. **(Photo #1)** How to determine when it is time to repair the glass or epoxy is sometimes a matter of esthetics. If you can live with the blemishes, many can be left alone, with no long- term effect on the boat or integrity of the structure.

If you built the boat yourself, you should have enough knowledge to do the repairs yourself.

If you did not, then a few simple tools and materials will do the job.

Materials/Tools

You can purchase small repair kits from many retail outlets or marine supply stores. They usually contain small packets of resin and hardener, stir sticks, and some form of filler. Other materials will be required. They include:

- Dust mask
- Sandpaper
- Protective gloves
- Small pieces of fiberglass cloth
- Mixing containers
- Scrapers **(Photo #2)**
- Epoxy resin and hardeners designed for clear coat
- Epoxy fillers
- Lacquer thinner

Preparation

To prepare the area to be repaired, you must first scrape off any old



Photo #3

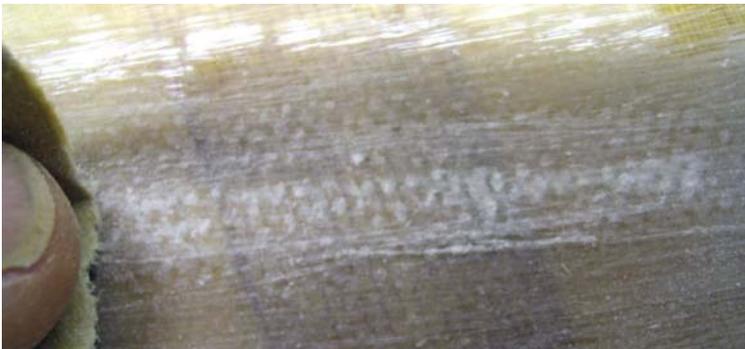


Photo #4



Photo #5

varnish or paint, since the epoxy will not bond well to it. A carbide scraper or cabinet scraper works best for this.

(Photo #3) Once you have removed all the old varnish in an area at least three times the size of the area to be repaired, you can proceed to scrape deeper to expose the fiberglass cloth in the repair area. As you scrape, you will see the weave of the cloth as a criss-cross pattern of white threads. To repair damaged cloth, you will have to scrape or sand right through the cloth to the resin impregnated wood below. The trick is to not sand right to new wood, as the repair is likely to be more visible if you do. At this point, you should probably proceed slower with sandpaper.

Sand a little and then remove the dust to see how far you have gone.

(Photo #4) Wet area with lacquer thinner to see what it looks like. If you still see the weave of the fiberglass damage, then you need to sand further. Continue to sand but re-check your depth frequently. If you cannot see the mark when wetted down with thinner, you have sanded deep enough.

(Photo #5) Now feather your sanding out so you do not have a deep groove or hole.

If the wood has been damaged, then you should sand into the wood and fill the sanded hole with epoxy that has been thickened with some wood flour fillers to colour match your boat's wood. Follow safety precautions for epoxies as described by manufacturer.

If the area is very small, it is probably good enough to just add epoxy to fill the hole. Build up the thickness of the epoxy to the original height, let harden, and then sand smooth and re-varnish.

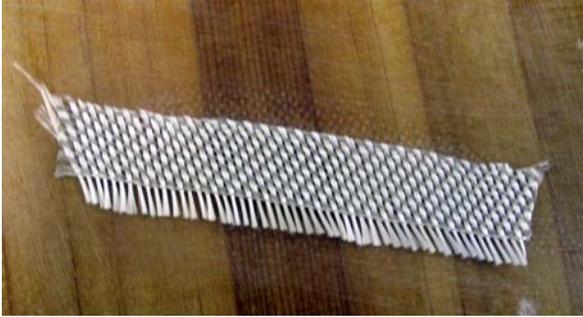


Photo #6



Photo #7



Photo #8



Photo #9

If the area is anything larger than your thumbnail, it is best to patch the area with a small piece of fiberglass. **(Photo #6)** Place a small piece the size of the original damage on first, and then place a slightly larger piece of fiberglass over that and then add epoxy. **(Photo #7 & #8)**

Build up the layers of epoxy to the original height, let harden, sand, and feather into original glass. **(Photo #9)**

Sand smooth and re-varnish.

