

Over 45 Years in Business

'Ask Dr Gel' • 18 Years in Boating on the Hudson

# Ask Dr. Gel

by Dave Weakley

Dave Weakley is the owner of American Boat Restoration and has been keeping boaters afloat in fine trim and good repair for over 45 years.



"Email me or call me with your questions! I'll be happy to help you out"  
americanboatrestoration.com / email: boatrepair@aol.com

Office: 413.665.7424 / Cell: 518.577.7799

## Gelcoat Repair Training gives student added benefit!

American Boat Restoration offers Gelcoat & Fiberglass repair training classes.

Many avid Boating On The Hudson readers know that "Dr Gel" owner of American Boat Restoration offers Gelcoat & Fiberglass repair training classes.

Classes teach how to do basic gelcoat and fiberglass repairs to those who want to work on their own boats or can be geared for those who want to start their own repair business, those already working in the trade and want to improve the quality of their repairs.

The training is all "hands on" it is not a class room setting. The class covers- Proper compounding and buffing techniques to prep a boat for a repair, equipment and tools needed, gelcoat color restoration, grinding gelcoat and fiberglass damage to prep for a repair, mixing and applying the proper materials and fillers for above and below the waterline repairs, sanding and prepping for gelcoat, color matching, spraying gelcoat, finish sanding, compounding, buffing techniques to finish the repair and more. He also covers repair procedures for osmotic blisters, holes, airvoids, stress cracks, fractures and gashes. We offer advanced training in Fiberglass lay-up and Polyflake repair. Polyflake training requires a lot of experience in successful gelcoat repair techniques before taking on. Polyflake is a plastic material based on metalized polyester film which can be colored to provide glitters that are brilliant and is applied to the surface of the boat along with gelcoat during a repair. It is seen on many Bass boats. There are a very few repair facilities that can do successful polyflake repairs. It is a very specialized art.

As part of the class we offer students to bring a project boat that they could do a minor repair on in the class "hands on". It could be a small gash, scratch, airvoid, etc. that the student can repair in the time allotted for the class.

Eric a recent student from down state NY looking to open his own repair business was able to do just that.

Eric's wife was riding on one of their jet skis and an acquaintance asked if he could ride on a second one owned by Eric and his wife. After telling the gentleman "no" a number of times he finally gave in and let him take the



Jet Ski. He warned him to stay clear of any boats, docks, rafts, shore and especially his wife! In a rather short period of time he realized why he should not have given in and let him take the Jet Ski.

He rear ended the Jet Ski his wife was on. He glanced off to the starboard side hitting it and narrowly missed her foot. The impact caused serious damage to both machines. Fortunately no one was seriously injured.



Lay up with fiberglass biaxle mat, Fiberglass cloth and resin.

The night before Eric came to the class he called and asked if he could bring the two damaged jet skis and do a repair in the class. He said one had a crack. We began the repair by grinding out all the fractured gelcoat and fiberglass until we revealed solid fiberglass. It was pulverized and had to be ground out almost all the way through the laminate. The fiberglass shattered on impact. Good fiberglass is deep purple in color, shattered is grey or white.

The next step done was to rebuild the ground out area. We applied multiple layers of fiberglass biaxle mat, fiberglass cloth strategically cut and resin until we had a tolerance of less than 1/8 below the gelcoat surface surrounding the repair area. We then applied reinforced fiberglass fillers to straighten out any imperfections. We then sanded the area to re-establish the original body lines. The area was prepped for gelcoat. The custom matched gelcoat was applied, left to cure with a spray coat of PVA on it. It was then sanded with various grits of wet sand paper, compounded and finished with wax.

What appeared to be a relatively small crack turned out to be more serious damage. This often happens as no one has x-ray eyes. Sometimes there are "tell tale" signs of how deep fiberglass damage can be. This is learned over many years of gelcoat & fiberglass repair experience.

Although it turned out to be a bigger repair than what we normally do in a training class it was a great learning experience for Eric. We had to grind, lay up, sand, and color match. There was no time to order factory gelcoat so we custom tinted some of our stock white. It was a perfect match. Eric was ecstatic, confident and anxious to do additional repairs needed on both jet skis. We were able to cover most of the class training in this one repair.



Lay up ground out, sanded and original body lines restored.



Thin layer of vinyl ester filler applied - ready for Gelcoat.



Gelcoat applied.



Finished repair - perfect custom color matched!