Over 45 Years in Business
"Ask Dr Gel"
15 Years in
Boating on the Hudson

Ask Dr. Gel

by Dave Weakley

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"Email me or call me with your questions! I'll be happy to help you out"

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Are all your ducks in a row before you go boating in 2021?

You'd be surprised at the number of people whose ducks are not quite lined up!

Oh! The things that can happen...

You're planning an outing on the water, it's finally hot! You hook up the trailer and...the lights don't work, bearings are grumpy, tires are flat and checked (cracked), registration is last years (and it's Saturday!), trailer needs inspection, where's the drain plug?, you pull the cover off and find out the mice moved in and you're growing mushrooms, battery is dead, gas smells funny, where's the safety gear? How many of you have experienced some of these things?

Take time to get ready for the boating season to avoid costly gelcoat and fiberglass repairs!

Spring service your boat and trailer and if you're unsure what needs to be done bring it to someone who has the knowledge of what to do. Have all the required State Safety Equipment onboard. Are you new to towing a trailer? Be sure to practice backing up before you head over to the boat launch, there maybe people there with no sense of humor!

Here are tips for you

Remove the winter cover /canvas or shrink wrap

Once the cold season is over and milder temperatures arrive it's time to pull the storage cover off your boat. April and May temperatures can really heat up the inside of a shrink wrap boat. The shrink wrap acts as an incubator and can cause dampness, mold, gas smell, stains, etc to develop. It's important to get that wrap off and cover your boat with your canvas or at least slit open areas of shrink wrap very carefully allowing ventilation! Not doing this can lead to triggering wood softness and rot.

Start to clean, examine and protect the gelcoat!

Get out the hose, cleaning buckets and gloves!

Fiberglass boats need to have a good surface protection so that algae, dirt, grime and critters can't adhere to the gelcoat. Spring clean with a good marine "boat wash" or "boat soap" - 3M, Seachoice, Starbrite, Marykate, etc. are brands to consider. They are mild detergents which should not remove the sealer glaze and wax. You can use Spray-nine, Fantastic, or On-Off, etc. They are all good cleaners, won't damage your gelcoat, but they will eventually remove the protection your boat should have such as sealer glaze and wax. The boat will be like a magnet if the defense is removed. Cleaning with the correct products will extend good gelcoat life.

Aviod using Scotch Brite Pads, Magic Eraser, etc to clean your boat. Not good for gelcoat!

Believe it or not we have taken many scratches out of gelcoat because boat owners thought these products were a good idea to use. It's like using sand paper! It works fast and great during the process but you will be horrified at the dull and scratch marks left behind! The fix for this mess of scratches requires wet sanding, compounding and wax which is very labor intensive.

1. Check deck and hull for oxidation, gelcoat cracks ,scratches, gashes, airvoids, etc. It's best to repair any gelcoat problems sooner than later to avoid worse problems and more expense down the road.

2.Check for osmotic blisters. Repair is highly recommended as soon as possible.

3.Reglaze and wax if your hull was cleaned with an acid wash (e.g. On-Off) All the gelcoat sealer protecting properties are gone and need replacing! This prepping step is extremely important and cannot be skipped!

4.If your boat is going to be in the water all season, consider applying epoxy barrier on the hull from the waterline down to help prevent osmotic blistering.

5.Touch up or replace antifouling paint

6. Compound the gelcoat using top quality Marine products. Read further for more info about proper compounding techniques.

7.Apply a good coat of marine sealer glaze being careful to completely cover the gelcoat

8.Next apply a high-quality marine UV protecting wax.

9.After you apply an ample coat of sealer glaze and wax the boat should not get the stubborn stains and grime.

10.Clean your boat often during the season by using the "Boat Wash" and don't hesitate to wax It regularly throughout the season. Protect your gelcoat like you protect yourself from sunburn! You can't overwax your boat!

Keep your boat from getting all chalked and faded. Keep it covered whenever possible.

The dullness in the gelcoat goes beyond the surface.

Gelcoat is porous and the fade is imbedded in the pores of the gelcoat. When the boat was new it had a sealer glaze that filled the porosity in the gelcoat. It's likely after years of washing the boat especially if harsh chemicals and or dish washing liquids were used the sealer glaze has gone away. Now that the protective glaze and wax is gone the UV sun rays are penetrating the porosity in the gelcoat. Degrees of fading will vary depending on color; darker colors, e.g.; red, maroon, green, dk. blue all have large amounts of pigment and will fade faster than lighter colors.

"In most cases gelcoat shine and color can be restored!"

If you are not aggressive enough when you compound you are shining only the surface. You need to take the top layer of gelcoat off to get to good gelcoat. It is possible that the right compound materials and technique will fix your problem.

Get good gelcoat compounds. There is a difference between compounds for cars and boats. Generally gelcoat compound is more aggressive than automotive compound. I use the following * TR products - there are others available but I like these. TR-311 is a coarse compound - TR 308 eliminates swirl marks and minor scratches and TR-301 Sealer Glaze closes gelcoat pores and seals. After using the TR-301 Sealer Glaze a good marine UV protecting wax must be applied to insure the longevity of the shine. Depending on how faded the gelcoat is will determine what compound you can start with.

"If you are going to compound and wax your boat you need the right materials and equipment"

Here's what you need; a good particle mast; compounds dry out your sinus and skin, eye protection and light weight gloves, micro fiber cloths, a variable speed buffer, not an orbital buffer! Orbital buffer is good for polishing but not for compounding because you won't get the heat from it necessary to get a shine. Be sure to get a buffing pad; different from polishing pads. Use a good quality wool pad; I use a doubled sided wool pad. The pads are pricey, but you get what you pay for. Don't bother using a foam buffing pad as they build up static electricity and will not produce a good shine.

"As a general rule; buffing without a little heat you're not going to get the shine"

Start with using TR-311, course compound. Apply to the boat using a terry rag. Put enough on to keep it moist; too much will sling all over and make a mess. Turn your buffer down to between 600 and 1000 rpms. All buffers spin clockwise so put compound on the boat and work right to left in small areas so the compound stays moist and it will avoid loading up your buffing pad. Be careful buffing around registration numbers, vinyl graphics and stripping tapes!

After using TR-311 wipe the residue off the boat. Clean the pad with a tool called a spur. You can use the side of a screw driver but it tends to pull the pad apart. Repeat the process using the TR-308 to get rid of swirl marks and minor scratches caused by the coarse compound. Again wipe off the residue and clean the pad. Next apply the TR-301 Sealer Glaze. It is recommended a buffer be used but it can be applied and removed by hand. Wipe the boat down one last time and apply a good marine UV protecting wax. Wax is essential because the Sealer Glaze does not have UV protecting properties.

If the gelcoat has become badly chalked and it comes off onto your hands and clothes when you rub against it wet sanding and compounding will be required to bring the shine back.

Here is the basic wet sanding process;

I test spot an area starting with a professional grade gelcoat compound. If that does not remove the fade then I will wet sand using a sanding block starting with 1000 gt. During the process the sandpaper is completely saturated with water. If fade is still present after testing with 1000 gt., I will then use 600 gt wet sandpaper. I will not use any coarser paper. I work 1 sq. ft at a time all the way around the boat being very consistent on how much sanding is done. The gelcoat must be sanded evenly other wise the boat will look like a leopard. If 600 gt is removing the fade, 1000 gt is used next. Depending on finish desired 1500 and 2000 gt is used. Final applications are professional grades of compound mentioned above, sealer glaze and UV protecting wax.

Check your Trailer

Be sure to have your trailer inspected and most importantly have the correct trailer for your boat.

A poorly adjusted trailer or one not adequate to fit your boat can cause a lot of damage to your gelcoat and fiberglass.

Ask your local marina to inspect your trailer – some states require a state inspection station to inspect trailers- A competent marine repair facility can be sure your boat fits the trailer properly.

Proper tongue weight and axle positioning is crucial to avoid unfortunate accidents and ensure a smooth riding boat. Not enough tongue weight can cause a trailer to whip from side to side especially if using a light weight tow vehicle.

And by the way, I am not a fan of roller trailers. Why? Because the rollers are hard and chafe away the gelcoat in multiple small areas and they do not support the hull like bunk trailers do. I have seen indentations caused by rollers. There are many parts to a roller trailer that need to be maintained. Broken rollers can do a lot of damage to gelcoat and fiberglass. Inspect them regularly. Roller trailers sometimes can be converted to the less damaging bunk trailers requiring less maintenance. Poorly maintained trailers include rotting bunks, trailer fenders and bad tires that can blow up. Also check and maintain your wheel bearings, hitches, surge brakes, etc or bring it to a marina service shop.

Check all hardware/fasteners

I worked on a high performance boat that endured normal vibrations that came along with its big engines and high speeds. It was brought to me to repair because the rub rail was falling off. I discovered that not only the rub rail was falling off but the deck was in fact separating from the hull. Good thing it was brought in for repair!

The resonation caused the heads of the screws to actually pull through the rub rail and deck thus separating the deck from the hull. Eventually the deck would have completely detached from the hull.

I had to completely remove the entire rub rail and clean off what was left of the old silicone all around the boat. Silicone should never have been used it was the wrong choice of sealer. 3M 5200 Permanent Adhesive Sealant, a high grade product is specifically made for this purpose and should have been used. Chances are if the proper sealant had been applied there never would have been a problem.

In other areas of the boat there were similar problems because of improper sealant use.

Both forward deck hatches had loose screws and had to be re-bedded. Good sealant would have dampened the resonation thus keeping the hardware tight. Both hatches were leaking like a sieve.

After finding all these problems I proceeded to check all the hardware and found most of it was loose.

On the transom I found loose swim platform bolts. These bolts are positioned below the water line. They were resealed with the correct sealant.

On your boat check and tighten screws, nuts, bolts,etc on bow eyes, seating, cleats, ladders, swim platform bolts, windlass, railings, antennas, electronics, windshields, rub rails, engine and transom, biminis, hatch doors, etc. While you are at it clean and polish metal with a good metal polish.

Protect your boat hull if it's in the water all season long!

I talk about this subject all the time! You may want to entertain the thought of applying epoxy barrier on a properly prepped hull. I'm not talking about Bottom Paint- It's Epoxy Barrier Paint which will HELP prevent blistering from the waterline down. It's a lot cheaper to properly apply epoxy barrier than it is to pay a repair facility to fix osmotic blisters. In addition Epoxy Barrier is cheaper than Bottom Paint.

As I mentioned in articles numerous time Bottom Paint alone will NOT prevent osmotic blisters and not all hulls are susceptible to developing them. Every manufacturer has their own building process.

Two boats can be built in the same plant- one boat may develop blisters while the other may not. If you don't want to apply any barrier at the very least KEEP a good coat of sealer glaze and a coat of marine wax on the hull.

At the dock

Secure your boat to a good solid built dock with secure dock cleats, adequate dock lines and fenders. Add dock edging if you can. Secure the correct size fenders and consider fender covers. Fender covers are cloth covers that slip over the fenders. They help to reduce "dock rash" on your gelcoat which can be expensive to repair. A boat lift is the perfect way to keep a boat at the dock.

Boat lines - Many boaters prefer three-strand nylon line because it can stretch under load, doesn't shrink and resists sun damage. Three-strand nylon comes in several lengths and diameters. You need to choose line with a diameter that fits the boat's size, weight and cleat size. Never short tie your boat. Allow for rise and fall of the water level and current. There should be slack in the line to prevent stress on cleats.

Throughout the boating season ventilate your boat to prevent moisture, dampness, rot and worse of all potential explosions of accumulating gases in your bilge

I receive numerous calls and emails from people who have deteriorating and/or rotted floors, stringers, supports, transoms, seating, etc. Some boat buyers are getting stuck with boats they thought was a great deal but ended up with water soaked floors, stringers, etc.

A customer brought a bow rider walk-thru boat to our shop wanting to repair a soft spot in the floor. The boat looked clean and well maintained. The exterior was in mint condition. Looking at it you would never have thought it had any soft floor issues.

Upon examination we discovered the floor was spongy and rotted from the bow to the forward area of the floor storage compartment. The boat owner was surprised, very unhappy and disgusted with the boat manufacturer. He thought the choice of materials used to build the boat should have lasted much longer.

What caused this to happen? Moisture!

The rot began in the "Storage Locker" - it's a convenient place to stuff all your wet lines, life/ski vests, etc. but these usually carpeted compartments absorb moisture. It's a big sponge in the center of the boat! The lifting hole in the cover allows additional water access. It's always damp and never has a chance to dry out due to lack of ventilation. The moisture works its way up the sides of the compartment into the underside of the plywood floor. Next the flotation becomes saturated. I have removed water saturated flotation that I was able to wring out like I was squeezing a wet sponge. The excessive moisture can easily add hundreds of pounds to your boat.

Once it is in the flotation and in the wood it will never dry out. Never, ever! Removal and replacement is the only option.

It is one of the more miserable, time consuming jobs I do in boat repair!

This boat also had a bow and cockpit cover allowing the windshield to be exposed to the sun now, creating an incubator. Hot air holds more moisture. You could have grown mushrooms inside this boat! And yes, I have actually seen mushrooms growing inside of boats.

Other helpful advise...

Look around your boat- Do you have any screws missing? – Put the screw(s) back in to seal it up!

Are there any holes? Seal them up!

If at all possible, do not cover a wet boat! Leave your compartment and cabin doors open and let the air circulate!

Install fans/blowers- Keep that air moving!

Lift your engine covers after each use- it'll keep your engine from rusting too! The key is – and it's worth all the effort - keep things as dry and ventilated as you possibly can, after every boat outing!

When unhooking your trailer chock the wheels on your trailer before releasing it from the tow vehicle. Seem like a no brainer? Well...accidents can happen...

It can roll down the hill getting smaller and smaller before it hits that tree at the bottom.

We meet a lot of people by accident...Most people realize if you live on a hill you should not unhook your loaded trailer from you vehicle to move it by hand. Chances are gravity will take over and ruin your day.

Our customer's trailer was equipped with a tongue jack with high tech double pneumatic wheels so he could move it by hand into its parking spot. This story goes all down hill from here.

The brand new 2013 high end bass boat is equipped with all the bells and whistles a bass fisherman would want and powered by a 2013 150 4-stroke engine. The boat owner unhooked the boat & trailer and it took off down the hill. All the owner could do was watch it go and go until it slammed into one of his nice trees. The accident broke the cavitation plate, bent the stainless steel prop, bent the prop shaft, smashed the cowling and tore a big hole into the transom. The damage in the heavy red polyflake was into multiple body lines. It was a major fractured area.

Tips from the US Coast Guard

1."Never approach a dock any faster than you want to hit it. Some captains like to hot-dog around, showing how efficiently they can shift and throttle, but even the best of them can be tripped up — either by misjudging distance, drift and vector, or by stalling their engines at shifting points, rendering the boat a helpless victim of its undirected momentum. A slow, steady approach is the sign of an experienced, steady skipper.

2. Never approach a docking situation without a plan. Perfect planning makes for perfect performance. It's as simple as that.

3. Communicate your plan to your crew and clearly delegate any tasks you would have them perform. For instance, assign one competent passenger a bow line, another a stern or spring line. You might want to have other passengers hang fenders over the side at contact points to avoid scratching the boat. Assign these tasks and the order in which you want them done well in advance of the maneuver.

4. Warn your passengers to keep arms and legs inside the boat and away from pinch points between the boat and dock. To protect the boat in case of a harder-than-expected landing, have them suspend fenders at contact points.

5. Never allow a passenger to jump ship until the docking maneuver is complete and the boat is secure. The force of leaping off the boat can misdirect its motion, causing an accident, or can make the boat move away from the dock, lengthening the distance and leaving the offending passenger in the drink. At best it's embarrassing; at worst it's dangerous when thrust from the propellers is needed to control the boat.

6. Never allow a passenger to serve as a fender, pushing against the dock to arrest forward motion. First, if you need that help, you've done a horrible job of docking. Second, rendering that help is extremely dangerous. Emergency rooms across the boating world have stories of missing fingers and broken arms from such mishaps. Gelcoat scratches are much easier and cheaper to fix.

7. When approaching a marina, use the VHF radio to talk to the dockmaster before entering port. Get directions to the best available mooring and let him know of any maneuvering limitations you might have. The larger the boat, the more important this is. You don't want to enter a dead-end passage and have to back out or perform an unnecessary pivot in unfamiliar conditions.

8. It's always best to approach a mooring against the current, when possible. Always gauge the current as you come in, because its direction and momentum will determine your safest, most practical approach. A following current diminishes control; a strong beam current could even sweep a smaller vessel beneath the dock, capsizing it and putting the crew at risk.