

Gel coat renovation



by
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for
Westerly Owners Association
East Coast Group
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Important information on Westerly gel coat

Westerly always used a double coat of gel coat that was slopped into the mould, not sprayed. This means the gel coat will be about 2 to 3 mm thick, so cleaning the surface will not cause many problems. Modern yacht builders now spray gel coat into the mould, usually 3 thin coats that are about 0.75mm thick. So the techniques explained in this clinic apply only to brushed gel coat boats.

During the mid 1970's through to the mid 1980's Westerly used a Ryland gel coat that has proved to be not UV stable. Boats from this period tend to change to a cream colour rather than white.





Actions you can take to improve the look of the gel coat on your boat. This list is in order of how to proceed using minimum effort and with possibly the minimum improvement.

1. Wash and polish.
2. Clean the gel coat with oxalic acid based stain cleaning products or brick cleaner (5% hydrochloric acid) and then polish.
3. Compound the gel coat and polish.
4. Sand, compound and polish.

The clinic will discuss options 2 to 4 but concentrating on 3 and 4.

Oxalic acid can be brought in crystal form from Amazon or eBay. It is made into a solution with water, 2½ tablespoons to a litre of water, but to use on a vertical surface like topsides it can be thickened with wallpaper paste. You can buy ready made stain removal products like Y10 that contain oxalic acid.

Oxalic acid will remove most surface stains from the gel coat but will not touch UV discolouration. It can be left on gel coat for up to 8 hours (overnight) with no problems. Using cling film can aid the cleaning process by keeping it moist.

Brick cleaner is good for rust stains and some other stains, but it does not touch UV discolouration. Do not apply for more than an hour.



Tools needed for sanding or compounding topsides.

To mechanically clean topsides will require working at some height depending on the draft of your yacht and what the keel stands on. Most boats will require an elevated platform or a scaffold tower.



© MachineMart

Either of these would be a very worthwhile investment as it makes working so much easier and safer than using steps or a ladder.



© TopTower

Power tools required for sanding and compounding.

Good tools that can take a lot of work are essential and remember you will be using these tools for days at a time. Vibration from the tools must be kept to a minimum as your hands could suffer vibration finger.

A sander/polisher, a palm orbital sander, and a multitool are essential. During my all restoration work on Concerto, I found I used the multitool for the longest and chose a Fein as they have the best vibration protection and a huge range of attachments.



Concerto's tired and discoloured topsides in December 2013



Before any compounding is started, all chips and cracks should be repaired. Every imperfection must be ground out to ensure you have a clean edge before filling, if not a black edge will show along the filled edge. This shows 2 areas that need attention.



The tool I usually use is a Dremel with a burr point to clean out any crack in the gel coat. To fill the grooves I use Plastic Padding Gel Coat Filler (now branded Teroson) as it is a 2 part white filler that is an almost exact colour match to the Westerly original gel coat colour and is fully waterproof (and can be used for osmosis blister repairs). The multitool is best for sanding the filler smooth ready for compounding.



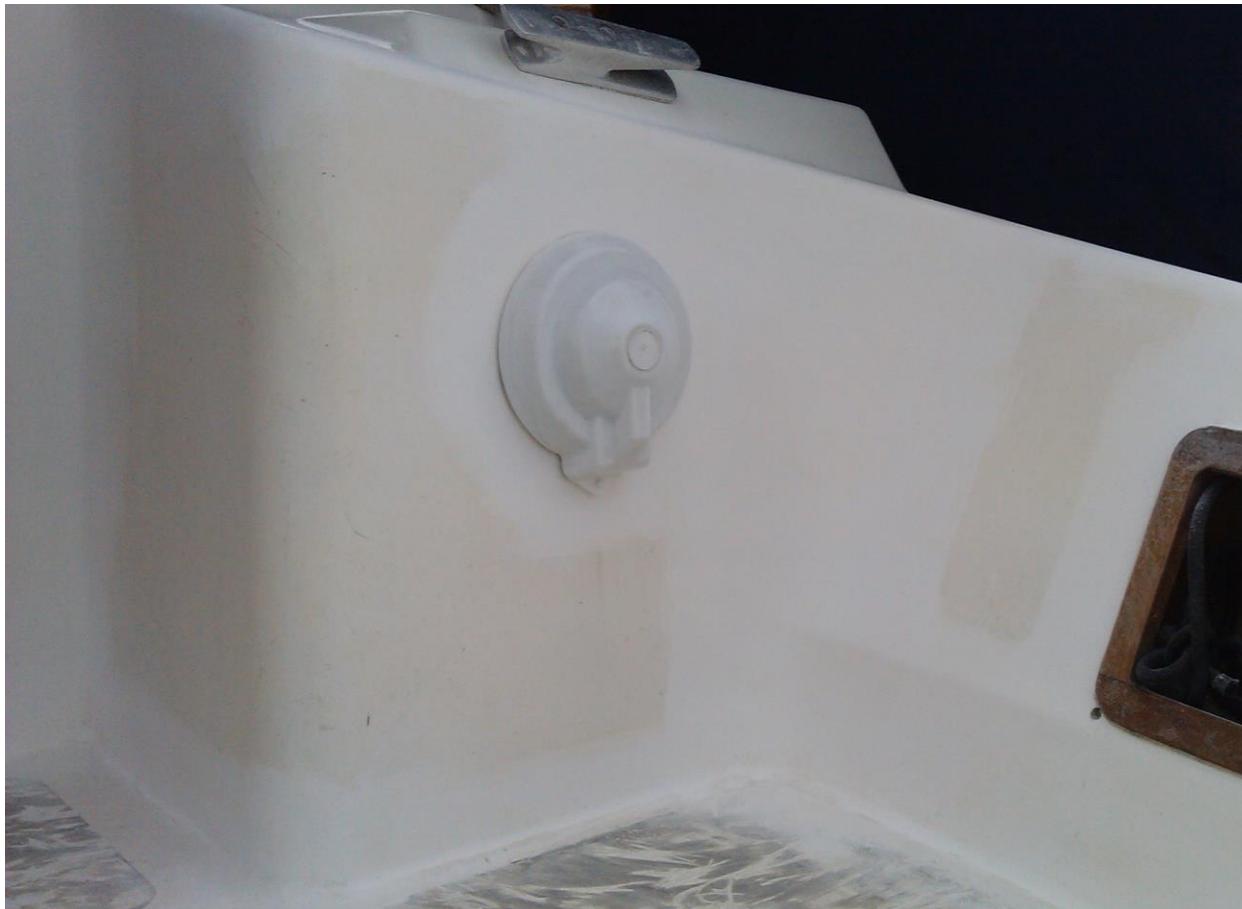
Concerto's hull had all the antifouling and paint on the transom removed and had been compounded to a high shine. I used Farecla G3 and G10 cutting compound on foam heads and lubricated using water from a plant spray. To remove the paint from the transom and compound to a high shine took 4 days and each topside took a day each, so a total of 6 days work. Once the hull had been epoxy protected, antifouled, style line and boot top painted, the hull was polished with a UV marine polish.



Concerto on launch day 29 April 2014 and the hull is looking very smart.
Notice there is no name or Westerly decals, these were fitted a year
later when the decks were repainted grey.



Deck gel coat usually has worse UV degradation and more washing than topsides. The complex shapes of the deck take a long time to compound. The photos show the colour difference after initial sanding. Start by sanding using 500 or 600 grade and then progress to 1000 grade. Once compounded, the gel coat looks like new. The deck paint is removed and ready for repainting.





There is a cheat to save time in some difficult gel coat areas like around hatches, mast step, main hatch box and grab rails. Instead of sanding and compounding the gel coat, you can use white deck paint. The forward end of the coachroof and round the hatch has white deck paint.



The added bonus of this is extra areas of non slip, especially the sloping end of the coachroof.

In the sanding process there is another trick that can be used in working through the different grades. A boat rubbed my topside and needed sanding. After initial sanding I applied a guide coat as it leaves paint in any scratches, so you know when to stop sanding.



A close up of a section of lightly sanded guide paint and shows the coarse sanding scratches.



This is the same area once these scratches were sanded out with an even finer grades.



Mirka Abranet sanding disks are best and coming grades to 1000. These patented polyamide thread net sanding disks work best with vacuum extraction for minimal dust.



Launched in 1980 and looks almost like new, not 40 years old. As an owner I am very happy sailing Concerto and get many favourable comments about her condition making all the hard work very worthwhile.



Hopefully, this gel coat clinic has inspired you to work on your boat to make it shinny and smarter.

If you have any queries after the clinic you can contact me on the WOA Forum either by posting a question/send a private message.

Alternatively send an email or phone me (see the WOA yearbook for contact details).