

Removing Scratches From Perspex, Plexiglass, Acrylic, & Polycarbonate (Lexan)

Quote:

The following is how I was taught how to work out scratches, and surface hazing from plastic windscreens. I've been in the boatbiz for over 30 years but this here trick I learned from a gent who worked on commercial aircraft as the windows in jets are plastic. It has served me well over the years.

The photos are of me performing the process to a self inflicted 180 grit profile series of scratches that I put in my windscreen with a piece of 180 grit sandpaper.

180 grit sandpaper that scratched my windscreen. I picked 180 as this would be at least the same as wear and tear (if not deeper) on an old windscreen.



Scratching the plastic:unsure:



View of the multi-scratched substrate. You can even see the scratched out strands of plastic there on the left.



What you are looking at here, is the affected spot where I wet sanded it with 400 grit wet-n-dry sandpaper to a uniform haze. This is where you have to judge what grit paper to use. In my opinion, never start at anything more aggressive than 400 grit and always finish with either 1500 or even 2000 grit.



After the 400 grit wet sanding, I then repeated the process with 1500 grit wet sanding.



Then, on to the buffing. I start out with a machine buffer electric or air on low speed with a foam polishing pad and buff the surface with 3M™ Perfect-It™ Rubbing Compound (PN 06085/06086)

Buff again with a finer compound like 3M Perfect-It III #05933. Then clean and check again for clarity.

And, I like to do a final overall polish with a car polish like NU-Finish using a lambs wool buffing bonnet on low speed.



And, there ya go! Scratches gone!



Here is what I had posted in the other thread about polishing perspex. It can be used as a general guide. I did modify it a bit.

1. Wash well with soapy water.
2. Take a bucket of water and put in a few drops of dish soap.
3. Take a piece of 400 or 600 grit wet and dry sandpaper and wet-sand the affected surface to a uniform haze of scratches.
4. Then wet-sand with 1500 grit. Now, take a machine buffer on low speed with a foam polishing pad and buff the surface with 3M™ Perfect-It™ Rubbing Compound (PN 06085/06086) until you attain a fairly good clarity.
5. Wipe clean with water, dry, and check clarity. If the clarity is not clear as plate glass, then proceed to #6.

6. Buff again with a finer compound like 3M Perfect-It III #05933. Then clean and check again for clarity.

7. Still not clear enough? Still see some scratches? Do the process again but start with 1000 grits and work back up.

NOTE You paid nothing for the description of this process and you use it at your own risk