

METAL PREP

(Techniques For Any Metal Body)

Once you have completed your machine, the last thing you want to have to worry over is the fresh Paint bubbling, cracking, lifting or peeling off. The top secret to avoiding this is in the metal conditioning and preparing process. The bare metal is the foundation of a long lasting paint job, meaning good adhesion. To obtain this it is imperative to prepare the metal correctly. Although we are demonstrating these techniques on a 1957 Chevy, you would prep any metal body exactly the same. Remember that taking a little extra time for this procedure will add longer life to your paint job. 22 PHOTOS SANDING / PHOSPHORIC METAL CONDITIONING STEP BY STEP

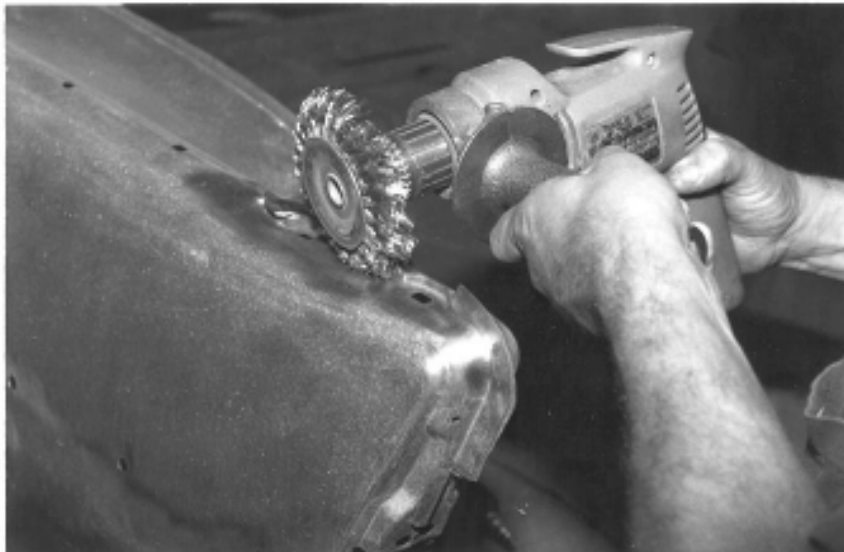


1. Here is a 57 Chevy's quarter panel section. It shows the paint already stripped off down to bare metal. You can use paint stripper or a sander to remove the paint. In this instance paint remover was used.



2. Take an electronic variable speed sander with 40-80 grit 8-inch stick it sand paper. Set the sander at 1500 RPMs which is the perfect RPM to clean steel with no warping of the panel from heat. Only remove a slight film of the steel, enough to clean it off some and give a good starting point. Do not apply pressure to the sander but allow the sander to cover a six-inch area every two seconds.

3. Also sand over the top edges where it rides over into the trunk. Hold the sander lightly and smooth over the contour. This process cleans up the surface well. Depending on your body style go easy over the contours! STAY OFF ANY EDGES!!!!!!

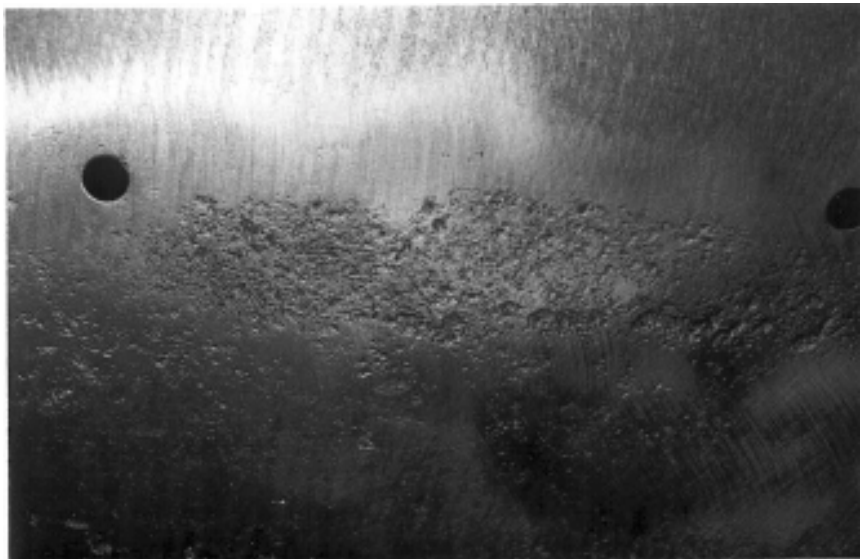


4. Here is a variable speed reversible electric drill, which is capable of 2100 RPMs. For our use, set it at the 1800 speed and use it with a Weiler knotted brush. This will clean out the tiny intricate areas. Once again only let it ride over the metal by itself because if you push hard it will roll the metal. As a rule of thumb run the drill forward for five minutes then reverse for a five-minute period. This gives you the optimum brush cutting life and more effective results.

5. On a 57 Chevy Belair the aluminum side panels have little screws holding them in place along with glue applied at the factory. Unfortunately this glue would hold water trapped under the panel causing strips of rust everywhere the glue was applied. You need to go over these pitted areas with the wire wheel. Your vehicle may have similar pitting from mouldings that your car has.



6. Here you can see the pits from the glued areas after they are cleaned up with the wire brush.

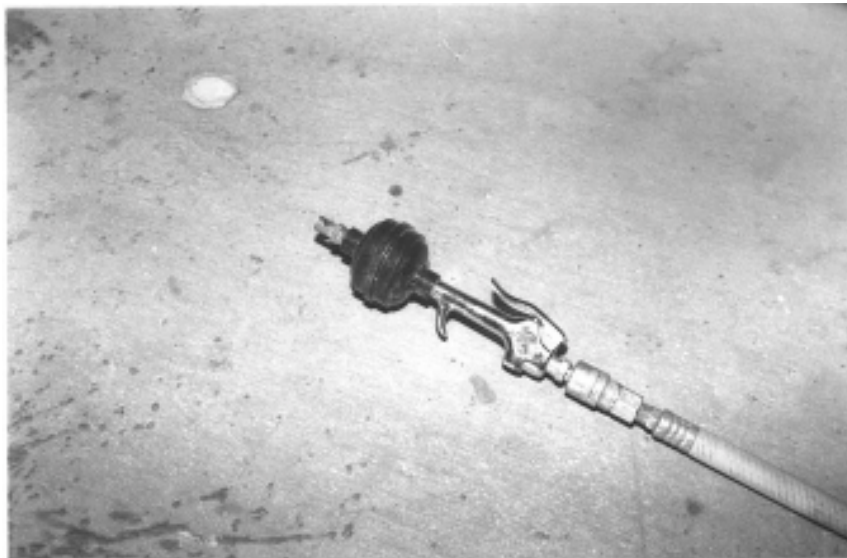
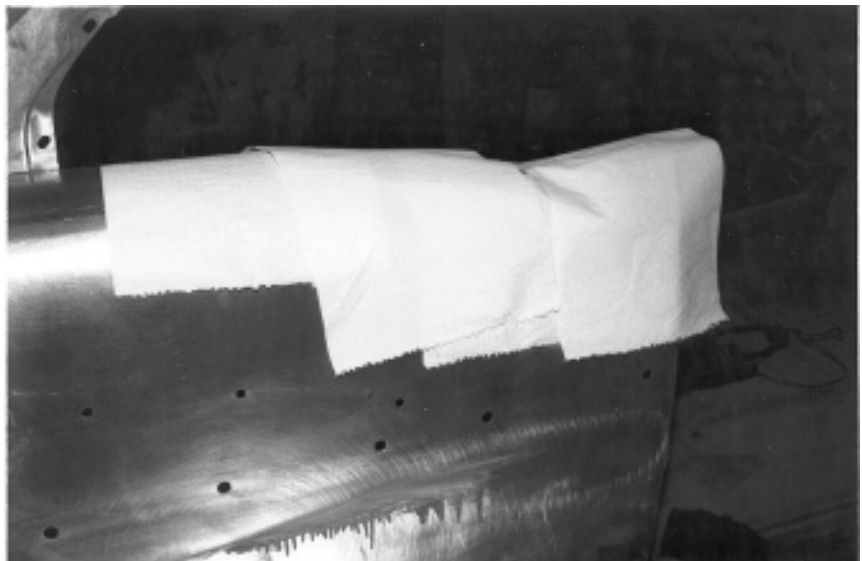


7. Now take a sander and run over the entire panel with 80-grit paper. This will etch the entire panel smooth, then blow it all down and get it dust free.

8. The supplies you will need are: phosphoric metal condition acid by PPG DX-679 mixed two parts water to one part acid, a clean bucket of water and clean towels ready for use.



9. Here we have dry towels over the quarter panel ready to go because you want to be sure during the metal conditioning you dry it up as fast as possible. You will need many towels to remove the metal deposits. Plan on using them liberally and always use clean ones. Also make sure the surface is clean where you lay them down.

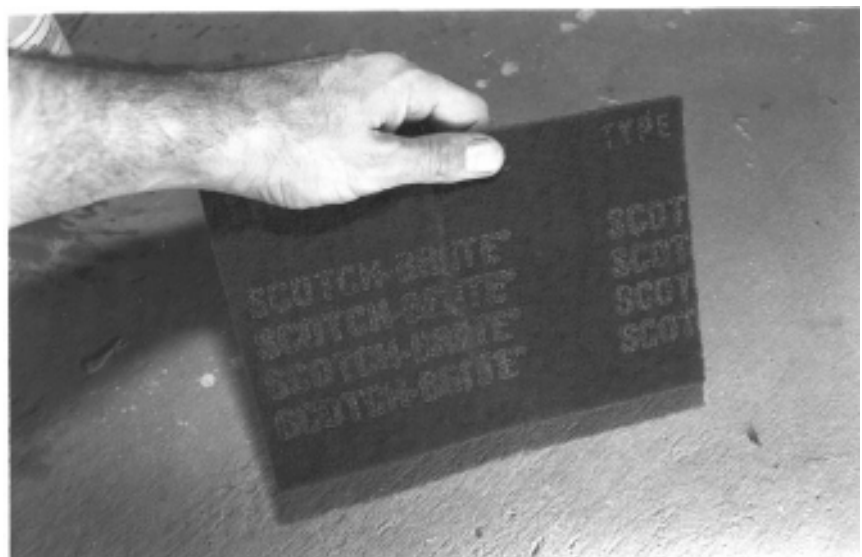


10. Here is an air blower with a special filter which will keep the oil and contaminants from the air compressor away from the clean metals.

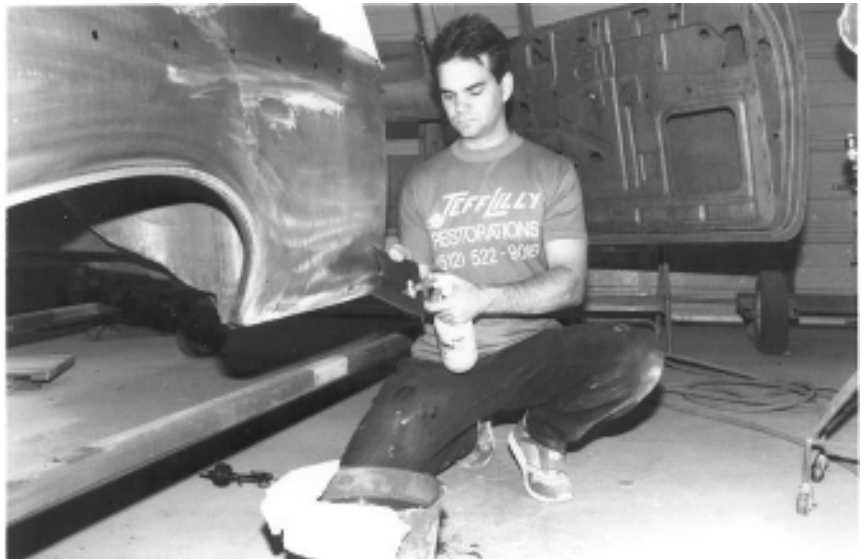
Note: The following steps will tell exactly how to acid prep. Complete steps 12-21 completely on a one-foot square area then return to step 12 to continue on to the next square foot sections. Also use new towels on each section.

11. Here is a Scotch Brite pad #7447 by 3-M. Always use new clean pads to avoid contamination.

Note: If you follow these directions correctly you do not have to wear a mask because none of the acid is being sprayed into the air. It remains a liquid so it shouldn't cause any breathing problem, however for your own safety you may want to wear a mask, gloves, and goggles.



12. Jeff applies the acid from #9 directly onto the Scotch Brite pad. Do not spray the acid onto the panel itself because it may mist onto other previously cleaned areas and contaminate them. Spray it into the scuff pad while moving the nozzle against the pad slowly.

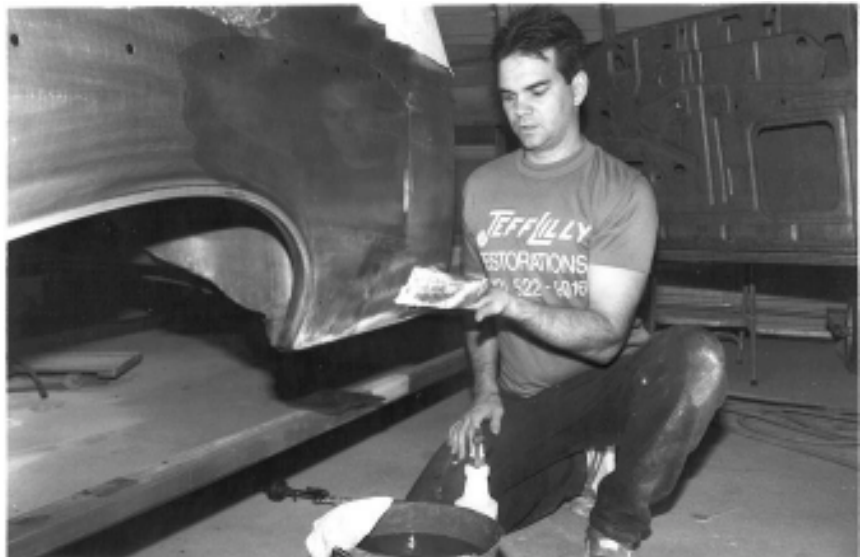


13. While using the scuff pad with the acid, scuff one square foot areas then complete steps 15 -21 before moving onto another area. In 70-degree temperature and cooler you may clean it with circular movements for approximately one and a half to two minutes. If the temperature is hotter the acid will dry much quicker and you may have to reapply it during the process. (It is best in hotter regions to do this process in the cooler hours of the morning)

14. Soak a clean rag and then squeeze it out until it is moist enough to saturate the panel and lift the acid off the panel without dripping onto the other surfaces of the panel.



15. Wipe down the whole square foot section. You will notice that there are black steel deposits. Do it again with a clean towel.



16. As you wipe with clean damp towels continue to check for the black remnants.

17. When there are no more remnants left grab a dry towel and wipe the area clean.

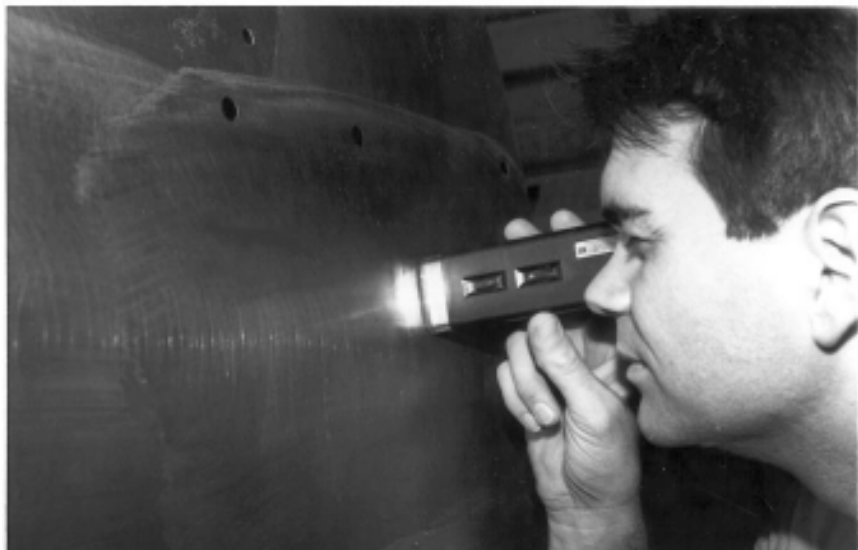


18. Take another dry towel and wipe at the same time using your air blower while slightly blowing the panel dry with 15 lbs of air pressure. This will leave a blue steel effect with no acid remnants on the panel.



19. You can see that the metal is clean and dry. Beyond perfection, longevity rules but takes preparation to take place. Famous quote by the car freak!

20. If you want to go total perfection, it is best to use a 30x Microscope from Micronata and put it against the panel to check the whole area before you move onto the next one-foot section. Any bad spots would appear as brown copper spots mixed in with gleaming crisscross highways. Tape these spots off with masking tape and redo the acid prepping steps to remove them.



21. When you have a perfectly clean panel you can go over the panel with lacquer thinner or DX440 PPG wax and grease remover. For bare steel this will remove any metal residue that is left.



22. Now scuff the metal with a new scuff pad by itself and blow it down, then prime with Dupont variprime, or if the piece is dented do your bodywork first and then prime. Another alternative is to use Ditzlers DP-90 epoxy two part primer if it will be a while before the panel is going to be body worked, painted or sitting more than a month !

About the Sites Convenience

1. Did you have any difficulty downloading **or** viewing our booklets?
Yes No if **So**, Why:
2. Was Restoreityourself.com easy to navigate?
Yes No if Not, Why:
3. Was our sample enough information for you to purchase it?
Yes No if Not, Why:

About This booklet

4. Is our product priced fairly?
Yes No if Not, Why:
5. Do you feel our booklet will help you with your project?
Yes No if Not, Why:

About Tools

6. Would you buy your tools on-line and have them delivered to your Home or Business?
Yes No If Not, why?

About You & your Vehicle

7. Will you be doing the work yourself or will you have a shop do the work for you?
Myself Shop
8. What is your age group? 15-24 25-34 35-44 45-54 55-64 65+
9. What Vehicle/s do you own?
10. What Vehicle/s are you working on or having worked on?

In General

11. How do you feel about On-line shopping?
Comfortable Uncomfortable but still do it Not comfortable at all
12. Are you interested in becoming a member at restoreityourself.com for substantial savings?
Yes No
13. Have you seen other sites providing Auto-Restoration booklets?
Yes No if yes, Where:
14. Will you be a frequent visitor at restoreityourself.com?
Yes No Don't know

Please enter your email address if you would like us to contact you about the results of your survey:

For any additional comments please type them in below: