



# ROOF REPAIR on a 1940 Packard 2-Door Sedan *by Ron Carpenter*

I am progressing in the restoration of the body of the 1940 Packard 2-door sedan. I am now ready to tackle the roof on the car. It seems like when cars have been in storage for a long time, that people look at them like they are an extra shelf. Our 40 Packard is no exception to this rule as the top is very bad even worse than the our 1951 Ford Country Squire. I will need to do extensive work on the top of the car. To start with, the top was very rusty under what was left of the paint. That will be the first thing I will need to address.

I will be addressing the problem in two phases. The first phase will be stripping the top of the car and getting rid of the rusty metal and then tackling the problem of the dents. The entire top is nothing but dents and will be a very tedious job.

In the past I may have sent out parts to be media blasted to clean the paint off or sand blasted if there was rust in the body. But the problem with media blasting is that it will not take any rust off and the problem with sand blasting is that it will heat up the metal and distort the metal and the top was in bad enough shape already. When I did the 1951 Ford wagon I had the body dipped but I have to say that I had a VERY bad experience with do that. I started out with an \$1100.00 estimate and by the time that I was finished it turned in to a \$2800.00 expense. They had to clean grease off the bottom of the floor pan and I wanted it primed as soon as the body was cleaned and that was why they said it was so expensive. That was bad enough but they did not have enough solution in the tank and there was a very large stain like a large circle in the inside and on the top that did not get stripped because there was not enough solution in the tank. They just covered everything up with paint. Which I figured that out when I started restoring the top of the car. Plus, I did not think that their stripping solution was not strong enough to do the job....very weak. The body parts I had to replace still had rust in them. For these reasons and the fact that they are no longer in business I decided to do the stripping all the paint and rust off by hand.

I cleaned and stripped the whole top of the car down to the bare metal with Scotch-Bright Clean and Strip Discs (051131-07471). These are very aggressive and can clean the metal down to the bare metal but YOU MUST WEAR EYE PROTECTION AND A FACE MASK. They will throw off particles and bits of the disc and they can hurt and you don't want to visit the eye doctor. You will get very dirty by the time that you take your first break so "dress accordingly". It is a filthy job and will take some time, I figured I spend a few weeks cleaning the top of the car. One more thing to remember is that using these stripping discs will heat up the metal so work different areas to let the metal cool down.

When I had the top or the 1940 Packard finally completely down to bare metal it was clean but there still was pits in the metal that needed to be rust converted. To do this I used two Permatex products. Permatex Rust treatment spray can 81849 and liquid Permatex Rust Treatment 16 oz can 81773. I sprayed the top with the spray product and I used an acid brush to put the liquid rust treatment in the

gutter to convert any rust that is there. When I did my 1949 club sedan years ago I sprayed on the top (I stripped the top of the '49 the same way) the rust converter and then put my primer on top of that. In all the years that the car has been on the road I have never had a problem with the paint on the top of the car. The fact is that by the time I get done picking and filing the top most of it will be bright metal any way but this is just extra insurance.

Now I am ready to start making the top of the car look pretty again.

1. I am showing what the top looks like when I started working on the top. How rusty it was and how I am working sections of it.



2. This picture is showing how I am cleaning



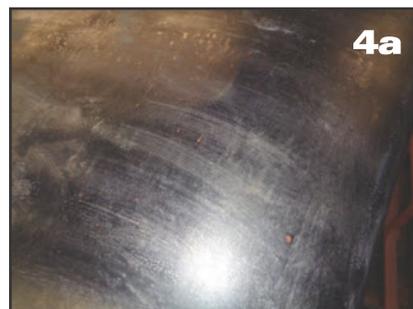
the top a section at a time. VERY tedious using the stripping wheel and you get very dirty doing this. But I am getting it down to bare metal.



3. The top after I have finished stripping the rust off it and I have DA'ed the whole top.



4. close up of the top showing how it cleaned up and I have sprayed the chemical Permatex Rust treatment on it.



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5. Another shot of the top with the Permatex Rust treatment spray on it.

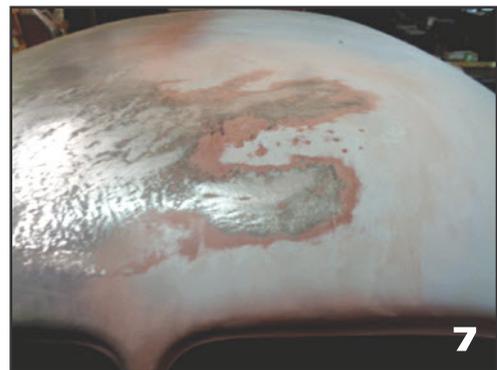


6. I have sprayed the whole roof with Red primer so that I can start figuring out how bad the dents in the top are.



7. I have sprayed some gray primer on the top and

in this picture you can see where I have actually removed metal in the top. All of the lines in the metal top are actually from the stripping wheel. The black Permatex Rust treatment is visible and the red pain and the gray paint.



8. I have DA'ed an area of the top and you can see the black rust treatment and the lines in the metal from the stripper pads



A word about the second phase of the process that I am about to start. Your main tools to use will be your picking hammer, a flat file and body dollies and also a "slapper file". Where it is possible I reach inside the car and use the dolly to do basic hammer and dolly work. Where ever there is a low spot from the dent there will be a high spot. You push the metal down in one area and it will push the metal up in another area. So both of these situations have to be dealt with. SO, I will be working

both the high spot and the low spot at the same time. Sometimes you work an area and just get tired of working the area and go on to the next area right next to what you have been working on. There is also another reason to do this, as you start to get the next area cleaned up it will make the area that you were working on before, easier to go back to finish. You will be going back and forth and it will run into each other. That may sound strange but you are using the flat file on the roof to find the high and low spots and with the next section "closer" to what it is suppose to be then the file "finds" the low and high spots easier. You have to work a roof to see what I mean. When you file you can't just start filing all the high spots down as you will file thru the metal and then you have other problems.

9. I have drawn a circle around an area that is low and high. If you have a dent down then the "ridges" around the dent are actually high so there are lows and high spots to deal with. So I will be "picking" the low spots at the same time I will be working the high spots down.'





10. I discovered this crack in the roof top in an area that I had just begun to work. I use a flat file to start with when I start a new section to see what is high and low and in doing so I found this crack. I have used the flat file and you can see my file marks and can see the high and lows in the crack area and at the top of the crack

11. I am showing more of where the crack is located and how I have "stopped" drilled the crack and then in the last picture have welded the crack



12. I have now ground the metal flat that I welded up and then DA'ed it so I can check the high and low spots again. It came out pretty good so on to next spot.



I have only showed a couple examples of using the flat file and working the roof to get it fixed. Each section that I worked on required a lot of work and then once I got the roof reasonably done then I used my two color primer to then block sand the

whole top of the car. Again this is a time consuming process and when you get tired of doing this you do it again. The following pictures show the two color red and gray primer applied to the top and how I blocked sanded it and I would "pick" the low spots and work the high spots to get it "BETTER".

13. The picture shows the top of the car with red primer showing thru the gray primer.



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14. This picture shows a closer picture of over the passenger door where there is a much lower area directly over the area.



15. This picture is one that shows how I have sanded lightly to find high and lows. This is after I have been picking and filing the top and now put paint on it to find the problems. I have several different lengths of DURA BLOCK brand blocks that are flexible and contour nicely to the top of the car. I used the 20 inch block on this area. The difference in color of the gray primer shows the lows and high spots.



16. I have identified a high spot and using the pick hammer I am working the area to LIGHTLY tap the area



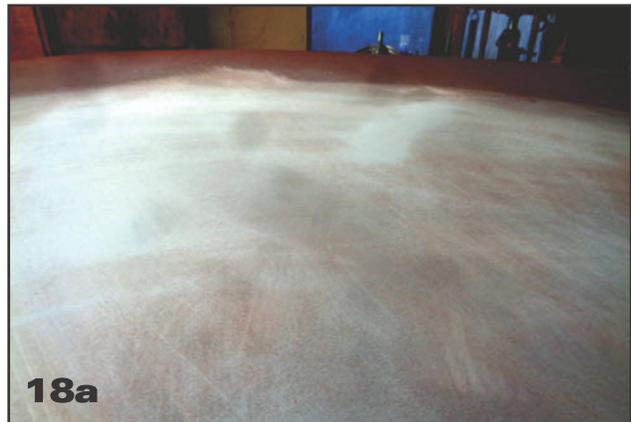
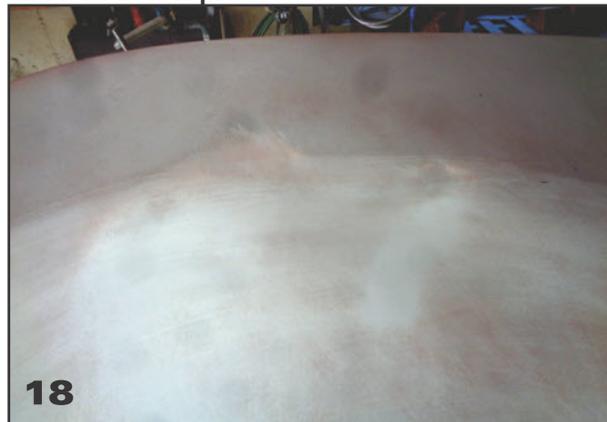
down and I will also be lightly hitting the area up that is low from underneath. ALWAYS use a gentle taps with the hammer.

17. I am making use of the "slapper file" it is like a bent file but all the points of the file are like a hundred hits of the hammer. I can either "slap" the



metal with it or sometimes I use my hammer to spread the hits at a larger area. There are a lot of high and lows that are much more visible now that I have the paint on it. Probably 95 percent of the paint that goes on the top will be sanded off.

18. These two pictures tell the story of a large area of high and low spots that I have to work on. Like I said it is a slow process





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19. I have continued the process over and over again and I have another coat of gray on the top

20 I have block sanded the gray once more and it is looking pretty good now and I will be thinking that I am getting close.



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21. I have re-sprayed the top in red primer and I am going to take a breather from the top now as I am tired of doing this I have spent at least 6 weeks getting to this point.



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I am going to start working on the front lower part of the cowl by the doors and this will be another problem

area but all of this shows that you can't make any money on buying and reselling a car that needs a lot of work so only go to the trouble of restoring a car that you really want. This 1940 110 two door sedan will never be worth the money that it will take to restore but it is a very unusual car in that there are not that many out there and it probably comes under the class of a RARE car. My son has told me that he would like the car when the time comes so that is what makes it worth while for me to do this work on the car.

I just need a break from the roof for a while and I will be starting all over when I get everything done and RE-BLOCK everything and re-prime it when I color sand the car with 400 sand paper and then I am going to use Acrylic Lacquer on the car. I know, with all the *new paints* that are so good, why..... Because I want to.