

Floorboard Repairs 102 - Fiberglass Method

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Like all of us who have older trucks, the battle against rust is an ongoing process (AMC products more so than others). As an alternative to the sometimes costly method of welding in new floorboards (ever try to find patch panels for an FSJ ?), rust treatment and then fiber glassing over floorboards and other areas may be a viable low cost alternative.

First understand that rust is just like cancer, you have to cut it out completely to get rid of it. Badly rusted area that require structural integrity or other areas for aesthetic purposes may need to be cut out, patched and welded regardless. In my case I had this done on the worst spot on my tailgate (bottom edge) and a new piece welded in.

Also regardless of the method used, the rust may well return after 5 or 6 years anyway, especially if you live in a wet climate (I do), but if you do the work yourself it is well worth the savings overall and the results can be gratifying. (Body shops are very expensive!)

In my FSJ the floorboards, passenger foot wells and the underside of my roof were badly rusted do to the roof racks having been ripped out during Hurricane Hugo and never replaced. The vehicle sat for a number of years and moisture let in by the holes in the roof soaked the carpet and head liner and the rust process began in earnest. I had extensive surface rust on underside of roof area and both large and small holes in the foot wells (these were the worst) and passenger areas. Can you say "Swiss Cheese" boys and girls?

Patch panels were nonexistent, so cutting and welding was going to be a custom process. \$300 minimum was the body shop quote. Since the areas that were affected the worst were not structural in nature or not load bearing, I decided to fiberglass the floorboards.

Materials List:

- Fiberglass Resin with hardener
- Fiberglass Matting (easier to cut and work with than cloth)
- Disposable Latex Gloves (auto parts store)
- Mixing container (I used disposable paint pan liners)
- Dust Mask
- Scissors
- Rust Converter
- Sander/Grinder
- Course Sandpaper
- Wire Brush

Disposable paint brush and container(wax cup works here)

Aluminum Tape

(1) First all the affected areas were wire brushed, scraped, sanded and then ground to get as much of rust and loose scale out as possible.

(2) Clean the areas thoroughly of loose dust and particles and use acetone or paint preparation of some kind to clean area of grease, dirt etc.

(3) Apply "rust converter" (it goes by different brand names but can be found at Walmart, Auto Stores etc.) to the affected areas, using the disposable brush and container. Follow the directions carefully and I would suggest that you use the liquid and brush it on, as opposed to the spray can method, as you get better coverage and deeper saturation by painting it on. This agent "converts" the rust to Hematite after 24 hours (it will turn black). Understand that you must still have some active rust in the area for it to be effective so do not grind rust completely out.

(4) The Hematite must then be lightly sanded and primed over before fiberglass or Bondo is applied.

(5) Cover over largest rusted out areas with aluminum tape or some other suitable metal covering, mainly to keep massive amounts of fiberglass dripping on exhaust pipes, concrete etc. (I did not do this the first time and had to chip fiberglass resin off of concrete with a chisel!).

(6) Mask off any areas you do not want fiber glassed and do not cover over bolt holes for seats, seat belts etc.

(7) Wearing the gloves, mix resin and hardener, soak matting in resin and apply a minimum of two layers of fiberglass matting (three in the worst areas) and resin to floorboards and up side walls (about 2" up). I suggest that you cut the matting in advance and keep it in about 1 square foot sections as it is easier to work with that way. Remove rust bubbles and make sure that all matting is properly saturated (again a disposable paint brush works well here).

(8) After properly cured, sand high spots down, prime and paint and cover with carpet (or in my case cover with Rhino Liner).

My interior roof areas were treated the same way except I fixed the holes in the roof with Bondo and then primed and painted. Obviously I did not fiberglass over this area.

Total cost approximately \$50 or less.

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