LATE 944 DASH RECOVER

As of January 3, 2020

Like many, my 944's dash needed to be recovered. Spent hours on the Internet doing research, and realized there weren't too many sets of detailed instructions. Therefore, I decided to do a full capture of the process I followed.

I used Classic 9's recovering kit, and even if you opt out of sourcing the foam/material from them I highly recommend getting the vent trim. It will be near impossible to get a professional appearance without it.

The dash is out of my '86 944 NA, white with burgundy interior. Quick note for those with burgundy interiors: if you can get every item in the interior to match, you are a better person than I am. Even the factory parts aren't exact matches. Just accept that nothing will be identical. Even the bottom of the dash is a different shade than the top of the dash. Picture to the right shows the Classic 9 cover next to the top and bottom portions of the dash. Texture is different, but colors are close enough; this isn't a concours restoration.



The dash wasn't too bad to start with; several deep cracks and a couple of minor cracks.



First, remove the defroster vent underneath the dash. You need to do this so you can mount the dash vent trim. Removal is straightforward. First, bend the tabs around the outside holding it into place. Second, you'll need to gently pry all the way around in order to break the plastic away from the sticky gunk Porsche used to seal it; I used an upholstery tool.



Once the plastic is off, you can roll the black stuff up into a ball using your fingers. Use mineral spirits to get any remaining or stubborn sealant. For those that have removed their taillights, I'm pretty sure this is the same gunk that seals them to the body.



To work on, I mounted the dash to two sawhorses using two clamps:



Now to begin! Stripping the old cover off the dash is straightforward. I used a razor blade and occasionally a heat gun, and it took about 20 minutes.



Underneath the cover, the left side (over the instrument cluster) had two types of damage. First (and obviously) the cracks. Second, the underlying foam had stuck to the dash cover, leaving a pitted finish.



Note that there is a pressed-on color-matched piece of aluminum trim along the front of the dash. This stays on – Classic 9 recommended simply laying the fabric (and foam) over it instead of removing or removing/reinstalling.

Next step was to grind out the cracks. I used a rotary tool (e.g. Dremel). I started with a grinding cone to make a "V", but ended up using a ball bit in most places. The cracks were deeper than expected, and the edges around the cracks were higher than the surrounding surface. Going a bit wider with the grind seemed the surest way to make leveling the dash easier when filling the cracks back in.



The one crack that concerned me the most went all the way through the front of the overhang on the top of the instrument cluster. The front line of the dash on the 944 is awesome, and I wanted to preserve it as much as possible. I actually didn't remove all of the crack; I was concerned about recreating it and most of it would be covered by the instrument cluster trim. Note that the crack next to it was also very deep. Underneath, I found a couple of voids (bubbles) in the foam that may have contributed to the cracking.



Next, I sanded the dash with 100 grit and a sanding block to remove the damaged foam. Note that the dash has a membrane-like cover from the initial casting. In some places, it had started to separate from the underlying closed cell foam. A bit of sanding will remove it and help ensure the filler adheres to the foam. The foam was more resilient to hand sanding than I expected; a bit of pressure helps.



With all the damage removed, it was time to fill the cracks and smooth the surface. I considered a ton of options (plastic, bondo, expanding foam, etc.) but settled on Evercoat 411 (about \$45 from Amazon). Why? An old Classic 9 post on the dash kit said he used an Evercoat product, and the other options seemed less durable or too hard to execute.

Although it is nowhere near as soft or plyable as the original foam, 411 is far more flexible than Bondo and spreads exceptionally easily. Note that you have to use this on a horizontal surface; it is too liquid to use on a horizontal surface. A few pointers: Mix thoroughly, wear gloves, always use a clean body filler spreader, and never work once it starts to harden.

Since I'm not a body filler (or dash repair) expert, between shrinkage and coverage it took me six coats to get the dash where I wanted it. I sanded between each coat, and ended up using an orbital palm sander with 120 grit for most of the smoothing. Don't sand the foam with the sander; it will cut through it quickly.



After every coat, I ran my hand over the dash to feel for dips or inconsistencies in the top. I made marks with a sharpie to show where I needed more filler; they'll get covered over anyway but helped me focus my limited time while the filler was workable.

Because the Evercoat 411 doesn't do vertical well (too liquid), I put a piece of painter's tape over the crack at the front of the dash. It worked beautifully, and removed cleanly once the filler cured.



Adding more and more coats (mostly due to lack of skill):



And after the sixth coat and final sanding:



One thing that I couldn't get a good picture of is how flexible the dash remains where the filler is thin. Wherever you can see the dash below, you can still push down a bit and the Evercoat 411 doesn't crack.

The next big step was prepping the trim piece and removing foam on the dash so it will fit. Ideally, paint your trim piece before beginning. I used two coats of primer and four coats of paint (two semi-gloss black, two flat black). I originally tried going with semi-gloss black but it was still too glossy, hence the two additional coats of flat black.



Drill the holes for the trim. I simply eyeballed it into position, then drilled 3/8" holes where each of the studs will go; the nuts will cover the hole and it isn't structural.



The next step is where precision is critical. You have to cut away all the foam (down to metal) where the trim will go. According to Classic 9, you trim 1/8th of an inch all the way around the trim. I had some success by pushing the trim into place over the foam, then putting a fine Sharpie into the hole in a washer and tracing around the trim.



My initial cut was made using a utility knife with a sharp blade. It worked in both the foam and the thinner filler material. Once it was cut, running a flat blade screwdriver along the edge of the cut (and against the underlying metal) cleared out the foam. I used a rotary tool with a sanding drum to clean up several places where the foam/filler didn't cooperate, and followed it with had sanding with 100 grit to get the edges as consistent and sharp as possible.

This was an iterative process; I put in and took out the trim multiple times and marked up the areas where improvement was needed. Once I was happy, I sanded all around the cut to provided a rounded edge. While you are removing the foam, reach underneath and pull the flashing that surrounds each of the vent holes; it's of no use and may show through the completed project. Checking for an even 1/8" gap around the trim:



Time to attach the underlayment. This is just a 1/8" piece of foam that levels out any imperfections and mechanically separates the cover from the dash. For me, this was the toughest part of the process. Unlike the fabric, the foam doesn't stretch and you can't use the heat gun on it (it melts).

I started at the left side of the dash, which is the most complex portion. I glued down one portion at a time, but be careful because once the both sides touch, they will stick and the foam will tear if you pull hard. If you must, start separating them and the hit the seam quickly and lightly with an heat gun while slowly pulling up. Also, make sure the glue is dried to tacky before attaching the foam. The contact cement doesn't evaporate well below between the two non-porous surfaces, so you may get bubbles. I stabbed my bubbles with a razor blade and pushed out the air.

Foam applied:



Foam trimmed:



Next, I sanded the edges of the foam to make a clean edge wherever it ended. 100 grit worked fine, but expect the foam to be a bit "hairy" once you're done. It doesn't sand cleanly. On top, I sanded the areas around the left vent where it was a bit wonky and on the top of the cluster where I had fixed several bubbles. Foam sanded:



One thing I would do differently was addressing the vent trim hole. I tried to press the foam into the ditch, and it had limited stretch and started to tear. I ended up having to run a knife down the middle of the vent to get it to press up against the sides. If I had to do it again, I would simply lay it over the top of the ditch, run a razor down the middle, then push it up against the sides. Putting the foam in the middle isn't necessary, and this would have greatly simplified the installation.



With the foam attached, it's time for the main event: attaching the cover itself. This proved to be far simpler than applying the foam because it was more pliable and flexible. To attach the cover, I did so a small section at a time. I used a technique I saw on Youtube that served me well (<u>upholstering video link</u>).



To address the vent trim, I only glued the fabric up to the channel. Once I did the area over the instrument cluster, it went pretty quick. To address the channel, I glued it up, pushed it against the near edge, the bottom, then the front edge of the channel. The excess was wrapped and glued over the aluminum trim piece.



I left wrapping the cover into the instrument cluster for last. This went much better than expected. Trimming the fabric, I left a little more than an inch of fabric beyond the edge of the cluster then made cuts perpendicular to the line of the cluster. Hitting it quickly with the heat gun after applying glue, the fabric folded easily into the inset and left a clean edge.



Now that the cover is installed, you have to cut the holes for the dash vent trim. Use an Exacto or scalpel if you can, and trim conservatively – if you overcut you can't repair. I followed the contours of the metal holes as best I could.



Test fitting the trim piece, I noticed that depending on the angle, I could see the white edge of the foam inside the dash vent.



Although the original dash had the same "feature" (i.e. exposed foam below the cover), I decided to try to cover it. I thought about paint, bed liner, PlastiDip, and couple of other options, but settled on cheap sheets of adhesive felt. I cut two strips, put them on either side, then shaped them to the vent hole.



Putting the trim piece in and attaching the mounting nuts:



One note: I didn't torque the nuts too hard. This may come back to bite me if the foam settles, but I'm not too worried, and will dab the nuts with silicone when I reattach the plastic vent channel.

Final product:



Bottom line, this went much better than I expected it to, and looks much better. The only thing that concerns me is that the vent trim may settle, but the silicone should take care of that.