

the pan sandblasted, which cost us \$35 at Western Sandblasting, Santa Ana, Calif., and was worth every penny. The procedure gets things right down to bare metal and is easier to work with. Once blasted, our pan was set on two metal sawhorses and made ready for cutting. By examining the factory clutch tube mounting points, we determined where we were going to cut two windows allowing us access to the brackets. VW spot welded the tube at three points" up front near the pedal assembly, in the center just behind the handbrake lever, and at the rear under the rear inspection plate. Our tube was broken in the front and the center (the most common breaks) and the rear was intact (naturally the rear never breaks because it's the easiest to get at). To fix these brackets we cut two windows into the tunnel using a drill and airchisel. The windows should only be large enough to allow a MIG welder to get inside, which is about 44-in. or slightly wider depending on the size of your hand. Our good friend Tim Orchard at OMF Performance in Riverside wire-welded our brackets back together and then proceeded to reposition the window sections and welded them back into place. Tim suggested not to trim the pieces or grind the openings to ensure the tightest possible fit. This area will be later covered by carpeting.

With the clutch problems now behind us, we continued our work by beefing up the area around the jack points, along with rewelding the front transmission mount (VW only spot welds them) and, the sheet metal section found just in front of this mount. Upon closer examination we noticed a few small rust holes that blew-out during the sandblasting which we carefully brazed-welded to close up.

The next few nights we dressed up the new welds and smoothed out the zillions of factory spot-welds. To remove the many dents from the floorboards, we used a body hammer and dolly to bring things back into shape along with dressing the outside perimeter straight. To ensure our pan was perfectly clean for the upcoming powder coating, we had to spend considerable time removing the excess black caulk VW uses to protect its important welds. To remove this tar-like caulking, we used a torch and putty knife followed by a wire wheel attached to the end of a 3/8-in. drill motor.

With the completion of our work, we delivered our pan to High-Coatings in Santa Ana, Calif., for powder coating. We chose gloss black for the pan, front arms and small parts, while the trailing arms got a contrasting dark gray. Powder coating is an incredible way of finishing steel or aluminum. It goes on in a dry powder state and when later subjected to a 400-degree oven, it melts and flows smooth. The result is a bullet-proof finish that will stand up to just about anything. For coating our pan, High-Tech charged \$150, while the front beam and trailing arms were additional. This should be the last time this pan and components will be painted - ever'.

Our reassembly began next by replacing every piece of rubber VW installs on the pan. West Coast Metric of Torrance, Calif., supplied us with each of these pieces to ensure

that all the cables, tubes and openings are properly sealed from the elements. One of the largest pieces we replaced was the important pan-to-body gasket which W.C.M. had in stock (along with possibly one of the smallest -a new shift rod bushing and clip).

By referring back to our notes we discovered that before we replaced the insulation panels we needed to refit the metal brake lines. Since we carefully removed them without adding any new bends or kinks, we were able to clean them up and refit them. Once the metal lines were in place, we fitted new flexible brake lines from Small Car Specialties in Anaheim, along with new wheel and master cylinders.

If there is one area that really takes a beating over the years, it's the tar board panels found underneath the floor mats. The four large floor panels were located at Chuck's Convertible Parts, Corona Del Mar, Calif., and we fitted them using ordinary roofing lap cement (or carpet contact glue). The rest of the pieces are just not available from anyone that we could find, so we had to make up our own. For material we chose roofing paper, which is really too thin, but it was the closest to the original VW material we could find. To beef up the thickness we cemented several layers together and by making cardboard templates *before* we removed the factory boards, we simply transferred the shapes and cemented them to the pan.

By now our pan was really beginning to take shape, especially when we reinstalled the rear suspension. New rubber suspension stops, spring plate donuts, transmission mounts, control cables and axle seals were all fitted, thanks to Small Car Specialties and West Coast Metric.

Up front we bolted up our shiny and straight front end, using new SCS ball-joints and tierod ends. West Coast Metric had new sway bar mounting kits in stock and our Ghia front disc brake spindles slipped on with new pads and seals from SCS. To improve the suspension control, we selected a set of Bilstein shocks all the way around. If we were going to lower the front end (which we're not), we would have to look into shorter-length front shocks to avoid bottoming-out. Our standardlength Bilsteins are the nitrogen gas variety and are known for their excellent handling and quality.

Well, believe it or not, that's about it for now. Our complete restoration project on the floorpan is just about complete. From here it's a matter of bleeding the brakes, installing the transmission and getting ready to drop a body back on the pan. Since a vast majority of the basic rebuilding chores revolves around the floorpan and not the body, it really makes things easy when all you have to work with is a basic chassis and you don't have to get in and out of the car 10, 000 times. Besides, isn't it nice to know that all of those deep dark secrets your pan once held are not a thing of the past?

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