



This is the point where we left off in the last issue with the roof panel and pillars wearing a thin coat of filler. The major shaping has been accomplished over the large surfaces and along the rolled drip rails. Notice how thin the filler is and how some bare steel surfaces are showing through the filler.



THIS OLD TRUCK

Pro Paint Tips: Prepping and Reading Body Surfaces

By Rich Boyd

We continue our coverage of the restoration of “This Old Truck” as it was treated to professional paint preparation at Brea Hills Auto Collision in Brea, California. Our last episode ended with the steel cab’s roof being surfaced and the rolled rain gutters shaped with a thin coat of plastic filler. This month we watched as John attacked the cab’s new rear panel, plus he also prepped the doors and cowl with a thin coat of plastic filler and much more sanding than we anticipated.

As John shaped the cab’s compound curved surfaces with long sanding boards the panels began to read as a continuous surface (with no low or high spots). Reading a surface that does

not have a gloss is a bit more difficult than one that does. It takes practice, and often feeling the surface with the flat palm and fingers can provide irregular surface information easier than looking at a primed or unpainted panel. Of course sanding off a guide coat will reveal many of the surface irregularities.

One most important fact is: the bare steel must be free from oil, dirt or rust for the plastic filler to attach itself firmly and provide a stable surface for a quality primer, and ultimately the color topcoat. This labor intensive job has very few shortcuts. Several power rotary sanders are quicker for working the fresh plastic filler than by hand.

Speaking of working the plastic

filler, much of the preliminary surfacing is done almost immediately after the catalyst has “kicked” and the filler takes on a soft plastic feel. Waiting until the catalyzed filler has thoroughly hardened is far too long and will add unnecessary hours to the surfacing task. In addition, concave surfaces need to be worked with a curved sanding block (like a tube) to maintain proper (continuous) surface development. More about this in the photo captions.

The reality of deadlines and other editorial tasks prevented us from staying at the shop on a 9-to-5 basis. But, we were present for enough of the project development to obtain a photo essay of the major problem areas and how they were prepared for a thick



Those areas of the cab's interior where a tool cannot reach into the crevices will be sprayed with Rust Converter, sealing the area to prevent further oxidation.



Brea Hills Auto Collision uses Evercoat Z-Grip with Hattonite, it's a quality plastic filler with excellent non-clogging sanding characteristics. Of course the filler is catalyzed with blue cream hardener before it's applied to the surface. The better quality fillers will shrink less as they cure to maintain a superior surface with excellent bonding characteristics.



John uses a squeegee to apply the filler in uniformly thin coats on the rear panel. Notice that he is wearing rubber gloves for protection. One goal before catalyzed filler was applied to the rear panel was to keep the large surface from oil-canning (moving in or out). This was important to ensure that the filler material won't crack, and that the eventual topcoat will not be damaged as a result.

coat of high-build primer. The primer will protect the cab's exterior sheet metal during the remaining construction phases of fenders, front-end and grille assembly.

The tasks of paint and upholstery are among the last major obstacles on the road to final assembly. These are also two of the more costly aspects of restoring a vintage vehicle. But, there are also two very rewarding aspects when evaluating the equity one might build into such a project. Obviously, well-painted and professionally upholstered cars and trucks are worth more, and more fun to show up in at events.



Important Tip: John uses a rotary grinder while the filler is still somewhat plastic to the touch. Other tools that can be used are a "cheese grater" or very coarse sandpaper (40- to 80-grit). Working the surface while it's still curing allows the high areas to be reduced more quickly and with less effort.



Important Tip: Soon John attacks the surface with a long foam sanding pad, working in an X-pattern to prevent flattening the panel. Some of these long foam sanding pads are supported with metal rods to keep them slightly curved. Remember all exterior surfaces are compound curves (in both directions) from side-to-side and top-to-bottom.



Several years ago we installed hidden Hagan hinges for a smoother exterior appearance, and we restored the rusted door skin up 10 inches from the bottom of the door. The door handles, key cylinder and all the exterior hardware were removed before surfacing the door skin. New chrome-plated interior and exterior handles have been purchased from Lobeck's Hot Rod Parts.



It's hard to say what percentage of the filler remains on the cab, but there's plenty of material both on the cab and on the floor. A good practice is to cover the engine and chassis. Plus, tape up any air holes that might collect small filler dust.



John cleans the restored rear corners of the cab and the door jambs with an air-powered rotary tool.



Important Tip: A wire brush on the rotary tool is good for thoroughly cleaning the tightly curved surface of the cab's body reveal. These surface changes serve to strengthen the exterior panels as well as improve the truck's styling.



John works the cab's rear corner surface with a sanding block – again moving in an X-pattern for the most part. The bottom of the cab's corner has an inner and an outer wall. When the cab was restored, the corner was sealed with metal to prevent moisture from entering between the inner and outer surface.



Important Tip: The door cut was sculpted shortly after the filler had “kicked” and was still somewhat soft. Waiting until the filler completely hardens takes a much greater effort to create and can often damage the edges.



The top of the cowl was worked in several thin layers. This area is one of the few with a “fillet” or concave surface.



John moves to the passenger side of the cab, cleaning old filler and primer. We will extensively clean the inner floor and seat riser in the near future to prevent rust from attacking the interior metal surfaces.



The long sanding board allows John to work from the cab's rear corner forward to the cowl. The continuous surface will likely be better than when the truck was brand new. Notice the amount of material on the floor.



Important Tip: A concave surface is best worked with a curved surface tool, such as a rolled sanding pad. John uses a cardboard paper roll with sandpaper added. The sanding motion is still primarily in an X-pattern.



Minor high spots were identified and shrunk in the door skin. The 70 years of shifting loads, plus use and abuse have resulted in a variety of distorted metal on the doors and rear panel.



The top of the cowl was next on the list; every bit of surface rust was ground away. The weld area where the original cowl vent was located was ground smooth as a baby's behind.



John works the passenger side door skin and the side of the cowl at the same time to create a continuous surface through the two panels.



This image of the rear roof panel shows a surface change or seam between the top and the rear of the roof. We agreed that this detail was important to retain to prevent the transition of the roof from looking too soft.



Alfred started priming the cab with the dash. A light tack coat was sprayed on initially, with more coats added as the preliminary coats began to kick. All of the paint and filler material is of a similar chemistry, a fact that aids in stability and longevity. Soon several counties in California will implement a water based paint system only.



Sherwin-Williams is better known for its house paint, but the ULTRA-FILL HS automotive products are of a high quality with low VOCs. ULTRA-FILL® is a premium, acrylic based lacquer primer-surfacer designed for faster fill and less shrinkage

than conventional lacquer primer-surfacers. ULTRA-FILL dries to sand in as little as 20-30 minutes and powders easily with no clogging of the sandpaper. ULTRA-FILL is well-suited for filling 80- to 180-grit scratches, feather-edges easily, and since it is acrylic based, is more resistant to blisters caused by high humidity. ULTRA-FILL when used with Transducer® ES10 or ES15 meets U.S. National Rule Requirement of 4.8 lbs.-gal. (575.04 g-l) maximum ready-to-spray VOC (volatile organic compound).



The dash will also be primed and painted body color – it needed to be prepared also. At least we've eliminated the unwanted holes in the dash and have fresh metal where the Classic Instruments gauges will be mounted flush to the dash panel.



Brea Hills' crew taped off the engine and the rear of the chassis to prevent what little overspray was in the air from floating onto unwanted surfaces. The HVLP spray guns put much less material into the air than paint guns from a decade ago.



The crew cleaned with SHER-WILL-CLEAN® Solvent Cleaner – these products are also available: R7K156; AQUA-MATE™ Low VOC Surface Cleaner W4K157 or UltraClean® Surface Cleaner R7K158. Simply wipe dry with a clean, dry cloth. Alfred applied two or three medium coats of ULTRA-FILL for a very sandable surface. Complete instructions can be found on the Internet as well as on the can.



With filler on the dash panel and the added lower A/C panel, the dash is beginning to look much more integrated. We think the Classic Instruments analog gauges and the backlit Vintage Air A/C controls will look great, and very sanitary next to the unified dash surfaces.

Source

BREA HILLS AUTO COLLISION
300 N. Orange Blvd., Unit A
Brea, CA 92821
714.256.1940



Here's how our '40 Ford pickup looked with the doors back on and the ULTRA-FILL primer dry. Our next goal is to assemble the front fenders, hood and grille. We didn't primer these items in the event that they may need some further adjustment in order to fit the cowl and hood. More good construction tips for 1940 Ford owners to come – stay tuned!