

# Chrome Finish on a Fiberglass Grille Shell

By Ron Biggerstaff – July 2012

Many of you have probably thought about the fact that chrome plating bits and pieces of your hobby car had to be reserved for metallic conductive parts in order to electroplate the chrome. Or if plastic, the parts will need to be chemically “plated” with nickel/copper to create a conductive surface. Then the chrome is electroplated onto it. This is how some of the interior pieces were done in your grandmother’s Buick.

If you are restoring plastic parts in your grandmother’s 64 Riviera, or in our specialty car world, you want to shine up a fiberglass part, then here are a couple of more modern ways that have been developed in the last few years. One way is to chrome paint the part with a product like Eastwood’s Liquid Chrome, Alsa’s Mirror Chrome, or Spectra Chrome’s Magic Chrome. These products are typically applied with a detail gun over jet black urethane and then clear coated. The rule here is that success is about 75% based on the preparation. The jet black must be absolutely flawless and appear to be “a foot deep”. If perfect, your finished part will have a slight black chrome appearance. This is great as long as the part is not nestled next to a metallic part which has been electroplated. The two colors of chrome would be obvious.

This brings me to another technique called “spray on chrome”. This system consists of a layer of real silver metal deposited between two layers of paint. The process duplicates the look and feel of real chrome. Since my replica 34 Ford has a fiberglass grille shell (usually painted) and an electroplated grill, this is the route I took to achieve a complete matching chrome assembly.



Shell before primer



Electroplated grille

Here are the general steps to finish a fiberglass grill shell in chrome finish:

Preparation: Block sand the gel coat 360 wet. Sun bake dry and guide coat. Block sand 400 wet. Epoxy prime and over-night dry. Block sand 800 wet, clean and dry. Inspect for hair line scratches using a bright light and reading magnifier. If any scratches are found, remove with 800 wet. Then sand 1000

wet, clean the part and dry it. From this point on the part cannot be touched with your bare hands (use cotton gloves).

Note: All the steps below were done in the paint booth at Creations N' Chrome in Valencia, CA

**Basecoat:** This is a white urethane product mixed at a ratio of 8:1:2 (thinner, hardener, basecoat) with a Spectra Chrome proprietary additive called Silver Grip mixed in, and applied in cross-pattern for full coverage. The part is then air dried at room temperature overnight. The next day the part can be moved into the "wet" spray booth which has a water/silver recovery system.

**Metal Spray:** The Spectra Chrome Metal Spray silvering formula consists of 3 concentrates (sensitizing solution, metal solution, and reducer solution) that are individually mixed with de-ionized water and sprayed through their respective spray guns. This is the trickiest part but basically follows this procedure: rinse, sensitize, rinse, dual nozzle metal/water, rinse, and blow dry. The booth has straight de-ionized water for rinsing and filtered shop air to blow dry the part. After a short dry time, the part can be moved back into the dry spray booth.

**Topcoat Tinted:** The topcoat consists of three components (thinner, hardener, topcoat) mixed in a ratio of 3:1:1. The Spectra Chrome topcoat used on my grille shell was pre-tinted chrome color containing hues of blue, black and violet. This stuff is applied like any urethane clear.

**Topcoat Clear:** This is the final coating over the entire grille shell to provide an additional layer of UV protection and increased gloss and shine.

Here is a photo of the shell as received from Creations N' Chrome and after installing the grille into the shell.



The grille shell can be cleaned and polished with any paint detailer or wax product, same as you use on the rest of the car's paint. For more info about spray on chrome, go to [www.sprayonchrome.com](http://www.sprayonchrome.com) where you will find more details and cool videos.