

Got a question for John? E-mail him at vintagetechn@amosautomotive.com

The Real Wheel

READER'S QUESTION: I'M REMOVING THE AFTERMARKET MAG WHEELS THAT CAME ON MY '67 COUPE, AND AM TAKING IT BACK TO STOCK APPEARANCE. I'VE LOCATED A SET OF CORRECT "DC" RALLY WHEELS AND WILL HAVE THEM SANDBLASTED AND PAINTED. I'VE SEEN SOME THAT WERE PAINTED GRAY ON THE BACK SIDE, SOME THAT WERE THE SAME ARGENT SILVER ON THE BACK THAT'S USED ON THE FRONT, AND SOME THAT WERE BLACK ON THE BACK. HOW SHOULD I TELL MY PAINTER TO DO THEM, AND HOW DID THE FACTORY PAINT THE WHEELS?

RESPONSE: '67 rally wheels left the plant with argent silver wheel enamel on the outer face, and semi-gloss black primer on the back side, with some faint fogging overspray of the argent silver that came through the slots in the wheel from the front side. The overspray on the back side isn't essential, but it's a nice touch that judges will appreciate. Rally wheels that are painted gray on the back side are service replacements; they were painted gray all over at Kelsey-Hayes so they wouldn't rust in warehouse storage.

Raw oiled steel wheels arrived from Kelsey-Hayes by the thousands in rail cars. They were unloaded and hung on a conveyor that took them through a hot cleaning and degreasing system, then through an iron phosphate system that provided "tooth" for later

primer adhesion, and then they were baked. After baking, they went through either a dip system or a flow-coat system that applied black primer, and they were baked again. The dip system submerged the wheels in black primer, and the flow-coat system used an enclosed booth with multiple showerhead-type nozzles that flooded the wheels with black primer from all directions and recirculated the runoff.

After the primer bake cycle, the wheels were transferred to another conveyor for color painting. This overhead conveyor had racks that held a full car set of five wheels; the rack had five rotating spindles mounted so the wheels were tilted back at about a 20-degree angle from vertical, and each spindle had a center pilot that went through the pilot hole in the

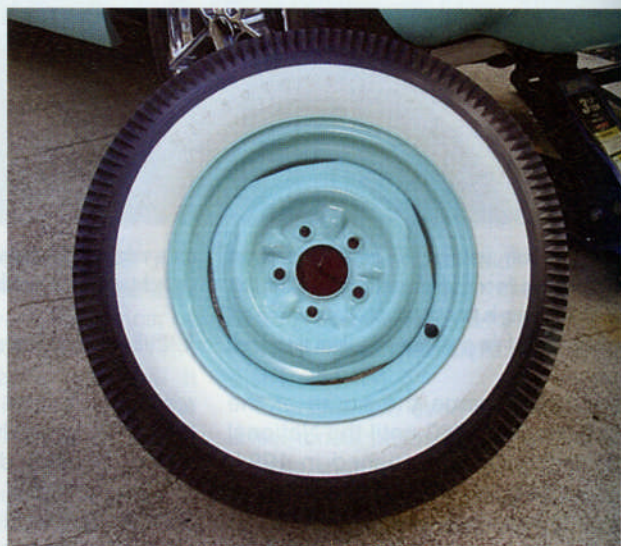
wheel; the base of each spindle was roughly the same diameter as the wheel's bolt circle.

When the rack moved into the sprayer's station, he spun each wheel manually and sprayed the face with the required color of wheel enamel (argent silver in the case of the '67 rally wheels) while the wheel was spinning on its spindle. The conveyor then carried the wheels through a bake oven and continued to the wheel and tire mount/balance area, where the wheels were removed from the rack and loaded on the tire mounting conveyor.

After many cycles, the wheel prime racks and the wheel color spray racks accumulated a lot of paint. The racks were removed from the conveyors and cleaned in caustic tanks about once a month on a weekend.



The back side of a factory rally wheel, showing the semi-gloss black primer and faint shadows of argent silver overspray through the slots from the front side.



A typical '57 wheel, painted with gloss body color enamel (Cascade Green); this wheel will also be semi-gloss black primer on the back side.