



Wheel Detailing, Part I

Danger Lurks in the Quest for Perfect Wheels

By Kevin Farrell

Customers love clean and shiny wheels. Perfect-looking wheels really make their cars “pop.” A car with dirty or even damaged wheels can, however, detract from the look of an otherwise gorgeous automobile. Wheels are more expensive than ever, with many people installing custom aftermarket wheels for a more personal look. OEM wheels are becoming more attractive as well, and enhance the appearance of a great-looking vehicle. Care must be taken to protect this ever-increasing investment.

The cleaning and care of wheels is therefore extremely important in the overall look of a detail, and in customer satisfaction. As detailers, we need to fully clean all the wheels to make them look showroom new — without damaging them or ourselves, and without spending all day in the process. Sometimes wheel cleaning is quite a chore, and it can be quite dangerous.

MAKING IT SAFE AND EASY

Wheel cleaning can be an easy part of the detail, or it can be a nightmare. If you have ever damaged a wheel with a harsh chemical or injured yourself with such a product, you know the feeling. Moreover, if you have ever spent 20 minutes trying to get *one* wheel clean, you’ve experienced the extreme frustration that accompanies the effort. So how can we make wheel-cleaning safe, yet fast and effective?

Many detailers are deathly afraid of wheel acids — and rightfully so. These are harsh products that are dangerous to the wheel — and to you, if used incorrectly. Acids have hurt many people, and lots of wheels have been permanently damaged or destroyed. However, many detailers (including myself) continue to use products like these because of their effectiveness. Let’s look at the reasons for both acid’s effectiveness and its harsh effects.

It Really is Acid!

Acid is highly corrosive! The skull-and-crossbones warning on any acid label is there for a reason. It eats away at almost everything in its path. This is both good and bad in wheel cleaning. If wheels only had normal dirt on them, we could wash them with simple soap and water or a light solution of all-purpose cleaner. It’s not the wheels’ composition that sometimes necessitates the use of acid or harsh cleaner, but what gets on the wheels that needs to be cleaned. The car’s brake pads and the brake rotor itself are what cause the problems. Combine this with extreme heat and neglect, and the cleaning process becomes much more difficult.

As vehicles have become faster, bringing the vehicle to a stop has become more exacting. This job falls mainly on the brake pads. Today’s brake pads have become more of a metallic composition. This helps bring the vehicle to a quicker stop, while also prolonging the life of the pad and enhancing the ability to resist brake fade. There are also other organic compounds in the pad composition, as well as the gluing systems to hold them together. The throw-off of the shavings of the pads (which are very hot) and, to a lesser degree, little bits of the brake rotors (which also get very hot) onto a hot wheel results in deposits that bond themselves to the wheel. The more that gets on the wheel, the deeper it embeds itself into the wheel and the more difficult it becomes to remove. This “brake dust” will never be fully removed with soap and water. This is why harsher cleaners such as acids have been used for years.

What Acid Does

Acid basically attacks a surface and eats away at what’s in the way. Acids are very effective in dissolving metals — which brake dust essentially is — and breaking down the adhesives, far better than any other cleaner. But what makes acid so dangerous?

