



# **CAR CARE SPECIALTIES, INC.**

## **CARE AND FEEDING OF YOUR WHEELS**

Feeding your wheels is easy; just give them a fresh new tire every 10,000 to 30,000 miles. The wheel will consume the tire tread over a period of time dependent upon its hunger level. If you drive the car rather enthusiastically, the wheel will get very hungry and eat the tread very quickly. If your driving habits are more conservative, then your wheels will have less of an appetite and only pick at the tire. (I'll bet you thought that the tread just wore off)

One of the questions I am most often asked is "What do I use to clean my wheels?" The correct answer is use the least aggressive cleaning method possible. If you keep up with the accumulation of brake dust, a simple car wash solution may be enough. If you allow the brake dust to build up, then you will have to resort to stronger cleaning agents.

To discuss cleaning methods/chemicals, we should first discuss the agents that attack your wheels. The main culprit is brake dust. Brake pads are made from several components, including monofilament carbon fibers, metal filings, Kevlar fibers and polymer based adhesives. The brake pad adhesive is the root of most of our problems. When the adhesive residue (a component of brake dust) becomes wet, it turns acidic and may etch your wheels. The metal filings, during braking, will become red hot and tend to "burn" tiny holes in the finish of your wheels. If you have small droplets that look like road tar on your wheels, this may not be road tar, but may in fact be re-polymerized brake pad adhesive. These polymer adhesives flocculate and form droplets that wind up on the wheels where they adhere with a vengeance. The only sure way to stop all this etching/burning/flocculating (sounds kind of kinky) is to refrain from using your brakes. Such a course of action is not usually desirable, even though some drivers are proponents. One of the keys to maintaining your wheels is a coat of wax. The wax acts as a sacrificial protectant. The damaging effects of red-hot brake dust, brake dust acids, pollution and ozone are unleashed upon the wax and not your wheel.

There are several ways to clean your wheels, choose the least aggressive method that will get the job done. A quality car wash/water solution is the least aggressive and will probably remove most of the dirt/brake dust from the wheel. My favorite is Sonax Gloss Shampoo at a dilution of 1 measuring cupful per gallon of water to clean wheels. If car wash does not do the trick, then try a quality wheel cleaner. My two favorite wheel cleaners are both made in Germany, P21S and Sonax. Be careful when choosing a wheel cleaner, as most of the popular brands are highly acidic and may damage the finish on your wheels. The active ingredient in many wheel cleaners is hydrofluoric acid (the same stuff they use to etch glass). A current class action lawsuit in California alleges that a popular advertised brand is damaging to almost all wheel finishes. I get 2-3 calls a week from people who have stripped the finish off their wheels with this or other highly acidic products. P21S and Sonax are pH balanced for the German wheel finishes. They may not be as aggressive as other brands, but neither will they strip the finish off your wheel.

Most wheel cleaners work best on a dry wheel. Spray the cleaner on the wheel and work evenly into all areas of the wheel with a soft cloth, soft sponge or wash mitt. Try to smooth out any drips or runs so there is an even coating of cleaner over the entire wheel. Allow the wheel cleaner some time to work (3-5 minutes) and gently scrub the wheel with your cloth/sponge/mitt. Some areas of a dirty wheel may require gentle brushing with a soft brush to dislodge the dirt. If areas need additional cleaning, respray with wheel cleaner and gently brush. I repeat the warning, the keywords here "soft" and "gently". The finish on many wheels is acrylic enamel or a high temperature lacquer that is relatively soft and may scratch. Once the dirt/brake dust is loosened, rinse thoroughly with water and dry.

If some areas of the wheel are still dirty, you may have to resort to a stronger solvent, such as Oil Flo Safety Solvent to spot clean these areas. Test all solvents on a section of the wheel that does not show, to insure that the finish will not be damaged. Spray the solvent on a cloth and spot clean the dirty area. Again gentle brushing may help. Rinse thoroughly, wash with a car wash/water solution and dry completely.

Give your wheels a coat of a quality Carnauba wax to help protect them. If your painted and/or clear coated wheels are slightly faded or dull looking, 3M Imperial Hand Glaze may help clean the faded clear coat/paint. Apply the glaze to a soft cloth and gently rub out the clouding and buff out. If this does not do the trick, put a generous amount of 3M on your cloth and add a small amount of P21S Metal Finish Restorer Metal Polish (about the size of your pinkie nail). Polish out the clouding with this combination. The P21S/3M combination will usually get the job done. When it has, follow up with a coat of quality Carnauba wax. If you don't want to use a paste wax on your wheels, or want a quick way to apply wax, use Sonax Spray Motorcycle Wax on the wheels. It is a pump spray hard wax that goes on easily and doesn't chalk and requires only light buffing.

If your wheels are anodized, the manufacturer may recommend a protective coating of petroleum jelly. I have tried this and have chosen to use a Carnauba wax instead. I found that the petroleum jelly attracted every dust particle within a half mile. Anodized wheels that have stain marks are difficult to restore. Most manufacturers do NOT recommend the use of any metal polish on anodized wheels. It will remove some of the anodization and change the appearance slightly. If you can live with the removal of some of the anodization and the appearance change, a mild metal polish such as P21S Metal Finish Restorer Polish may help remove some of the stains. Test any metal polish on the back of the wheel before using. Once the wheel is done, apply a coat of Carnauba wax.

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How do you determine if your wheels are painted/clear coated or anodized? The painted/clear coated finish is smooth to the touch and the anodized finish feels slightly rough. If you have any doubts, one method of testing the finish is to touch the tip of your tongue to the wheel. If you taste metal, it is usually anodized. If you taste almost nothing, it is usually clear coat. (I had a \$1.00 bet I could get you to lick your wheel)

If you have any questions or if you need further information, please do not hesitate to contact us.

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