



Info - Chemical Staining, Pitting, Corrosion and/or Spotted Appearance of Chromed Aluminum Wheels #00-03-10-002D - (08/01/2006)

Subject:

Models: 2007 and Prior GM Cars and Trucks (Including Saturn)

2003-2007 HUMMER H2

2006-2007 HUMMER H3

2005-2007 Saab 9-7X

This bulletin is being revised to add models and model years as well as update the information and subject. Please discard Corporate Bulletin Number 00-03-10-002C (Section 03 - Suspension).

Important: You may give a copy of this bulletin to the customer.

[What is Chemical Staining of Chrome Wheels?](#)

Figure 1



Chemical staining in most cases results from acid based cleaners (refer to Figure 1 for an example). These stains are frequently milky or greenish in appearance. They result from using cleaning solutions that contain hydrofluoric, oxalic and most other acids on chrome wheels (or any wheels). Soap and water is usually sufficient to clean chrome wheels, but if a cleaner must be used on chrome wheels, GM Chrome and Wire Wheel Cleaner, P/N 1052929 (in Canada, use P/N 10953202), or equivalent, is recommended. Do not use cleaning solutions that contain hydrofluoric, oxalic and most other acids on chrome wheels (or any wheels).

Notice: Many wheel cleaner instructions advise to take care to avoid contact with painted surfaces. Most customers think of painted surfaces as the fenders, quarter panels and other exterior sheet metal. Many vehicles have painted brake calipers. Acidic wheel cleaners may craze, crack, or discolor the paint on the brake calipers. Damage from wheel cleaners is not covered under the vehicle new car warranty. Soap and water applied with a soft brush is usually all that is required to clean the calipers.

Important: GM Chrome and Wire Wheel cleaner, P/N 1052929 (in Canada, P/N 10953202), has a mild phosphoric acid, which will not stain the chrome. However, do not use this product on clear-coated aluminum wheels.

Whenever any wheel cleaner is used, it must be THOROUGHLY rinsed off of the wheel with clean, clear water. Special care must be taken to rinse under the hub cap, balance weights, wheel nuts, lug nut caps, between the wheel cladding and off the back side of the wheel.

Notice: Do not use cleaning solutions that contain hydrofluoric, oxalic and most other acids on chrome wheels (or any wheels).

If the customer is unsure of the chemical make-up of a particular wheel cleaner, it should be avoided.

For wheels showing signs of milky staining from acidic cleaners, refer to Customer Assistance and Instructions below.

Warranty of Stained Chrome Wheels

Stained wheels are not warrantable. Most acid based cleaners will permanently stain chrome wheels. Follow-up with dealers has confirmed that such cleaners were used on wheels that were returned to the Warranty Parts Center (WPC). Any stained wheels received by the WPC will be charged back to the dealership. To assist the customer, refer to Customer Assistance and Instructions below.

Pitting or Spotted Appearance of Chrome Wheels

Figure 2



A second type or staining or finish disturbance may result from road chemicals, such as calcium chloride used for dust control of unpaved roads. The staining will look like small pitting (refer to Figure 2). This staining will usually be on the leading edges of each wheel spoke, but may be uniformly distributed. If a vehicle must be operated under such conditions, the chrome wheels should be washed with mild soap and water and thoroughly rinsed as soon as conveniently possible.

Important: Road chemicals, such as calcium chloride used for dust control of unpaved roads, can also stain chrome wheels. The staining will look like small pitting. This staining will usually be on the leading edges of each wheel spoke. This is explained by the vehicle traveling in the forward direction while being splashed by the road chemical. If a vehicle must be operated under such conditions, the chrome wheels should be washed with mild soap and water and thoroughly rinsed as soon as conveniently possible.

Warranty of Pitted or Spotted Chrome Wheels

Wheels returned with pitting or spotting as a result of road chemicals may be replaced one time. Damage resulting from contact with these applied road chemicals is corrosive to the wheels finish and may cause damage if the wheels are not kept clean.

Important: Notify the customer that this is a one time replacement. Please stress to the customer the vital importance of keeping the wheels clean if they are operating the vehicle in an area that applies calcium chloride or other dust controlling chemicals! "GM of Canada" dealers require prior District Service Manager approval.

Customer Assistance and Instructions

GM has looked for ways customers may improve the appearance of wheels damaged by acidic cleaners. The following product and procedure has been found to dramatically improve the appearance of stained wheels. For wheels that have milky stains caused by acidic cleaners try the following:

Notice: THE 3M CHROME AND METAL POLISH REQUIRED FOR THIS PROCEDURE IS AN EXTREMELY AGGRESSIVE POLISH/CLEANER. THE WHEELS MUST BE CLEANED BEFORE APPLICATION TO AVOID SCRATCHING THE WHEEL SURFACE. THIS PRODUCT WILL REDUCE THE THICKNESS OF THE CHROME PLATING ON THE WHEEL AND IF USED INCORRECTLY OR EXCESSIVELY MAY REMOVE THE CHROME PLATING ALL TOGETHER, EXPOSING A LESS BRIGHT AND BRASSY COLORED SUB-LAYER. FOLLOW INSTRUCTIONS EXACTLY.

1. Wash the wheels with GM Chrome and Wire Wheel Cleaner, P/N 1052929 (in Canada, use P/N 10953202). Follow the instructions as indicated on the bottle for stubborn stains. This step will clean and may reduce wheel staining. Flood all areas of the wheel with water to rinse.
2. Dry the wheels completely.

Notice: Begin with a small section of the wheel and with light pressure buff off polish and examine results. ONLY apply and rub with sufficient force and time to remove enough staining that you are satisfied with the results. Some wheels may be stained to the extent that you may only achieve a 50% improvement while others may be able to be restored to the original lustre. IN ALL CASES, only apply until the results are satisfactory.

3. Apply *3M Chrome and Metal Polish #39527 with a clean terry cloth towel. As you apply the polish, the staining will be diminished.
4. When dry, buff off the polish with a clean portion of the towel.
5. Repeat application of the 3M Chrome and Metal Polish until satisfied with the results. If continued applications fail to improve the appearance further discontinue use.

This procedure will improve the appearance of the wheels and may, with repeated applications, restore the finish dramatically. For wheels that exhibit spotting from road chemicals the above procedure may marginally improve the condition but will not restore the finish or remove the pitting. In this type of staining the wheel finish has actually been removed in spots and no manner of cleaning will restore the finish.

*We believe this source and their products to be reliable. There may be additional manufacturers of such products/materials. General Motors does not endorse, indicate any preference for or assume any responsibility for the products or material from this firm or for any such items that may be available from other sources.

Parts Information

Part Number	Description
1052929 (US)	*GM Chrome and Wire Wheel Cleaner
10953202 (Canada)	
39527	**3M Chrome and Metal Polish (10 oz)

*Not available to Saturn Retailers. Saturn Retailers are to use soap and water.

**This product is currently available from 3M. To obtain information for your local retail location please call 3M at 1-800-364-3577.

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from the information.



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