

1997 - 2004 Corvette: Service Bulletin: Info - Refinishing Aluminum Wheels

Subject: Refinishing Aluminum Wheels

Source: Chevrolet Dealer Technical Service Bulletin

Number: #99-08-51-007A - (03/07/2002)

Models: 2003 and Prior Passenger Cars and Trucks

This bulletin is being revised to add additional model years. Please discard Corporate Bulletin Number 99-08-51-007 (Section 08 - Body and Accessories).

This bulletin updates General Motor's position on refinishing aluminum wheels. GM does not endorse any repairs that involve welding, bending, straightening or re-machining. Only cosmetic refinishing of the wheel's coatings, using recommended procedures, is allowed.

Evaluating Damage

In evaluating damage, it is the GM Dealer's responsibility to inspect the wheel for corrosion, scrapes, gouges, etc. The Dealer must insure that such damage is not deeper than what can be sanded or polished off. The wheel must be inspected for cracks. If cracks are found, discard the wheel. Any wheels with bent rim flanges must not be repaired or refinished. Wheels that have been refinished by an outside company must be returned to the same vehicle. The Dealer must record the wheel ID stamp or the cast date on the wheel in order to assure this requirement. Refer to Refinisher's Responsibility -- Outside Company later in this bulletin.

Aluminum Wheel Refinishing Recommendations

0. Chrome-plated aluminum wheels Re-plating these wheels is not recommended.
0. Polished aluminum wheels These wheels have a polyester or acrylic clearcoat on them. If the clearcoat is damaged, refinishing is possible. However, the required refinishing process cannot be performed in the dealer environment. Refer to Refinisher's Responsibility -- Outside Company later in this bulletin.
0. Painted aluminum wheels These wheels are painted using a primer, color coat, and clearcoat procedure. If the paint is damaged, refinishing is possible. As with polished wheels, all original coatings must be removed first. Media blasting is recommended. Refer to GM Aluminum Refinishing Bulletin #53-17-03A for the re-painting of this type of wheel.
0. Bright, machined aluminum wheels These wheels have a polyester or acrylic clearcoat on them. In some cases, the recessed "pocket" areas of the wheel may be painted. Surface refinishing is possible. The wheel must be totally stripped by media blasting or other suitable means. The wheel should be resurfaced by using a

sanding process rather than a machining process. This allows the least amount of material to be removed.

Important

Do not use any re-machining process that removes aluminum. This could affect the dimensions and function of the wheel.

Painting is an option to re-clearcoating polished and bright machined aluminum wheels. Paint will better mask any surface imperfections and is somewhat more durable than clearcoat alone. GM recommends using Corsican SILVER WAEQ9283 for a fine "aluminum-like" look or Sparkle SILVER WA9967 for a very bright look. As an option, the body color may also be used. When using any of the painting options, it is recommended that all four wheels be refinished in order to maintain color uniformity. Refer to GM Aluminum Refinishing Bulletin #53-17-03A for specific procedures and product recommendations.

Refinisher's Responsibility -- Outside Company

Important

Some outside companies are offering wheel refinishing services. One such company, Transwheel Corporation (800-892-3733), provides this service within GM guidelines. Other companies may also exist. Such refinished wheels will be permanently marked by the refinisher and are warranted by the refinisher. Any process that re-machines or otherwise re-manufactures the wheel should not be used.

A refinisher's responsibility includes inspecting for cracks using the Zyglo system or the equivalent. Any cracked wheels must not be refinished. No welding, hammering or reforming of any kind is allowed. The wheel ID must be recorded and follow the wheel throughout the process in order to assure that the same wheel is returned. A plastic media blast may be used for clean up of the wheel. Hand and/or lathe sanding of the machined surface and the wheel window is allowed. Material removal, though, must be kept to a minimum. Re-machining of the wheel is not allowed. Paint and/or clear coat must not be present on the following surfaces: the nut chamfers, the wheel mounting surfaces and the wheel pilot hole. The refinisher must permanently ID stamp the wheel and warrant the painted/clearcoated surfaces for a minimum of one year or the remainder of the new vehicle warranty, whichever is longer.

Important

Whenever a wheel is refinished, the mounting surface and the wheel nut contact surfaces must not be painted or clearcoated. Coating these surfaces could affect the wheel nut torque.

When re-mounting a tire on an aluminum wheel, coated balance weights must be used in order to reduce the chance of future cosmetic damage.

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