

2022 CHEVROLET CORVETTE SERVICE MANUAL

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Aluminum Wheel Refinishing

Aluminum Wheel Refinishing Guidelines

Warning:

To avoid personal injury when exposed to plastic media blast, hand and/or lathe sanding dust, primer, color coat, and clearcoat, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs and protective gloves and clothing.

Evaluating Damage

Note:

- Inspect the wheel for corrosion, scrapes, gouges, etc. Damage MUST NOT be deeper than what can be sanded or polished off.
- Inspect the wheel for cracks. If cracks are found, discard the wheel.
- ALL wheels with bent rim flanges must not be repaired or refinished.
- The re-machining and the re-clear coating of aluminum wheels is not recommended in the dealer environment due to concerns of repair durability.
- Do not use any re-machining process that removes aluminum. This could affect the dimensions and function of the wheel.

Aluminum Wheel Refinishing General Recommendations/Options

- Painted aluminum wheels use 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. (See option number 1).
- If the clearcoat is damaged, it is possible to refinish with clearcoat only, however, the required refinishing process cannot be performed in the dealer environment. Refer to Refinishers Responsibility (Repair option number 2).
- Re-plating of chrome-plated aluminum wheels is not recommended.

Repair Option Number 1

Material Required/Information Resources

- The Paint Manufacturer's Color Book
- Refer to the latest GM Approved Refinish Materials Booklet (GM 4901 MD-2005) for specific products for aluminum refinishing.
- To access the booklet, go to www.gmgoodwrench.com. Click on GM Collision Parts. Click on GM Technical Repair Information, select Paint Shop.
- A Color Compatibility chart is also at this site defining what colors are used on what models.
- Note:

Chemical strippers are not recommended.

- Refer to specific Paint Manufacturers for refinish procedures and process pertaining to 'Aluminum Refinishing'.
- The procedure requires the wheel surface to be plastic media blasted to remove old paint or clearcoat.

General Color Selection

- If the wheels being painted were previously clearcoated aluminum, and a painted aluminum look is desired, using Corsican Silver

WAEQ9283 for a fine 'aluminum-like' look, or Sparkle Silver WA9967 for a very bright look. Body color is another option to the customer that may also be used.

- Some specific colors may be recommended on certain models.
- If painting wheels that were previously clearcoated aluminum, it is recommended that all 4 wheels and their center caps be refinished to maintain color uniformity.

General Refinishing Procedures “ Removal

1. Remove the wheels from the vehicle. The tires may remain mounted on the wheels.
2. Remove the balance weights and mark their locations on the tire.
3. Remove excess grease, etc. from the wheels with wax and grease remover.
4. Have the wheels plastic media blasted to remove the clearcoat.
5. Note:

MASK OFF ALL MOUNTING SURFACES, 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.

6. Clean and mask and paint the wheels.

General Refinishing Procedures “ Installation

1. Unmask the wheels.
2. Clean all wheel mounting surface of any corrosion, overspray, or dirt.
3. Note:

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

4. Install NEW coated balance weights at marked locations.
5. Note:

Use a torque stick on an impact wrench, or a torque wrench to consistently and uniformly fasten the wheel to the specified torque for the vehicle. The star pattern must be followed.

6. Install wheels on vehicle.

Repair Option Number 2 “ Outside Companies

- Some outside companies are offering wheel refinishing services. One such company, Transwheel Corporation (800-892-3733), provides this service with GM guidelines. Other companies may also exist.
- Any process that re-machines or otherwise remanufactures the wheel should not be used.
- The wheel ID must be recorded and follow the wheel throughout the process to assure that the same wheel is returned. 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.
- Paint and/or clearcoat must not be present on the following surfaces, the nut chamfers, the wheel mounting surfaces and the wheel pilot hole.
- A refinishers 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. 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.