

# Service Bulletin

Date: May, 2013

# WARRANTY ADMINISTRATION

Subject: General Motors New Vehicle Wheel Warranty Coverage

Models: 2014 and Prior GM Passenger Cars and Light Duty Trucks

This bulletin is being revised to add the 2013-2014 model years and remove the Saab Warranty Information. Please discard Corporate Bulletin Number 07-03-10-015B.

# The General Motors New Vehicle Wheel Warranty

This bulletin has been issued to clarify warrantable conditions on GM OEM wheels. It is our intent that this one document will answer many of the warranty scenarios you are likely to encounter. Unlike other parts of the vehicle, wheels encounter various road hazards, corrosive substances and abuses that may present questions in both the mind of the customer and the dealer. Eligible conditions are warranted for the full term of the New Vehicle Warranty.

# Information Sources for Wheel Issues

The following GM Service Bulletins contain information useful to minimizing possible damage, and reducing customer concerns that may arise through incorrect servicing and improper cleaning products.

- #00-03-10-002 Chemical Staining, Pitting, Corrosion and/or Spotted Appearance of Chromed Aluminum Wheels
- #04-03-10-012 Pitting and Brake Dust on Chrome Wheels
- #06-03-10-004 Proper Use of OEM Service Wheel Weights, Marring and/or Damage Due to Use of Non-OEM and/or Incorrect Wheel Weight Installation
- #06-03-10-010 Information on Proper Wheel Changing Procedures and Cautions

# What is NOT Warrantable

GM provides many different styles and finishes for our passenger car and truck wheels. You will find both steel and aluminum wheels with painted, polished or chrome finishes available. While each of these types must meet GM durability standards for road impacts and finish appearance, there are conditions that are not warrantable.

#### Curb Impact / Scrapes

Wheels that have been damaged through abuse are not warrantable. Finish scraping and wheel flanges that have been damaged due to curb impact are not warrantable.

#### Bent Wheel Flanges / Cracked Wheels

Bent wheels and cracked wheels due to road hazards are not warrantable. In many cases bent and cracked wheels result from driving on low tire air pressure or a flat tire. Low tire pressures dramatically reduce the impact protection the wheel has and lowers the threshold where damage may occur.

#### Finish Damage / Streaking / Pitting / Corrosion

There are many different types of finish damage possible, resulting from aggressive cleaning products, road chemicals, poor tire changing practices, or manufacturing processes. Some of these are warrantable while others indicate abuse. See the Finish Damage sections below, which give examples of the different types of specific finish concern issues you may encounter.

#### **NON-Warrantable Examples**

The following are examples of actual wheels that were returned to General Motors under the New Vehicle Warranty and have been analyzed and reviewed.



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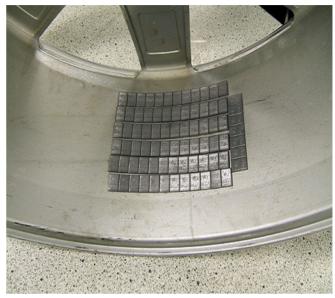
The wheel above exhibits typical wheel rim damage on the inboard flange, caused by a road hazard. Customer comments may be vibration, air loss, or a wheel that cannot be balanced. This damage is not warrantable and a Warranty Parts Center (WPC) Regional Feedback Report was issued on this wheel. (Most WPC Regional Feedback Reports result in a chargeback of the warranty claim to the dealership.)

**Important:** Customers whose vehicles have sustained road hazard damage due to poor road surfaces on county or state roads may have recourse through their insurance company or through the county or state road commission. These policies vary by area. Contact your country or state government to check eligibility.



1985592

The photo above illustrates a crack in the wheel from a road hazard. In addition to the damage seen in the photo, the flange of the wheel was bent in the same area. Customer comments may include, vibration, air loss, or a wheel that cannot be balanced. This is not a warrantable condition and does not indicate any defect in the wheel. A Feedback Report was issued on this wheel.



1985602

The photo above is an example of the over-use of wheel weights to try to overcome another issue. This wheel has a bent outboard flange exactly 180° from the **application of 79 1/4oz. (7 gr.) wheel weights!** This condition is both not-warrantable and an example of incorrect servicing. If a wheel and tire assembly will not balance, the wheel should be examined and checked for runout. The associated tire should also be checked for radial force variation.



Chemical staining in most cases results from acid based cleaners (refer to Figure 1 for an example).

These stains are frequently milky, black, or greenish in appearance. They result from using cleaning solutions that contain acids on chrome wheels. Soap and water is usually sufficient to clean wheels.

If the customer insists on using a wheel cleaner they should only use one that specifically states that it is safe for chromed wheels and does not contain anything in the following list. (Dealers should also survey any products they use during prep or normal cleaning of stock units for these chemicals.)

- Ammonium Bifluoride (fluoride source for dissolution of chrome)
- Hydrofluoric Acid (directly dissolves chrome)
- Hydrochloric Acid (directly dissolves chrome)
- Sodium Dodecylbenzenesulfonic Acid
- Sulfamic Acid
- Phosphoric Acid
- Hydroxyacetic Acid

**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.

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. Wheels returned to the Warranty Parts Center that exhibit damage from wheel cleaners most often have the damage around and under the wheel weight where the cleaner was incompletely flushed away.

*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.

**Important::** In some cases when this type of stain is not too severe, it may be possible to improve the appearance with certain chrome cleaner/polishes. Refer to the latest version of Corporate Bulletin Number 00-03-10-002 for additional information.

#### Warrantable Issues

Any defects in the finish, balance, or structure of the wheel resulting from improper manufacture are covered under the New Vehicle Warranty for the full time and mileage limits of that warranty. Typical covered finish issues that you may encounter are:

• Flaky or pitted chrome on the visible wheel surface indicating poor adhesion of the plating.

- Polished or machined aluminum wheels that exhibit Filiform Corrosion (chalky white lines under the clear coating) This condition is warrantable, unless it is caused by incorrect wheel weight application and use.
- Wheel center caps that exhibit similar conditions to warrantable wheel concerns.
- Thin or poor paint finish quality on painted wheels. Bubbling / Flaking of the paint.
- Paint damage incurred during stick-on wheel weight changes. (See Stick-On Wheel Weight Paint Damage or Paint Flaking/Peeling Backside of Wheel)
- Flaking or peeling on backside surface of wheel indicating poor adhesion of the plating (See Stick-On Wheel Weight Paint Damage or Paint Flaking/Peeling Backside of Wheel).



1792402

One type of finish concern specific to chromed aluminum wheels is spotting or what appears as golden colored pits on the surface (See example above). This type of finish concern is not the fault of any manufacturing or durability shortfall. This dissatisfier results from corrosive road chemicals used for dust control in some areas. (Calcium Chloride) Wheels with this type of corrosion may be eligible to be warranted **one time only.** Please refer to the latest version Bulletin Number 00-03-10-002 for additional information.

### Preparing Wheel(s) for Warranty Return

The wheels returned to General Motors for warranty coverage are evaluated by a team made up of representatives from Engineering, GM Service, Quality, and the manufacturing OE Wheel Suppliers. During review of returned wheels, a finite amount of time is available to evaluate each wheel. It may benefit your dealership to observe the following guidelines for returning wheels.



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- Please mark the defect in the wheel. You may use a paint pen, grease marker or tape off the area. Many times the Repair Order is not clear as to the reported concern. Simply circling the area of concern on the wheel is sufficient.
- Clean the wheel if it is overly dirty. It is not required that the wheel be polished or detailed. Returned wheels covered over with dirt/mud create the possibility of overlooking a cosmetic flaw that was the subject of the wheel return, creating a possible Feedback Report.
- Treat the wheel with care before packing for return. Dismounted wheel rims can be scratched and bent easily if abused before packing. This type of damage can mimic road/curb damage creating a possible Feedback Report.

# Removal of Stick-On Adhesive Backed Wheel Weights

Many "flangeless" design wheels require the use of stick-on or adhesive backed wheel weights. Improper removal of the wheel weights (on chrome plated wheels) may peel, scratch or flake the paint on the interior surface of the wheel. Normally this is of no concern, but on some vehicles with wheels that are of a very open design, the interior of the wheel may be a visible surface. Here are tips to aid the removal of these weights.

• Use ONLY Plastic tools for removal of the wheel weights. The best tools to use are commercially available plastic putty knives or a plastic accusative trim removal tool. Use the tapered end of the tool to remove the wheel weight. These plastic tools are delicate on the painted surfaces serving to "push" the adhesive off the surface rather than scraping.

- Any adhesive left on the wheel may be cleaned with an automotive adhesive remover such as 3M General Purpose Adhesive Remover #08984 or equivalent.
- In most cases you will not encounter any difficulty with OEM painted aluminum wheels. Fully painted wheels have a robust paint application process that cannot be matched and duplicated. Chromed aluminum wheels have an air dry paint applied to the back side of the wheel, which is applied over a chromed surface. If a chromed aluminum wheel paint on the interior of the wheel peels, refer to the section below.

#### Stick-On Wheel Weight Paint Damage or Paint Flaking/Peeling Backside of Wheel (Chromed Aluminum Wheels)

Under no circumstances should the wheel be replaced for this type of damage. Damage caused by improper removal, metal tool scrapes and gouges should not be submitted. If you encounter a wheel where the paint has peeled, you may repaint the backside of the wheel.

GM currently uses two all-purpose colors to paint the inside of the wheel area. Both colors are a flat paint available in a very light silver or dark silver. Follow all manufacturers instructions when refinishing and refer to the GM Labor Time Guide for Material Allowances noting the warranty information below.

### **Aluminum Wheel Paint Codes**

| Description           | Paint Code |  |
|-----------------------|------------|--|
| Light Silver Metallic | WA-303L    |  |
| Dark Silver Metallic  | WAEQ715Q   |  |

# Warranty Information

Use the following Labor Operation when repairing a vehicle under warranty.

You are allowed to claim ONE-HALF the total amount of allowable time and materials as only the back side of the wheel is being repainted in this operation.

| Labor<br>Operation | Description                                   | Labor<br>Time                                  |
|--------------------|---|--|
| 1445854            | Wheels, Aluminum - Color/<br>Clear Coat - One | Use<br>Published<br>Labor<br>Operation<br>Time |

GM bulletins are intended for use by professional technicians, NOT a "<u>do-it-yourselfer</u>". 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, <u>DO NOT</u> 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.

