# Low Tire Pressure Leaking Cast Aluminum Wheels (Repair with Adhesive Sealant) #05-03-10-003A - (Dec 19, 2005)

Low Tire Pressure, Leaking Cast Aluminum Wheels (Repair with Adhesive Sealant)

2006 and Prior GM Passenger Cars and Light Duty Trucks

2003-2006 HUMMER H2

2006 HUMMER H3

with Cast Aluminum Wheels

This bulletlin does not apply to Saturn, Saab and Canadian dealers at this time. Once parts are available, Saturn, Saab and Canadian dealers will be added.

This bulletin is being revised to include additional model years and models. Please discard Corporate Bulletin Number 05-03-10-003 (Section 03 -- Suspension).

#### Condition

Some customers may comment on a low tire pressure condition.

Diagnosis of the low tire pressure condition indicates an air leak through the cast aluminum wheel.

#### Cause

Porosity in the cast aluminum wheel may be the cause.

#### Correction

- 1. Remove the tire and wheel assembly from the vehicle. Refer to the appropriate service procedure in SI.
- 2. Locate the leaking area by inflating the tire to 276 kPa (40 psi) and dipping the tire/wheel assembly in a water bath, or use a spray bottle with soap and water to locate the specific leak location.

## **Important:**

- If the porosity leak is located in the bead area of the aluminum rim (where the tire meets the rim), the wheel should be replaced.
- If two or more leaks are located on one wheel, the wheel should be replaced.
- 3. If air bubbles are observed, mark the location.
  - If the leak location is on the tire/rubber area, refer to Corporate Bulletin Number 04-03-10-001A or newer - Tire Puncture Repair Procedures for All Cars and Light Duty Trucks (SI Document ID #1573203).
  - If the leak is located on the aluminum wheel area, continue with the next step.
- 4. Inscribe a mark on the tire at the valve stem in order to indicate the orientation of the tire to the wheel.
- 5. Dismount the tire from the wheel. Refer to Tire Mounting and Dismounting (SI Document ID #1332544).
- 6. Remove the tire pressure sensor. Refer to the appropriate TIre Pressure Sensor removal procedure in SI.
- 7. Scuff the INSIDE rim surface at the leak area with #80 grit paper and clean the area with general purpose cleaner, such as 3M® General Purpose Adhesive Cleaner, P/N 08984, or equivalent.
- 8. Apply a 3 mm (0.12 in) thick layer of Silicone Adhesive/Sealant, P/N 12378478, or equivalent, to the leak area.
- 9. Allow for the adhesive/sealant to dry.

**Notice:** Caution must be used when mounting the tire so as not to damage the sealer. Damaging the repair area may result in an air leak.

- 10. Align the inscribed mark on the tire with the valve stem on the wheel.
- 11. Reinstall the Tire Pressure Sensor. Refer to Tire Pressure Sensor installation procedure in SI.
- 12. Mount the tire on the wheel. Refer to Tire Mounting and Dismounting (SI Document ID #1332544).
- 13. Pressurize the tire to 276 kPa (40 psi) and inspect for leaks.
- 14. Adjust tire pressure to meet the placard specification.
- 15. Balance the tire/wheel assembly. Refer to Tire and Wheel Assembly Balancing Off-Vehicle (SI

Document ID #664222).

16. Install the tire and wheel assembly onto the vehicle. Refer to the appropriate service procedure in SI.

## Parts Information

Part Number	Description	
12378478	Silicone - Adhesive/Sealant	
3M®	3M® General Purpose Adhesive Cleaner	
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### Warranty Information

**Important:** Silicone - Adhesive/Sealant, P/N 12378478 comes in a case quantity of six. ONLY charge warranty one tube of adhesive/sealant per wheel repair.

For vehicles repaired under warranty, use:

One leak repair per wheel.

Labor Operation	Description	Labor Time
E0420	Wheel - One - R&R Or Replace	Use Published Labor operation Time
Add:	To Repair Porosity On Aluminum Wheel	0.1 hr
Add:	To Repair Each Additional Wheel	0.4 hr

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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