



Service Bulletin

Bulletin No.: 01-08-42-001O

Date: February, 2023

INFORMATION

Subject: Exterior Lamp Condensation and Water Leak Information and Replacement Guidelines

Models: 2023 and Prior GM Passenger Cars and Trucks (including Medium Duty Trucks)
(Excluding LCF Medium Duty Trucks)

Attention: Involved Region or Country: North America, Europe, Uzbekistan, Russia, Middle East, Iraq, Israel, Palestine, Argentina, Brazil, Bolivia, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, Venezuela, Japan, Cadillac Korea (South Korea), GM Korea Company, China, Taiwan, Thailand, Singapore, Philippines, Australia/New Zealand, Egypt, Other Africa, South Africa

This bulletin has been revised to add the 2023 Model Year, update the Attention statement to list Involved Regions or Countries, add the bulletin reference statement at beginning of bulletin, and add three condensation example graphics. Please discard Corporate Bulletin Number 01-08-42-001N.

Dealers in the U.S. and Canada Only: Please follow Service Bulletin # **18-NA-306** and the pre-authorization process prior to warranty replacement of front headlamps in 2021 and newer model year vehicles.

The following information is being provided to better define the causes of condensation in exterior lamps and includes guidelines for determining the difference between a lamp with a normal atmospheric condition (condensation) and a lamp with a water leak.

Some exterior lamps, such as cornering, turn signal, backup, headlamps or tail lamps may exhibit very small droplets of water, a fine mist or white fog (condensation) on the inside of the lamp lens. This may be more noticeable on lamps with "multi-lens" designs and may be normal during certain weather conditions.

Condensation occurs when the air inside the lamp assembly, through atmospheric changes, reaches the "dew point." When this takes place, the moisture in the air within the lamp assembly condenses, creating a fine mist or white fog on the inside surface of the lamp lens.

Most exterior lamps on General Motors vehicles use a vented design and feature a replaceable bulb assembly. They are designed to remove any accumulated moisture vapor by expelling it through a vent system. The vent system operates at all times, however, it is most effective when the lamps are ON and when the vehicle is in motion. Depending on the size, shape and location of the lamp on the vehicle, and the atmospheric conditions occurring, the amount of

time required to clear the lamp may vary from 2 to 6 hours. Customers with short commutes will experience a longer time to clear the lamp.

Completely sealed headlamp assemblies (sealed beams) are still used on a limited number of models being manufactured today. These lamps require the replacement of the complete lamp assembly if a bulb filament burns out.

Condensation Examples



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A Fine Mist or White Fog on the Inside Surface of the Lamp Lens Occurring After a Period of High Humidity

- May be located primarily in the lens corners (near the vents) and SHOULD NOT cover more than half the lens surface.
- The condition should clear of moisture when the vehicle is parked in a dry environment, or when the vehicle is driven with the lights ON.
- A comparison of the equivalent lamp on the opposing side of the vehicle indicates a SIMILAR performance.

If the above conditions are noted, the customer should be advised that replacement of a lamp assembly may not correct this condition.

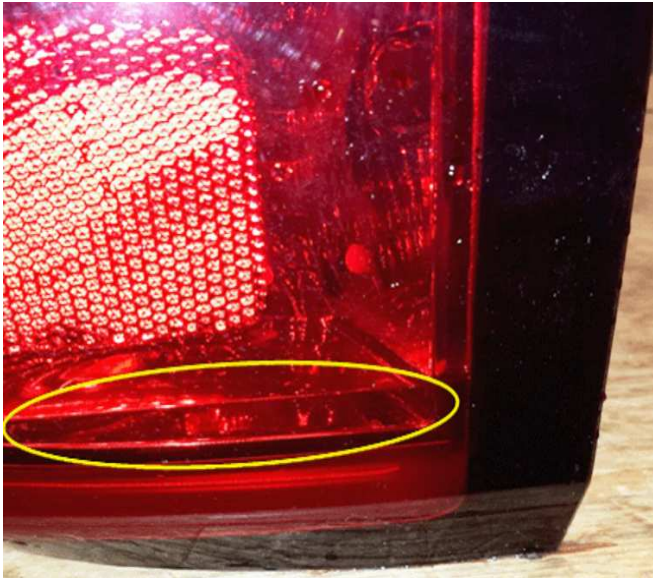
Water Leak Examples



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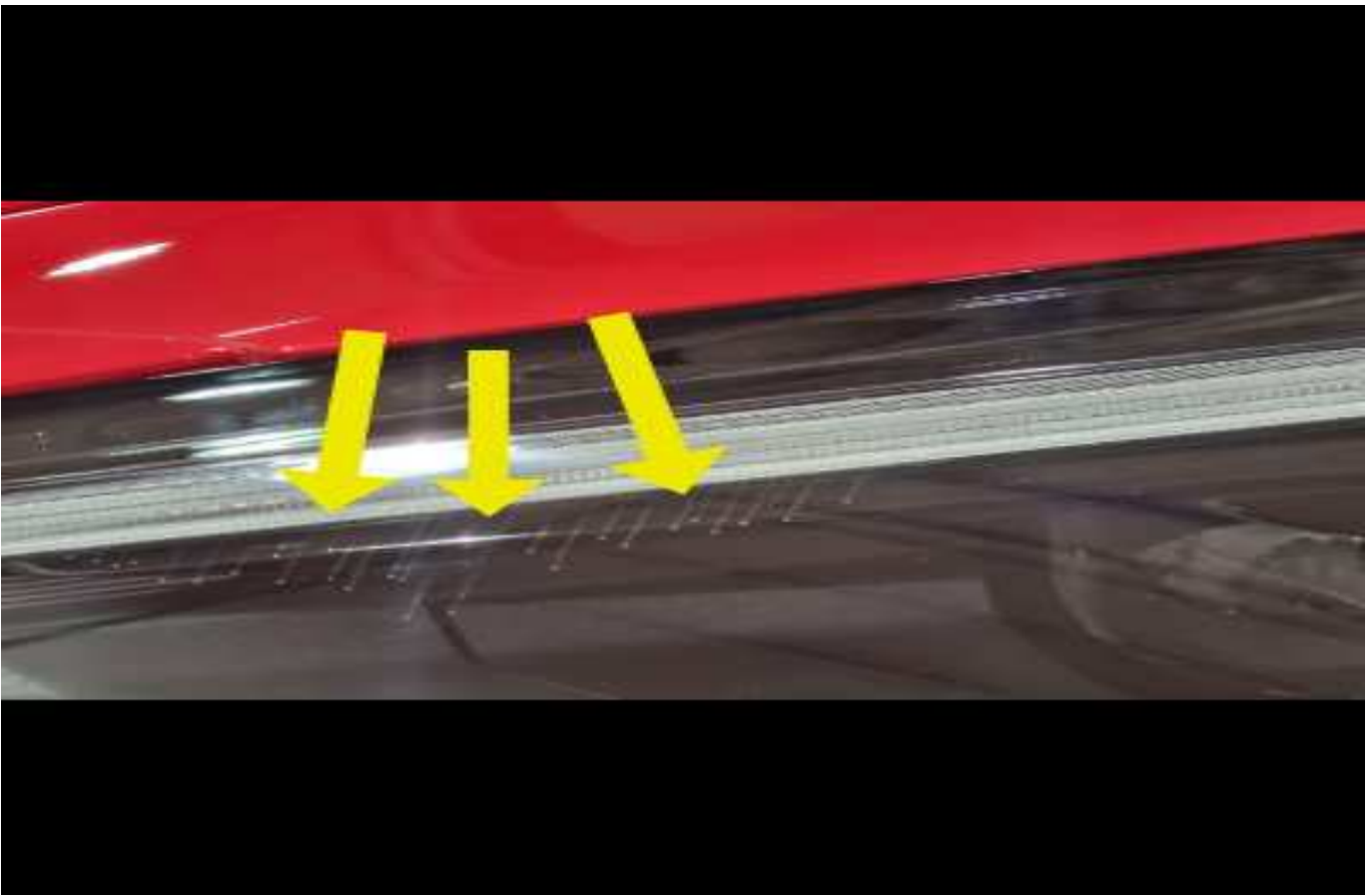
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Numerous & Various Size Drops of Water Collecting on the Inside Surface of the Lamp Lens After the Vehicle Has Been Exposed to Rain or a Car Washing Environment

Important: Moisture is most noticeable during the Spring and Fall of year, due to high humidity and the large fluctuation in temperature between day and night.

Note: Any of the conditions listed below would indicate the need to service the lens or lamp assembly.

- A condition that covers more than half the surface of the lamp lens.
- An accumulation of water in the bottom of the lamp assembly.
- A condition that WON'T clear when the vehicle is parked in a dry environment, or when the vehicle is driven with the lights ON.
- A comparison of the equivalent lamp on the opposing side of the vehicle indicates a different performance.

Note: A different performance of lamps on opposite sides of a vehicle DOES NOT always indicate that one lamp is bad, and the other is normal. For example, on a cold day when the sun is hitting only one side of the vehicle, the normal condition of one side showing clear and the other showing fogging/moisture, could be misinterpreted as a bad lamp. The customer may comment that, or you may need to inquire if, the moisture "comes and goes." Moisture "coming and going" is considered a normal condition.

If a lamp is found to be exhibiting a leak, review the most recent version of Service Bulletin 02-08-42-001 for information regarding impact damage and modification inspection.

Non-GM Headlamp, Tail Lamp and Fog Lamp Assemblies

Many companies outside of General Motors are manufacturing lamp assemblies that look very similar to original equipment. They target high volume programs like, but not limited to, Impala, Malibu, and Full Size Truck. These lamps are most often presented by customers as holding moisture or for inoperative bulbs due to corroded electrical connections. It appears these non OE lamps get installed on vehicles as part of a collision repair. Most likely the customer has no idea they are not original equipment, as the initial appearance is generally good. Obviously, these parts are not covered by warranty. Some of the common company names seen on these lamps are Eagle Eyes and Depo.



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This fog lamp was returned for retaining moisture. As you can see it is marked with the Depo brand (it is also called out on the front lens).

The most reliable way to identify a non OE part is to compare it to the replacement service part or a like vehicle. Many do have the application called out on the part with the letters GM being present. Notice that they almost never underscore it, as that would be a trademark violation. They often use substandard wiring, sockets, vent patches and unsealed connectors.

Example of GM Trademark

Note: The graphic below is an example of a GM Trademark that appears on some lamp assemblies. Current assemblies contain the trademark on a label affixed to the assembly.



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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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