



# Service Bulletin

File in Section: -

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## INFORMATION

**Subject:** Information Regarding Magnetic Drain Plugs

**Attention:** This Bulletin also applies to any of the models that may be Export vehicles.

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Buick Cadillac Chevrolet GMC	All GM Passenger Cars and Trucks	2009	2017			All	All

### Purpose of Magnetic Drain Plugs

Magnetic drain plugs in drive axles, transmissions and transfer cases are designed to attract metallic particles generated during normal operation and prevent them from passing through the gears or bearing.

When inspecting metallic particles on a plug magnet, it's important to determine the size and source.

**Important:** Inspection of the drain plug does not constitute a diagnosis, it should be used to determine if further investigation is required.

### Normal Condition



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Fine metal particles, as illustrated above, are normal and are the result of internal component wear, which can shed fine metallic particles at a steady rate.

Metal shavings, which are often remnants from the housing machining process, may adhere to the plug magnet. These shavings are not detrimental to component operation and do not require component replacement.

During service repairs and maintenance, inspect the drain plug for large metal deposits. Small metal flakes and fine metal dust on the plug magnet are considered normal.

### Not Normal Condition



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Fragments from bearings and gear teeth indicate component damage that is not considered normal. Components should be inspected for damage and repaired as needed.

### Fluid Conditions

The color of the fluid can be an indicator of contamination; however, some colors can be easily confused with the normal color of some fluids.

New fluid is usually red or light brown. With time and miles, used fluid often turns black. This is a result of the normal chemical process that occurs as the additive package in the fluid degrades. The black color does not indicate that the fluid's useful life has been exhausted.

When a fluid is a milky brown color, it may indicate that the fluid is contaminated with significant moisture. The fluid should be changed.

Water contamination of the axle lube also creates significant odor and forms corrosive conditions that will cause internal components of the axle to corrode.

Milky-colored fluid combined with rust particles is a sign of moisture contamination either from submersing the axle vent, a pinched or misrouted vent hose, or a failed seal that is allowing moisture to enter the axle.

Under 5000 miles (8,000 km) of operation, hypoid axle lube may appear tinted and have a whitish or yellow appearance from the gear marking compound used in the production of the axle.

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