



## Tech Note:

### **Alarm system malfunction causes catalytic converter damage!!!**

After reading the following bulletin, remember, misfire codes (P0300 series codes) are not stored until a predetermined number of misfires occur within a certain timeframe. Therefore, random misfires could occur over long periods of time and go unnoticed by the driver or technician causing irreparable damage to the catalytic converter.

Bulletin No.: 02-06-05-004b

Date: February 14, 2006

## INFORMATION

### Subject:

Misfire DTCs P0300, P1380, P1381 and Catalytic Converter Damage Due to Installation of Alarm Systems

### Models:

2006 and Prior GM Passenger Cars and Light Duty Trucks

2006 and Prior HUMMER H2, H3

2006 and Prior Isuzu Light Duty Trucks

### Supercede:

This bulletin is being revised to add model years. Please discard Corporate Bulletin Number 02-06-05-004A (Section 06 - Engine/Propulsion System). General Motors Engineering, in an effort to determine the root cause of catalytic converter damage, has determined that aftermarket alarm systems incorrectly installed in vehicles have the potential to cause misfire codes and damage to the converter. These alarm systems use a circuit interrupt which utilizes the ignition circuit on the vehicles.

These alarm systems utilize mechanical relays and normal vehicle movement can trigger these relays to engage and disengage the ignition circuit while the vehicle is in motion. These disruptions of the ignition circuit, which occur in milliseconds, may cause more fuel to be commanded. Overtime, this dumping of fuel on and off again can cause misfire codes and ultimately damage the converter assembly.

**Important:** Engineering could not identify any alarms that utilize solid state circuitry that would eliminate this concern. Because of this, it has been determined that all alarm systems must be routed through the starter circuit in order to avoid this condition.

Dealers must be aware of this issue and take note of the wiring on vehicles with alarm systems that come in for repair, particularly for catalytic converter damage that seem to have no known root cause.