

Bulletin No.: 00-06-04-033B

Date: October 10, 2006

INFORMATION

Subject:

I/M Readiness as Part of Emission Inspection and Maintenance Program for OBD II Vehicles

Models:

1996-2007 GM Passenger Cars and Light Duty Trucks (Including Saturn)

2003-2007 HUMMER H2

2006-2007 HUMMER H3

2005-2007 Saab 9-7X

with OBD II Emissions Systems

Attention: "GM of Canada" and "IPC" Dealers are not authorized to utilize this Service Bulletin.

Supersede:

This bulletin is being revised to add models, model years and additional information on emission testing. Please discard Corporate Bulletin Number 00-06-04-033A (Section 06 - Engine-Engine Controls).

Inspection Maintenance (I/M) Program

Several states require that vehicles pass OBD system I/M emissions inspection. These inspections may apply to any 1996 and newer model year OBD II equipped passenger cars and light duty trucks.

As part of an OBD I/M emission inspection, the vehicles I/M readiness status is checked to ensure that the vehicle's OBD system has properly evaluated the emissions systems of the vehicle for proper operation. To ensure vehicles are capable of passing this portion of the inspection, technicians can review the I/M readiness test status using the I/M System Status display on the Tech(R)2. This display provides test data that will verify whether the vehicle's OBD systems have run. States performing inspections on an advisory basis will not reject vehicles for not being I/M-ready.

Conditions for Updating the I/M System Status

Each OBD II system requires at least one diagnostic test. A system monitor is complete when all of the DTCs that report to the system monitor have run and passed or failed. The results of a failed test are reported by a diagnostic trouble code (DTC).

Once all of the tests are complete, the I/M System Status display indicates YES in the "Completed" column. For example, when the HO2S Heater Test indicates YES, all oxygen sensor heaters have been diagnosed.

When any required test for a specified system has not run, the "Completed" column under I/M System Status displays NO. The following is a list of conditions that would set the I/M System Status indicator to NO:

The vehicle is new from the factory and has not yet been driven through the necessary drive conditions to complete the tests.

The battery has been disconnected or discharged below operating voltage.

The control module power or ground has been interrupted.

The control module has been reprogrammed.

The control module DTCs have been cleared as part of a service procedure.

Monitored Emission Control Systems

The OBD II System monitors all emission control systems that are on-board. Not all vehicles have a full complement of emission control systems. For example, a vehicle may not be equipped with AIR or EGR.

The following is a complete list of the vehicle's systems that may require monitoring by the OBD system:

Air conditioning system

Catalytic converter efficiency

Comprehensive component monitoring (emission-related inputs and outputs)

Evaporative Emissions (EVAP) system

Exhaust Gas Recirculation (EGR) system

Fuel delivery system

Heated catalyst monitoring

Misfire monitoring

Oxygen sensor system (O₂S or HO₂S)

Oxygen sensor heater system (HO₂S heater)

Secondary Air Injection (AIR) system

If a specific vehicle is not required to monitor one or more of the above listed systems, the Tech(R)2 display will read "not supported." Any non-supported system will not be considered when determining the readiness of the overall system.

For the specific DTCs related to each system, refer to SI (Service Information) for further diagnostic information on conditions for running the DTC or refer to the publication information mentioned in this bulletin to order the Inspection

Maintenance Emissions Diagnostics Manual and follow the I/M Readiness Testing System DTC Tables. Systems such as fuel delivery, misfire, and comprehensive components may not be listed in a system status list. These tests run continuously on some vehicles and may not require an indicator.

Diagnostic Aids

The I/M System Status display indicates when the control module has completed the required tests. This does not necessarily mean that the test has passed, only that a decision was made. If the diagnostic fails, a DTC will indicate the failure. If a failure indication is present, it may prevent other required tests from running. For example, a DTC for the control circuit of the relay controlling an AIR pump may not be listed in the Inspection Maintenance System DTC Table because it is a continuous test. If this DTC is set, the Active Tests for the AIR system may not run and AIR system readiness could display "NO."

The I/M System Status information may be useful for a technician to determine if diagnostics have run when verifying repairs.

Publications

General Motors Service and Parts Operations has published a supplement titled "Inspection Maintenance Emissions Diagnostics Manual" (Item # SD-MA-IM240).

This publication includes the content of the General Motors Green Books (GMPT/97-IM240 and GMPT/95-IM240). Content covers enhanced I/M program, including the procedures for setting OBD II monitors. To order this manual, contact ACDelco(R) at 1-800-825-5886.

Training

General Motors Service Technical College (STC) offers two courses for technicians to address service issues related to this type of testing.

16042.10B, H Enhanced Vehicle Emissions, Testing and Diagnostics

16044.14W3 GM Powertrain Performance

For more information about service technical training, visit the GM Training website.

Having competent, trained technicians will give your Service Department a competitive edge by offering your customers a dependable repair facility which can fix vehicles right the first time.