

# I/M Update

## Pennsylvania Emissions Inspection Publication

### OBD Readiness Codes - What They Are and How They Work

Unlike traditional vehicle emissions tests, an on-board diagnostics (OBD) system monitors the engine, transmission and emissions control systems for malfunctions that may result in emissions increases. To predict when emissions limits may be exceeded, the OBD system compares electrical signals from various sensors (e.g., engine coolant temperature, intake air temperature) and actuators (e.g., solenoids, fuel injectors) to a stored record of what those signals should be. If the signal readings fall outside of a specified range and the vehicle emissions are likely to be exceeded, the OBD system alerts the driver by illuminating the malfunction indicator lamp (MIL), commonly referred to as the check engine light.

To help ensure the OBD system is working properly, "readiness codes" are used to indicate whether or not monitored emissions control systems have been tested by the OBD system. Each emissions control system has its own monitor and related readiness code. If any of the readiness codes are set to "not ready" or "not complete," depending on the scan tool used, the OBD system has not yet completed testing of the particular component or system. A component failure may exist, but has not yet been identified because the system testing has not been completed.

Some emissions control components are tested continuously, and others are tested intermittently when predetermined operating conditions are met. Three continuous monitors are found in all newer OBD vehicles: comprehensive components, fuel system and misfire monitors. These monitors should always be set. Non-continuous monitors include those vehicle systems that are directly related to emissions control, such as the oxygen sensor and the catalytic converter.

PennDOT and the Pennsylvania Emissions Team will provide an update to your analyzer's Vehicle Record Table. This update will accommodate known problem vehicles that are unable to communicate with the OBD equipment or be made ready. This update will automatically download from the VIID and will be seamless to technicians.

A new OBD II Inspection Flow Chart, designed to help guide technicians through different inspection results that may be encountered during the normal course of OBD II inspections and repairs, is now available online at [www.drivecleanpa.state.pa.us](http://www.drivecleanpa.state.pa.us).

Reminder: Model Years 1996-2000 are allowed two readiness monitors not set and will continue through the inspection. Model Years 2001-Current Model Year are allowed one readiness monitor not set and will continue through the inspection.

### Helpful Information for Technicians

#### **Sticker Placement**

The emissions sticker must be positioned to the immediate right (when viewed from the driver's position) of the current certificate of safety inspection, or where a truck weight class sticker is present, to the immediate right (when viewed from the driver's position) of the truck weight class sticker. Press firmly until tightly affixed to the windshield.

#### **Inspection of Vehicles Registered Out-of-State**

Do not issue a sticker for the vehicle unless the customer specifically requests one. Instead, provide the customer with a copy of the Vehicle Inspection Report (VIR) as proof that the test was performed. For example, if you have an out-of-state vehicle from New Jersey, when prompted by the analyzer to enter a sticker number, enter the state's initials and all nines (i.e. NJ99999999). If a sticker is requested, it must be affixed to the windshield and the sticker number entered, as with any other test.

#### **Call PennDOT for Public Information Material**

You can order public information materials (consumer brochures) by calling PennDOT at 717-787-2895.

#### **STATION TIP!**

**Attempting to Issue Waivers for "Not Ready" Vehicles**

The most important requirement needed to qualify a vehicle for a waiver is that the vehicle must have failed the test twice. A vehicle that is rejected for "readiness" is not capable of being completely evaluated. Therefore, the vehicle must be made ready and tested twice before the request for a waiver can be approved.

**Get "I/M Updates" Online**

You can now view and/or print a copy of the "I/M Update" by logging on the Drive Clean web site at [www.drivecleanpa.state.pa.us](http://www.drivecleanpa.state.pa.us) and clicking on the Service Station Link, and then clicking on the list of the "I/M Update" newsletters.





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### Routing Slip

Circulate to:

- Shop Foreman
- Service Manager
- Emissions Inspector
- Technician

## Call the Station Operator Hot Line: 1-888-265-5909

For answers or help with:

- Enrollment into the Emissions Program.
- Network connections & operations.
- Analyzer problems, user ID, password and system access.
- VIID application problems.
- VIID database problems.
- Readiness Issues.

## You or your customers may call the Customer Hot Line: 1-800-265-0921

For answers or help with:

- Waivers
- Exemptions
- Complaints
- General program information

Visit us on the web at  
[www.drivecleanpa.state.pa.us](http://www.drivecleanpa.state.pa.us)

## Frequently Asked Questions

**Q:** How do I know if a vehicle is eligible for a 5,000-Mile Exemption?

**A:** A vehicle that has been owned by the same owner(s) for at least 1 year and driven less than 5,000 miles in the previous 12 months, as indicated by the mileage noted on the safety inspection sticker or by the mileage recorded on the vehicle inspection data base, is eligible for a 5,000-mile exemption as specified in Section 177.101 (b)(12) of Chapter 177 – The Emissions Inspection Regulations.

**Q:** Since new vehicles are exempt from testing, do I have to enter the exemption into the analyzer and, if so, will I be charged the \$4.15 Program Management Fee?

**A:** Yes, all necessary data needed to issue an exemption sticker must be entered into the analyzer, and the \$4.15 Program Management Fee will apply.

## You Should Know....

- I/M Emissions Counties' Safety Inspection – The Safety Inspection program in the 25 counties that require emissions testing has NOT changed. There is no visual check of emissions components required with the Safety Inspection in the 25 emissions counties, since it is already a requirement during the emissions inspection.
- Non-I/M Emissions Counties' Safety Inspection – Vehicles registered in the 42 Non-I/M Emissions counties will NOT be required to pass an Emissions Inspection. Those vehicles weighing 11,000 pounds and less are required to pass a Visual Anti-Tampering Check as part of their annual Safety Inspection.
- Vehicles subject to an emissions inspection must be inspected "as is," or in the condition they come into the station. The Environmental Protection Agency (EPA) requires cars to be tested "as presented." During the inspection, if you observe something that is disconnected or loose, do not repair or replace it, unless it creates an unsafe condition for testing the vehicle. For example, a belt missing from the air pump will fail the inspection; do not replace the belt until you have first tested the vehicle and indicated a failure for the AIR system. Afterwards, you can perform any necessary repairs (with the customer's approval) and then conduct the free re-test to record the repairs and issue a sticker. If the vehicle fails the gas cap inspection, you have the option to replace the gas cap during the test. In this case, the analyzer records a failure and the repair, during the initial test, which still satisfies the EPA requirements. If the consumer does not want the gas cap replaced, simply continue with the remainder of the test. The vehicle will fail for at least the gas cap portion of the test. Once the consumers have replaced their gas caps, they can return to your station for their free re-tests.