



"The Environment and Safety Are Our Business."

IS YOUR VEHICLE READY FOR TESTING?

WHAT IS A READINESS MONITOR?

To complete an On Board Diagnostic II (OBD) inspection, the Motor Vehicle Inspection (MVIB) test equipment makes an electronic request for information to the vehicle being inspected through a standardized diagnostic link connector. The subject vehicle responds back to the MVIB equipment with data including vehicle information, the on/off status of the Malfunction Indicator Light (MIL), Diagnostic Trouble Codes (DTC) and the status of the vehicle's readiness monitors. The "monitors" verify the OBD system is ready to be tested. Readiness monitors must be set before a vehicle can be tested for On Board Diagnostics II.

An essential component of every MVIB OBD II inspection is the readiness check of each applicable monitor. The readiness evaluation is part of the final OBD II inspection result, and it could possibly be the only reason why a vehicle fails the City of Memphis emissions inspection.

There are a total of 11 monitors but currently no vehicle has all 11 monitors present. The exact number of monitors in any vehicle depends on the motor vehicle manufacturer's emissions control strategy. Note that the misfire, fuel trim, and comprehensive components monitors are referred to as being "continuous." These three monitors are found in every gasoline-powered OBD II vehicle, and are very different in design from the other eight monitors. The Powertrain Control Module (PCM) through the use of its three "continuous monitors" is constantly testing and evaluating their assigned emission components and/or emission system while the vehicle is running. Conversely, the other eight monitors are commonly referred to as being "non-continuous" monitors, as certain conditions need to occur before a test or series of tests can be completed by the PCM.

Successful repairs will cause the vehicle computer to automatically clear Diagnostic Trouble Codes (this turns off the check engine light). After the computer confirms that the problem no longer exists, this can take 2 or 3 days of normal driving before, the readiness codes are set. The vehicle performs the self-diagnostic test when the vehicle is driven. If a mechanic clears the Diagnostic Trouble

Codes, the readiness monitors will also be cleared. The vehicle will then need to complete a drive cycle in order to reset the readiness monitors before it is returned to the inspection stations for retest. **Failing to complete the drive cycle can cause the vehicle to fail the retest if monitors are not set to ready.**

Readiness monitors are also cleared when the battery is disconnected.

Some self-diagnostic tests will not occur until you have driven the vehicle at highway speeds for a certain length of time. Others will not occur until you have driven the car the required number of “drive cycles” of warming up to normal engine temperature then cooling back down.

If your vehicle does not perform all of the required tasks, the monitors will not be ready.

- A. If three or more monitors are not set to ready on a 1996-2000 model year vehicle, or any emission critical *monitor is not ready, it will fail the emissions retest.
- B. If your vehicle is 2001 or newer, it will fail if two or more monitors, or any emission critical *monitor is not ready.

***If the vehicle catalyst fails on the initial test, the catalyst monitor must be set to ready.**

What to Do!

- Automobile manufacturers have various strategies for setting the vehicle readiness monitors. For this reason, the MVIB cannot give you a simple list of instructions. Drive cycles are a combination of highway driving, stop and go driving, and for some vehicles an overnight cooling down period. **Specific drive cycles for your vehicle can be obtained from the vehicle manufacturer.**
- Check with your service technician or mechanic to make sure the readiness monitors have all been set to ready before bringing the vehicle back to the MVIB inspection station for testing.
- Don't take your vehicle back for an emissions retest at the MVIB inspection stations until you are confident that all readiness monitors have been set to **READY**.