



PRODUCT SERVICE INFORMATION

Reference:

PI95-008

Date:

April 5, 1995

ENHANCED EMISSION INSPECTION/MAINTENANCE PROGRAM-I/M240

SERVICE INFORMATION

As a result of the 1990 Clean Air Act Amendments, the Environmental Protection Agency (EPA) has mandated a more stringent vehicle emission testing program, known as I/M240. Most major metropolitan areas within the United States are designated as I/M240 areas, and the EPA's expectation is that these areas will establish a centralized test-only facility. While several states are operating an I/M program, other states have postponed, modified, or canceled their start-up dates (To confirm the requirements in your local area and obtain additional information, please contact your local environmental agency).

As envisioned by the EPA, an independent contractor would perform the test utilizing a computer driven dynamometer to test both the exhaust gases and the performance of the evaporative emission system. If a vehicle were to fail any portion of the test, the consumer would then take the vehicle to a separate repair facility of his or her choice for repair, and then return to the centralized test facility to retest the vehicle.

Based upon actual I/M240 testing, known good vehicles have failed the test under certain circumstances, primarily due to the operating temperature (below the norm) of the catalytic converter. These erroneous test "failures" were found to be caused by extended idling of the vehicle while waiting in line for the test, or the engine/exhaust system not being at normal operating temperature. In such situations, the catalytic converter would not be at its normal operating temperature, and the vehicle may fail the test for a high NOx condition.

These erroneous "failures" create a difficult situation for the dealer to diagnose. Because such a vehicle would be operating as designed, there would be no failed parts. The consumer might be frustrated by the erroneous "failure" and the dealer's inability to discover the reason for it. In actual retesting of several vehicles that initially failed for high NOx, a high percentage of these vehicles passed with an adequate margin without any repairs being performed after an adequate warm-up cycle prior to the beginning of the test was allowed.

This warming-up (or "preconditioning") of the catalytic converter brings the vehicle's emissions systems into the normal operating range, rendering a more accurate I/M240 test result. Typically, driving at freeway speeds for 5-10 minutes will ensure that the system is at normal operating temperature. Nissan is investigating this issue, and developments in this area will be communicated to dealers as they become available.

.....
Index # **041949**
.....

Of particular importance to Nissan, is the EPA's recent advice to all automobile manufacturers of instances where dealers have refused to repair vehicles that have failed the I/M test. The EPA reports that these refusals to repair are based primarily upon the dealers perceived lack of required diagnostic equipment, specifically dynamometers and/or an exhaust gas analyzers that measure NOx. The EPA, however, recognizes that very few (if any) dealers currently own a dynamometer, particularly the type used in the I/M test, together with an analyzer that measures NOx.

As described in the EPA letter, current I/M 240 tests are using **"very loose pass/fail standards...** Vehicles that fail will almost certainly have a significant malfunction in one or more of the major emission control systems which can be diagnosed and fixed using tools and methods that repair shops currently have.... Repair providers can apply standard diagnostic procedures to the fuel delivery, ignition, EGR, and other emission control systems when presented with a...(test) failure". With the exception of the preconditioning matter described earlier, the EPA information concerning diagnosis and repair is generally reliable for vehicles that fail the current I/M 240 test.

Nissan Motor Corporation U.S.A. strongly advises dealers against purchasing any additional emission related equipment at this time for the purposes of diagnosing Nissan vehicles. As indicated in the initial I/M240 dealer letter mailed in August, 1994, Nissan's existing emission systems diagnostic procedures and tools are adequate for dealers to correct and repair vehicles failing an I/M 240 test.

As the vehicle repair industry gains knowledge and experience with the I/M tests, corresponding improvements in repair technology are expected. There are new and innovative technological approaches currently under test and review. Nissan continues to monitor and evaluate I/M 240 testing & diagnostic requirements and will continue to advise dealers of developments as they become available.