

DIESEL SMOKE EMISSION TEST FOR MOTOR VEHICLES

LTO MEMORANDUM CIRCULAR NO. 94-192, March 01, 1994

Read online (full-text search, related cases, audio case brief): <https://batas.org/library/0551e0cbac42/>

In order to abate the excessive smoke emission from diesel fed motor vehicles in order to promote public health and environmental safety, and pursuant to the provisions of Section 34(1) of R.A. 4136 and Presidential Decree No. 1181, the following rules and regulations are hereby promulgated for the testing of all diesel fed motor vehicles in the National Capital Region.

SECTION 1. Scope - All diesel powered motor vehicles prior to registration in Metro Manila, shall be subjected to smoke and exhaust emission tests in the district office and MVIS in the case of "For Hire" vehicles. Those already registered and found to be emitting excessive smoke while operating in any public highway, shall be subjected to the same test by properly equipped law enforcement units.

SECTION 2. Smoke Emission Standard - The black soot content shall not exceed 2.5 m-1 light absorption coefficient or 48% in the Iyasaka bosch or opacity-type meter, or 66% in the Hartridge smoke emission unit (hsu) or any equivalent smoke emission tester.

SECTION 3. Test Procedure - The free acceleration feet procedure shall be observed strictly, to wit:

1. Test Condition of the Motor Vehicle:

- The test shall be carried out on a stationary vehicle at normal engine operating procedure with the combustion chamber not cooled or fouled by prolonged period of idling preceding the test.
- The exhaust system shall not have any hole through which the gases emitted by the engine may escape or be diluted.

2. Test Procedures and Smoke Opacity Measurement:

- Follow the opacity meter manufacturer's instruction in the proper installation and use, and check the accuracy/calibration before and after each test. Manual of Operation is enclosed for reference.
- Set the vehicle gear in neutral position and engage the hand brake effectively.
- Start the engine and warm up to normal operating temperature.
- Insert sampling probe at the tailpipe - see to it first that the tester is correctly plugged to the computer and the application program is running and ready to accept instruction and data entry.
- Accelerate the engine two to three times to remove soot deposits and other carbon particles.
- Depress the accelerator quickly not violently to obtain maximum delivery of fuel from the injection pump, maintain this position until maximum speed is reached for about three (3) seconds and the governor comes into action. Release the accelerator until the engine reaches idling speed.
- Repeat the procedure in par. "1" three times until the maximum opacity values register in consecutive free acceleration tests are stabilized. The values are regarded stabilized when three (3) consecutive readings are within a band width of 0.3 m-1 (equivalent to % in the bosch-opacity meter or 5 hsu in the hartridge meter) and do not

form a decreasing sequence. The test result shall be the arithmetic mean of the three stabilized values automatically given in the computer monitor read out, hard copy print out or the tester display.

- For motor vehicles with two or more exhaust pipes, measure the smoke opacity of all the exhaust pipes and take the reading of the highest reading.

- Seal the full-load screw of the injection pump/delivery system after the test.

SECTION 4. Forms - The computer generated form shall be utilized. In case of power outage or when the computer is not linked or operational with the tester, use the same format for manual generation and subsequent encoding in the computer later.

SECTION 5. Records - All data related to the vehicle and the tests conducted shall be encoded in the data diskette for uploading to the regional and central office computers. A copy of the test result print out shall be attached to the MVIR and another copy to the vehicle owner.

SECTION 6. Schedule of Test and Validity - Smoke emission tests on a motor vehicle may be conducted within a month prior to registration and shall be valid for a period of 30 days from the date of the tests for purposes of complying with the registration requirement.

SECTION 7. Test Fee - For every motor vehicle tested for smoke emission, the following schedule of fees are to be collected, to wit:

- a. FIFTY PESOS (P50.00) for motor vehicles under L, M, H, UV & TX denominations
- b. SEVENTY FIVE PESOS (P75.00) for motor vehicles under T or TB denominations
- c. FIFTY PESOS (P50.00) for every vehicle tested in the owner's garage in addition to the fees prescribed above

SECTION 8. Repealing Clause - All circulars, orders, memoranda and instructions contrary herewith are hereby deemed superseded and amended accordingly.

SECTION 9. Effectivity - This Memorandum Circular takes effect immediately.

Adopted: 1 Mar. 1994

(Sgd.) MANUEL F. BRUAN
Brig. Gen. (AFP) Ret.
Assistant Secretary

ABOUT BATAS.ORG

Study smarter at BATAS.org

The Philippine bar review and law-school companion built around how your brain actually remembers.

The complete Philippine law library - free for everyone.

More than 100,000 Supreme Court decisions, Republic Acts, and executive issuances - full-text searchable, browsable by category and year, and always free. No paywall, no login. This PDF came from it.

Audio case-brief lectures.

Any decision becomes a podcast-style lecture - facts, issues, ruling, and doctrine - with read-along highlighting and a hands-free presentation mode. Study while commuting, working out, or resting your eyes.

Bar review built on the science of memory.

Complete, sequenced courses for all eight bar subjects, narrated like podcasts and reinforced with retrieval practice and spaced review - the study techniques with the strongest evidence behind them.

The full law-school curriculum.

One subscription unlocks the entire J.D. curriculum - every subject, every lesson, with your progress tracked down to the paragraph so you can pick up exactly where you left off, on any device.

Mock exams that tell you where you stand.

Timed multiple-choice exams graded instantly, with per-subject score breakdowns and focus suggestions that point you at your weakest topics first.

A study planner that keeps you on pace.

Set your schedule and BATAS tells you every day whether you are on track for bar day - and exactly which lesson to take next.

Start free at <https://batas.org>

The law library is free forever - and your first lesson is one click away.

The text of this document is an official public record and remains in the public domain. Formatting, presentation, and compilation © 2026 batas.org.

Downloaded free from the batas.org Law Library. Share it freely - the library is free for every law student, bar reviewee, and practitioner.