

SECTION IV NOISE LEVELS

C-23. MUFFLERS AND EXHAUSTS SYSTEMS

Mufflers and exhaust systems not manufacturer- or factory-installed on vehicles or motorbikes that are suspected of exceeding the noise level of 90 decibels must be checked by the inspector using a handheld decibel-meter tester. If the vehicle is found to exceed the noise level in the links in subparagraph [a \(motor vehicles\)](#) or [b \(motor bikes\)](#) below, it will be rejected.

a. Motor vehicle: <http://www.unece.org/trans/main/wp29/wp29regs/r051r1e.pdf>.

b. Motor bikes: <http://www.unece.org/trans/main/wp29/wp29regs41-60.html>.

C-24. NOISE-LEVEL TESTING

a. The test in [paragraph C-23](#) will be conducted using scale “A” on the handheld decibel meter. The tester must be located **0.5 meters away**, at a **45-degree angle from the exhaust pipe**, and the instrument must remain level with the exhaust pipe as shown below. The exhaust noise level will be tested with the engine at idle and during acceleration up to half the permissible revolutions per minute (rpm) for the engine. **This test must be conducted at a distance greater than 50 meters from surrounding structures.** Figures [C-1 through C-3](#) show distances and angles for measuring noise.

b. [Table C-2](#) lists decibel maximum allowable values for different vehicle types.

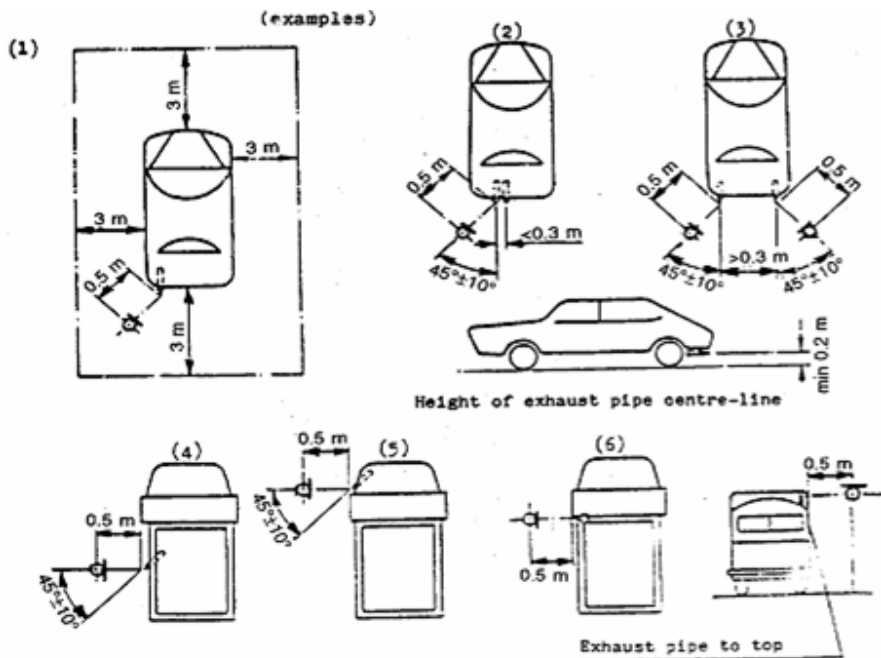


Figure C-1. Noise-Level Testing for Motor Vehicles With Three or More Wheels

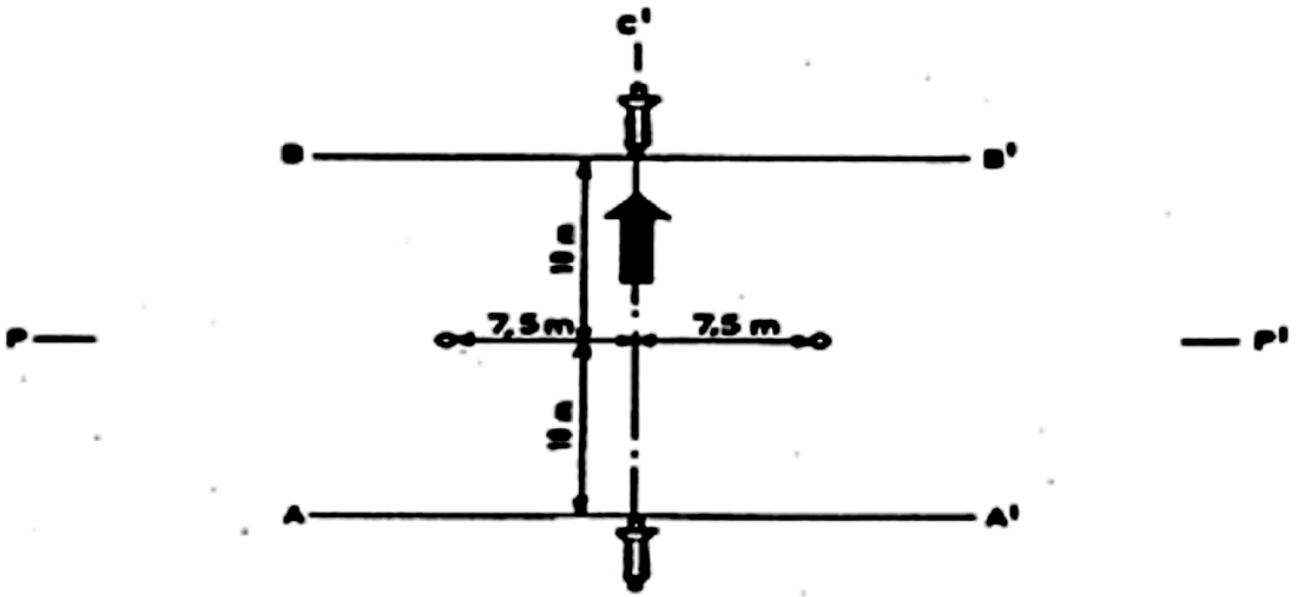


Figure C-2. Measuring Distances for Motorcycles in Motion

Measuring positions for stationary motor cycles
Height of exhaust pipe-centre-line

