

Why is California Inspecting Heavy-Duty Vehicles?

Only about 2% of California's vehicles are heavy-duty but they produce roughly 33% of the NO_x (nitrogen oxides, a key smog-forming compound) and 25% of diesel PM (diesel particulate matter, or toxic soot) from all mobile sources.



Roadside inspections help ensure that vehicles operating in California meet reasonable standards of maintenance and help protect the air we all breathe.

Other CARB regulations apply to heavy-duty vehicles. Visit arb.ca.gov/truckstop for more information or contact 866-6DIESEL (866-634-3735) or 8666diesel@arb.ca.gov.



Heavy-Duty Vehicle Inspection Program (HDVIP)

New Amendments Effective 7/1/2019

More Information

arb.ca.gov/enf/hdvp/hdvp.htm

The TruckStop

arb.ca.gov/truckstop

1-866-6DIESEL (1-866-634-3735)



California's Heavy-Duty Vehicle Inspection Program

CARB tests heavy-duty trucks and buses (gross vehicle weight rating over 6,000 pounds) for excessive smoke and tampering. Any heavy-duty vehicle operating in California, including vehicles registered in other states and foreign countries, may be tested.

All heavy-duty trucks and buses are subject to California's anti-smoke and tampering inspections.

Where the Tests are Performed

CARB inspectors may conduct unannounced roadside tests at various locales, such as:

- California Highway Patrol (CHP) weigh stations
- Randomly selected roadside locations
- Fleet facilities
- Border crossings

Roadside Anti-Smoke Inspections

The inspection team selects a vehicle for the test and the CHP directs it to a special inspection lane. The wheels are blocked for safety and the inspection is performed using the Society of Automotive Engineers' (SAE) J1667 snap-acceleration test procedure. Some key steps in the inspection include:

Visual Inspections: The inspector checks malfunction indicator lights, may conduct an on-board diagnostic (OBD) scan, and looks under the hood to check for visible signs of tampering, to record engine data, and to ensure the engine has the appropriate emission control label (ECL).

Snap-Acceleration Tests (SAE J1667 Protocol): The inspector positions a smoke meter just above, or places a probe inside, the vehicle's exhaust pipe. The driver then conducts pre-test snap accelerations by rapidly accelerating the engine three times, with the transmission in neutral, to clear the exhaust of loose particles. The driver then repeats the snap-acceleration test three times. The meter measures and averages the opacity of the smoke being emitted.

Allowable Levels of Smoke Opacity

Engines Equipped with a Diesel Particulate Filter (DPF)	
5% Opacity Limit	
Pre-2007 Model Year (MY) Engines without a DPF	
1997–2006 MY Engines	20% Opacity Limit
1991–1996 MY Engines	30% Opacity Limit
Pre-1991 MY Engines	40% Opacity Limit
Engines Equipped with a Level 2 Verified Diesel Emission Control Strategy (VDECS)	
20% Opacity Limit	
Two-Engine Cranes Driven by a non-DPF Off-Road Engine	
40% Opacity Limit	

Penalties for Violations

ECL Penalties: The penalty is \$300 for each violation (missing or illegible label).

Opacity and Tampering Penalties (other than a tampered ECL):
First Level Citation - If engine repairs are made and proof of repair is submitted to CARB within 45 days, the owner shall be subject to a minimum penalty of \$300. After 45 days, the penalty increases to \$800.

Second Level Citation - The penalty for any further violations within a 12-month period for the same vehicle is \$1,800 for each violation. In addition, proof of repair must be submitted and the vehicle must be retested by CARB in order to clear the citation.

In certain cases, the CHP may take a vehicle out of service for an outstanding citation if the penalty has not been paid, or if the vehicle has not been repaired. CARB can request the Department of Motor Vehicles place a hold on the California registration renewal until the violation is cleared.