

### GENERAL INFORMATION AND INSTRUCTIONS for the VEHICLE EMISSIONS CONTROL EQUIPMENT INSPECTION FORM

# PLEASE READ THIS DOCUMENT FOR INSTRUCTIONS TO ACCURATELY COMPLETE THE SEPARATE VEHICLE EMISSIONS CONTROL EQUIPMENT INSPECTION FORM.

You must use the separate Vehicle Emissions Control Equipment Inspection Form to conduct the Vehicle Emissions Control Equipment Inspection (visual inspection) on heavy-duty vehicles without on-board diagnostic (OBD) systems. The Vehicle Emissions Control Equipment Inspection Form is required by section 2198, title 13, California Code of Regulations (CCR), Heavy-Duty Inspection and Maintenance Regulation (HD I/M).<sup>1</sup>

#### **General Information: Vehicle Applicability**

The Vehicle Emissions Control Equipment Inspection must be performed on any non-OBD heavy-duty vehicle that receives a Notice to Submit to Testing starting in January 2023 under the requirements of the HD I/M Regulation.

When the HD I/M periodic testing requirements begin in 2024 timeframe, the Vehicle Emissions Control Equipment Inspection must also be performed on any non-OBD heavy-duty vehicle. Non-OBD vehicles are those with:

- 2012 and older model year diesel engines or hybrid systems with 2012 and older model year diesel engines; or
- 2017 model year and older alternative fuel engines or hybrid systems with 2017 and older model year alternative fuel engines.
- The vehicle is an on-road vehicle equipped with an off-road engine.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> The final HD I/M Regulation is contained in sections 2195 through 2199.1, title 13, CCR, on CARB's website at: https://ww2.arb.ca.gov/rulemaking/2021/hdim2021.

<sup>&</sup>lt;sup>2</sup> An off-road engine used in an on-road vehicle is a rare situation and must have been previously approved through CARB.



#### <u>Instructions for Completing the Vehicle Emissions Control</u> Equipment Inspection Form

### I. Registered Vehicle Owner, Vehicle/Engine, and HD I/M Tester Information:

- Fill in all requested information on the registered vehicle owner, the vehicle/engine, and on the HD I/M Tester conducting the inspection.
- Please write legibly.

#### II. Vehicle Emissions Control Equipment Checklist

#### **Emission Control Label (ECL):**

- Verify that the ECL is present and legible on the vehicle's engine. If so, record "Y" for Yes in the applicable column.
- If it is not present or not legible, record either "NP" or "NL" in the applicable column.
  - o "NP" means not present.
  - o "NL" means not legible.
- A missing or illegible ECL will result in the vehicle failing the Vehicle Emissions Control Equipment Inspection and the HD I/M Compliance Test.

#### Visual Inspection of the Emissions Control Components:

- Perform a visual inspection of all emissions control components listed on the ECL.
  - Refer to reliable sources of engine and vehicle technical specifications, such as service and repair manuals, or other reliable published sources for information on the proper configuration of each emissions control component.
  - Table 1 of these instructions includes more details for the components in the Vehicle Emissions Control Equipment Checklist (page 2 of the Form)



- Upon completing the inspection of each emissions control component, record
  the findings in the Vehicle Emissions Control Equipment Checklist (page 2 of
  the Form) using one of the following designations in the applicable column for
  each component.
  - o "P" if it is in its proper configuration.
    - Proper configuration means a system is installed as manufactured and there is no evidence of tampering.
  - o "M" if it is missing
    - Missing means all or part of an emissions control system has been removed from the vehicle.
  - "MO" if it is modified
    - Modified means an emissions control component that has been physically or functionally altered, replaced with a part that has been identified as "not legal for use in California on pollution controlled motor vehicles", altered with a replacement part used in a manner for which it was not defined, or altered using an addon part not approved by CARB.
  - o "D" if it is defective
    - Defective means an obvious condition noticed during the Vehicle Emissions Control Equipment Inspection, due to normal wear and tear, that would affect the operations of an emissions control part, but is not the result of tampering.
  - o "DI" if it is disconnected
    - Disconnected means an emissions control system is present, but a component required for the operation of the system has been disconnected (e.g., a hose, wire, belt, etc.).
- For components NOT listed on the ECL, record "N/A" in the applicable column.
  - "N/A" means not applicable because a component is not identified on the ECL and is not required.
- For components that may be listed on the ECL, but aren't included in the Vehicle Emissions Control Equipment Checklist on the Form, add the components and the inspection results into the "Additional Information" section at the bottom of the Vehicle Emissions Control Equipment Checklist.
- Any vehicle with a missing, modified, defective, or disconnected emissions control component or system will fail the Vehicle Emissions Control Equipment Inspection and the HD I/M Compliance Test.



**Table 1: Vehicle Emissions Control Equipment Descriptions** 

Fuel Injection System (DI, DDI)	Includes injectors, wiring, fuel pump, regulators, pumps, seals, covers, etc.
Exhaust Gas Recirculation (EGR)	Includes EGR valve, EGR cooler, controls
Turbo Charger/Super Charger and Charge-Air Cooler (TC/SC) (CAC)	Includes turbo charger or super charger, charge air cooler, actuators, etc.
Engine Control Module/Powertrain Control Module (ECM/PCM)	Includes computers, modules, wiring, controls, actuators, connectors, warning lights
Selective Catalytic Reduction System (SCR)	Includes filter, regeneration system (including 7 <sup>th</sup> injector), monitoring system, warning lights
Three-Way/Oxidizing Catalyst (TWC/OC)	Includes three-way and oxidizing catalysts, monitoring systems, warning lights
Diesel Particulate Filter (DPF) (PTOX)	Includes filter, regeneration system (including 7 <sup>th</sup> injector), monitoring system, warning lights
Sensors and Switches	Includes oxygen sensors, air fuel sensors, coolant temperature, air intake temperature, barometric pressure, intake manifold pressure, etc.
Verified Diesel Emissions Control Strategy (VDECS)	SEE SECTION III. BELOW FOR MORE INFORMATION ON VDECS
Other Emissions Control Systems (ECS)	Includes intake and exhaust manifolds, air filter including flow indicator, crankcase controls, related hoses, connectors, brackets, and hardware; other emissions-related components for a particular vehicle/engine as determined from the manufacturer's specifications, emission control label, certification data, or published vehicle parts manuals



### III. Inspection of a Verified Diesel Emissions Control Strategy (VDECS)

A diesel vehicle with a 2006 or older model year engine may be equipped with a VDECS, often referred to as a retrofit DPF, that requires additional inspection steps to verify HD I/M compliance. Please follow the steps below to complete the VDECS section of the Form.

- Determine whether the vehicle has a VDECS and circle "Yes" or "No" in the applicable section on the Form. If "No," skip this section on the Form and move on to signing and submitting the form as instructed in section IV below.
- For vehicles equipped with a VDECS, there should be two VDECS labels: one located on the VDECS itself and the other located on the engine (separate from the ECL). Use these labels to determine the Diesel Emission Control Strategy Family Name, the VDECS manufacturer name, and the product serial number. Record this information from both labels in the applicable section on the Form. LABEL #1 is the VDECS label on the VDECS; LABEL #2 is the VDECS label on the engine (separate from the ECL).
  - Example of a Diesel Emission Control Strategy Family Name is shown with red underline in the image below.
  - Example of a VDECS manufacturer name is the second element, circled in red, in the Diesel Emission Control Strategy Family Name. In this example, DON represents Donaldson.
  - Example of a product serial number is the alphanumeric name after "S/N" in the image below.



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- Perform a visual inspection of the VDECS as you would an original equipment DPF and record the findings in the VDECs column of the Vehicle Emissions Control Equipment Checklist using the appropriate designation as shown in section II of these instructions.
- **Be advised:** It is illegal to use a non-verified diesel retrofit device or install a VDECS on an engine/vehicle for which it is not verified. CARB staff will determine that trucks in these conditions will fail the Vehicle Emissions Control Equipment Inspection, the HD I/M Compliance Test, and may issue a citation for tampering.

## IV. Instructions for Submitting the Vehicle Emissions Control Equipment Inspection Results to CARB

Only credentialed HD I/M testers may perform the Vehicle Emissions Control Equipment Inspection and submit this form. Forms must be sent to CARB via email at: HDVehicleenforcement@arb.ca.gov.

- The subject line of the email to CARB must contain: "Non-OBD Vehicle Compliance Test; VIN; HD I/M Tester ID"
  - Example: Non-OBD Vehicle Compliance Test;
     JN3MS37A9PW202929; IB032459
- Scan the completed and signed Vehicle Emissions Control Equipment Inspection Form and include as an attachment to the email. Note that the Form has two pages and you must scan and submit both pages to CARB.
- If applicable, scan, upload, and attach the accompanying smoke test opacity receipt or electronic test results (if the smoke meter has the capability of uploading results directly to your computer) in the same email.
- Within 72 hours, CARB will send an email to the HD I/M Tester confirming the result of the Non-OBD Vehicle Compliance Test.