

State of California

Air Resources Board

Proposed Modifications to
Procedures for Exemption of Add-On and Modified Part(s)
for On-Road Vehicles/Engines

NOTE: The proposed amendments to this document are shown in underline to indicate additions and strikeout to indicate deletions compared to the test procedures as adopted June 29, 2021. Existing intervening text that is not amended in this rulemaking is indicated by "*****".

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I. APPLICABILITY

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II. DEFINITIONS

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“Drivability” means vehicle or engine performance during in-use driving conditions such as acceleration, cruise, idle, or cold-start operation.

“Electric Vehicle” or “EV” means a motor vehicle that is powered solely by an electric motor drawing current from a rechargeable energy storage system, such as from storage batteries or other portable electrical energy storage devices, including hydrogen fuel cells, provided that:

- (1) The vehicle is capable of drawing recharge energy from a source off the vehicle, such as residential electric service; and
- (2) The vehicle does not have an onboard combustion engine or generator system as a means of providing electrical energy.

“Electric Vehicle Conversion” or “Electric Vehicle Conversion Kit” is a set of parts that converts a previously certified gasoline-, diesel-, or alternative-fueled vehicle to an electric vehicle.

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“Fill Pipe Testing” refers to the procedures set forth in “Specifications for Fill Pipes and Openings of 2015 and Subsequent Model Motor Vehicle Fuel Tanks,” as of October 1, 2019 (last amended May 31, 2019), incorporated by reference herein.

“Fuel-Fired Heater” means a fuel-burning device that creates heat for the purpose of warming the passenger compartment of a vehicle but does not contribute to the propulsion of the vehicle.

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III. APPLICATION SUBMISSION REQUIREMENTS

California Air Resources Board (CARB) requires a manufacturer to complete all the requirements listed in this section when requesting an exemption for a device.

(a) Category Selection

A manufacturer must choose **only one** of the following categories that best describes the device or request for exemption. If an application is outside the scope of the selected category, the Executive Officer will redirect the application to the appropriate category.

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(9) Category IX – Add-On or Modified Part(s) Not Covered by Categories II through VIII or Category X.

Add-on or modified part(s) that do not fit the criteria set forth in Categories II through VIII above or Category X below.

(10) Category X – Electric vehicle conversions. This category applies only to EV conversions that have no sources of combustion (e.g., fuel-fired heater) and emit no regulated emissions. The requirements for EV conversions are specified in Sections VI and XI of this procedure. Sections III(b) through V and VII through X are not applicable to EV conversions, except as specified in Section XI.

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VI. CRITERIA FOR CATEGORY I APPLICATION REQUESTS

The Executive Officer shall use good engineering analysis, along with required information submitted by the manufacturer, to justify a Category I application request. If the request does not meet the criteria specified in Sections (a-d) below, the Executive Officer will redirect the application to the appropriate category, the manufacturer will need to supply additional information to meet the requirements of the new category.

(a) Part Number(s) or Name Change(s)

If a manufacturer has a previously issued exemption Executive Order, and seeks only to add part numbers or name change(s) to the Executive Order, the application will be evaluated for the design (excluding exterior appearances such as color), fit, and function of the additions to those which are currently exempted. A new Executive Order will be issued on the basis of similarity without the need for additional testing.

(b) Model-Year Additions on Carryover Vehicle(s) or Engine(s)

If a manufacturer has a previously issued exemption Executive Order and has requested to add model-years to the same vehicle or engine coverage, the Executive Officer shall evaluate applicable emission certification standards, worst case vehicle(s) or engine(s) tested, other information used in prior exemption Executive Order(s), and whether the emissions control system has changed and emissions would be negatively impacted for the requested additional model years. In the case of an EV conversion kit, the Executive Officer shall instead evaluate the information used in prior exemption Executive Orders and whether the EV conversion kit has changed.

The Executive Officer shall grant the request upon determining that the findings leading to the initial exemption Executive Order approval are valid for the added model years. The device(s) must maintain the same design (excluding exterior appearances, such as color), fit, and function as described in prior exemption Executive Order(s). A new exemption Executive Order will be issued without the need of additional testing. New part numbers can be assigned to the model-year additions only.

(c) Private Label(s) or Extending Coverage to Subsidiaries

Manufacturers who have requested to extend all or part of their previously issued exemption Executive Order(s) to another manufacturer or to its own subsidiaries must request approval for such extensions from the Executive Officer. In reviewing the request, the Executive Officer shall evaluate design control and if the part(s) or EV conversion kit(s) are identical in design (excluding exterior appearances, such as color), fit and function to those currently exempted. If all requirements are met, a new Executive Order will be issued to the marketing manufacturer or a new Executive Order will be issued to the manufacturer with the added marketing manufacturer listed in the Executive Order. Private label(s) and subsidiaries can use different marketing names and part numbers for this

request. The manufacturer with design control maintains all responsibility for emissions compliance.

(d) Consolidation of Executive Orders

- (1) A manufacturer can consolidate its previously issued exemption Executive Orders into a new issued exemption Executive Order when all of the following criteria are met:
 - (A) Device name is the same on all exemption Executive Orders to be consolidated
 - (B) Applicable OEM is the same on all exemption Executive Orders, except when combined under the same test group or engine family, to be consolidated. EV conversion kits are exempt from this requirement.
 - (C) Device description is the same on all exemption Executive Orders to be consolidated
 - (D) All information provided associated with the exemption application as approved by the Executive Officer is still applicable to the devices to be consolidated.
- (2) A manufacturer, at the time of application submission, can request CARB to provide a consolidated exemption Executive Order when application submissions share the criteria listed in (A-C) above. The applications must be submitted at the same time when such a request is being made. Each application submission will be evaluated separately.

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XI. REQUIREMENTS FOR CATEGORY X APPLICATION REQUESTS

- (a) This section applies only to EV conversions that have no sources of combustion (e.g., fuel-fired heater) and emit no regulated emissions. This section does not apply to EV conversions of vehicles originally certified as electric vehicles.

(b) Application Submission Requirements

(1) Application Requirements. The application must contain:

- (A) The information required by Section III(b)(1).
- (B) Vehicle coverage. Specify vehicles or engines that the manufacturer is including in the application to be covered by the Executive Order.
- (C) List of parts that comprise the EV conversion kit(s). Manufacturers may choose to identify the part numbers associated with each part. Manufacturers may choose to identify each kit number covered by the application.
- (D) Generic installation guide that includes installation instructions, diagrams, pictures, and schematics for proper installations. Manufacturers may choose to provide more specific installation guides. Installation guides must clearly indicate that all combustion or regulated emissions sources must be removed prior to installation of the EV conversion kit.
- (E) General description of an EV conversion kit to assist CARB staff in understanding its operation, including technical operating principles, dimensional drawings and schematics of a kit, and material specifications.
- (F) The requirements of Section III(b)(6) apply to EV conversions.
- (G) The requirements of Section III(b)(7) apply to EV conversions.
- (H) A signed attestation by the manufacturer of the following: That the information is true, accurate, and complete, and that to the best of the manufacturer's knowledge, installation of the EV conversion kit on a covered vehicle or engine will not cause regulated emissions to increase beyond the certification standards to which the vehicle or engine was certified including any noxious or toxic matter.

(2) The requirements of Section III(c) apply to EV conversions.

(3) Vehicle or Engine Coverage Requirements

(A) Applications for an exemption must be prepared and organized according to the categories listed below:

1. Passenger cars
2. Any vehicle with a GVWR of 8500 pounds or less that does not meet the definition of passenger car
3. Any vehicle with a GVWR of 8501 through 14,000 pounds
4. Any vehicle with a GVWR over 14,000 pounds
5. Any vehicle, excluding motorcycles, certified by CARB or US EPA for on-road use that is not included in any of the aforementioned categories

(B) If applicable, a list of vehicle or engine models the manufacturer voluntarily excludes from the submitted application.

(c) Criteria for EV Conversion Application Requests

The criteria for evaluating an exemption application are set forth below.

- (1) The converted vehicle must have no source of regulated emissions.
- (2) The EV conversion will be evaluated based on an engineering analysis of the application, any other submitted materials, the regulated emissions potential of the technology, and that the application meets all other applicable requirements of these procedures.

(d) Action on Application

The Executive Officer shall utilize the manufacturer's test data (if applicable), information submitted with the application, and the engineering analysis conducted to determine if the EV conversion meets the requirements of these procedures.

(e) Labeling

The EV conversion manufacturer shall provide with each EV conversion kit sold and covered by the Executive Order a product information label, minimum of 12-point font, and complete instructions for its installation of the label in an under-hood location that is readily visible to the average person. The product information label shall contain the following: One unique product name as listed on the exemption Executive Order, CARB Executive Order number using the format "CARB B-XXX," and manufacturer's name and contact information. Manufacturers can add

one of the following to the label: reference numbers, device numbers, or kit part numbers; a single category may include multiple numbers. The label installation instructions shall contain a warning to the consumer in bold lettering that the product information label is required to aid inspection of the vehicle. The product information label shall be designed to be durable in material, wording, and method of adhesion for the useful life of the vehicle or engine; the manufacturer must provide documentation or an engineering analysis to support compliance with this requirement.

(f) Issuing an Exemption Executive Order

If the Executive Officer determines that the EV conversion kit will not reduce the effectiveness of the emissions control system, will not result in emissions that exceed the applicable model-year emission standards or comparative baseline levels for the vehicles and/or engines listed in the application, and that it meets all the requirements set forth in these procedures, the Executive Officer shall issue an Executive Order exempting the EV conversion(s) from the prohibitions of Vehicle Code Section 27156. The Executive Officer's determination will be based on the manufacturer's test data (if applicable), information submitted with the application, and the engineering analysis conducted. The manufacturer shall not: 1. use the Executive Order as an endorsement or approval by CARB, 2. market the EV conversion(s) using any identification other than that shown on the Executive Order, 3. Apply the Executive Order to parts sold prior to the date shown on the Executive Order, 4. market the EV conversion kit(s) for an application other than those listed on the Executive Order, 5. offer for sale, or advertise any component of an applicable EV conversion kit as an individual device, or 6. advertise the product as capable of reducing emissions.

The Executive Officer shall deny the applicant's exemption request if the EV conversion does not meet all the requirements set forth in these procedures. If the applicant's exemption request is denied, the Executive Officer shall convey by letter notice of and the reasons for denial.

Violation of any of the conditions contained in these procedures shall be grounds for revocation of the granted Executive Order. The Executive Order can be revoked only after a 10-day written notice of intention to revoke the order, during which period the holder of the order must request in writing a hearing to contest the proposed revocation. If a hearing is requested, it shall be held within 10 days of receipt of the

request and the order will not be revoked until a determination is made after the hearing that grounds for revocation exist.

CARB reserves the right in the future to review the exemption Executive Order to assure that the exempted EV conversion kit(s) continues to meet the standards and procedures of Title 13, California Code of Regulations, Section 2222, et seq.

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