Purpose and Rationale

1962.8. Warranty Requirements for Zero Emission Vehicles and for Batteries in Plug-in Hybrid Electric Vehicles for 2026 and Subsequent Model Year Passenger Cars and Light-Duty Trucks.

Subsection 1962.8(a) - Applicability

Purpose

Subsection (a) specifies which vehicles the requirements contained in section 1962.8 are applicable to: 2026 and subsequent model year zero-emission vehicles and batteries in plug-in hybrid electric vehicles certified for sale in California.

Rationale

This subsection is necessary in order to define which model years and vehicle types the regulation is applicable to. The applicability subsection clarifies that the requirements contained in section 1962.8 are applicable to 2026 and subsequent model year zero-emission vehicles and plug-in electric vehicles certified for sale in California. These requirements are part of the ZEV assurance measures described in Chapter III.D of the Staff Report.

Subsection 1962.8(b) – Definitions

Purpose

Subsection (b) adds appropriate definitions for terms used in this section 1962.8 in addition to those defined in related regulations at CCR, title 13, section 1962.4 and its incorporated test procedures.

Rationale

This subsection is necessary to provide clarity and ensure consistency in the meaning of the terms used throughout this regulation and how requirements must be met.

"Authorized service network" is necessary to define, as it applies to section 1962.8, as all service and repair providers that are warranty stations in order to ensure there is a place for consumers to have warranty repairs conducted.

"Battery" is necessary to define the term as it applies to this section 1962.8 to clarify which battery the warranty requirements apply to (an electrical storage device used to provide tractive power to a BEV and PHEV), as it differs from other definitions for battery. These battery warranties do not apply to smaller accessory batteries that are not used to propel electric vehicles.

"Propulsion-related part" is necessary to include because such parts are subject to warranty requirements under this section. The definition gives examples of such components but also is broad enough to include each component when it is integrated based on vehicle designs in the future.

"Screened warranty claim" is necessary to define because enforcement of the regulation is linked to this term. The rationale for defining screened warranty claims as claims for an adjustment, inspection, repair or replacement of a specific propulsion-related part of a battery within the warranty period is to be able to track on a component level the number of valid claims made to a manufacturer.

"Unscreened warranty claim" is necessary to define to differentiate from a "screened warranty claim". "Unscreened warranty claim" defined as those made to a manufacturer whether or not valid ensures manufacturers have a way to not treat all warranty claims as valid.

"Warrantable condition" is necessary to include to define the condition that triggers a vehicle manufacturer to take corrective action.

"Warranty period" is necessary to define the period in years and mileage that the vehicle would be covered by the warranty provisions. The warranty period is clarified as beginning on the date the vehicle is delivered to the purchaser or placed in service. The warranty period does not begin at the time of production, or delivery to the dealership. This makes the warranty coverage clear to the ultimate purchaser.

"Warranty station" is necessary to define as a facility or entity authorized by the vehicle manufacturer to perform warranty repairs to clarify that this includes franchised dealerships and other owned or contracted facilities/entities, or those otherwise authorized to service the subject vehicles.

"Vehicle manufacturer" is necessary to make explicit the regulated party that is subject to this regulation and must provide the warranty for their vehicles.

"Vehicle owner" is necessary to define because it identifies the person a manufacturer is required to notify under this section.

Subsection 1962.8(c)(1)(A) and (B) Propulsion-Related Part Warranty

Purpose

The purpose of this subsection is to set minimum warranty requirements for coverage for propulsion related parts. These parts, as defined earlier in the regulation, shall be warranted to the ultimate purchaser and subsequent purchaser to be designed, built, and equipped to conform to all applicable regulations and free from defects. This subsection also defines the timeframe in mileage or years that the manufacturer must warrant these parts.

Rationale

This provision mimics the defects warranty that conventional vehicles are subject to for 3 years or 50,000 miles or 7 years 70,000 miles for high-priced propulsion-related parts, whichever comes first. To expand the ZEV market and achieve the needed emissions reductions, it is important to offer a similar defect warranty. Failure of such components can have detrimental effects on the efficiency, performance, range, or drivability of the ZEV. This gives the consumer confidence in the ZEV and an avenue to get defective propulsion-related parts replaced. Further background for this proposal is explained in the ISOR Section III.D2.

Subsection 1962.8(c)(2) and (c)(2)(A) High-Priced Propulsion-Related Parts

Purpose

This subsection establishes how a manufacturer identifies in its certification application high-priced propulsion-related parts for each model year. The parts are designated high-priced based on cost threshold calculated by CARB using the formula provided in this subsection. This section also directs manufacturers to calculate the individual replacement cost of the part by determining the retail cost to the owner including cost of the part, labor, and standard diagnosis and compare the cost to the cost threshold to determine if it is a high-priced propulsion-related part.

Rationale

This subsection in needed to define and describe how to determine high-priced population related parts because these parts have a longer warranty than other propulsion-related parts. Because these parts are costly, they come with a longer warranty period of 7 years or 70,000 miles. To expand the ZEV market and achieve the needed emissions reductions, it is important to offer similar defect warranty to the conventional vehicles. This gives the consumer confidence in the ZEV and an avenue

to get defective parts replaced. The proposed high-priced part calculation is identical to the high-priced part calculation in CCR, title 13, section 2037 for manufacturers' emissions warranty requirements. This maintains consistency across warranty requirements and avoids undue burden on the regulated entities.

Subsection 1962.8(c)(2)(B)

Purpose

The purpose of this subsection is to require the cost threshold to be revised annually, based on the highest-cost metropolitan area. In cases where the Consumer Price Index is not yet available, this subsection also makes explicit how to calculate high-priced parts using an average of monthly nationwide urban consumer price indexes for the most recent 12-month period.

Rationale

This subsection is necessary to update the cost threshold each year to reflect inflation in California, ensuring the appropriate parts are covered by the high-priced parts warranty. The proposed subsection is in line with CCR, title 13, section 2037, which contains emissions-related warranty requirements for manufacturers. This maintains consistency across warranty requirements and avoids undue burden on the regulated entities.

Subsection 1962.8(c)(2)(C)

Purpose

The purpose of this subsection is to provide an explanation of how a manufacturer is to determine the replacement cost of a part based on the retail cost it charges to a vehicle owner in the highest metropolitan area of California.

Rationale

This subsection is necessary to make explicit how manufacturers are to determine the cost of replacement parts. The proposed subsection is in line with CCR, title 13, section 2037, which contains emissions-related warranty requirements for manufacturers. This maintains consistency across warranty requirements and avoids undue burden on the regulated entities.

Subsection 1962.8(c)(3) Battery Warranty

Purpose

The purpose of subsection (c)(3) is to require a minimum warranty for traction batteries on battery electric vehicles and plug-in hybrid vehicles. The manufacturer shall warrant to the purchaser a battery free of defects in materials and workmanship which causes deterioration of the battery state of health to be less than 70% for 2026 through 2030 model years and 75% for 2031 and subsequent model years, for a period of 8 years or 100,000 miles, whichever comes first.

Rationale

Battery warranty is important to purchasers because it is the most expensive part of the vehicle and expensive to repair and replace. Failure or undue degradation of the pack can affect the usefulness and drivability of a BEV and cause individual drivers to stop using the vehicle, revert to gasoline vehicles, or avoid initial or subsequent purchase of the technology for fear of future failure. With the battery warranty defined in this subsection, the manufacturer is liable to honor claims that fall below the threshold of 70% state of health in the timeframe, 8 years or 100,000 miles for 2026 through 2030 model years, and 75% state of health for 2031 and subsequent model years. This will bolster consumer confidence in ZEVs and help sustain and expand ZEV market growth. Discussed in detail in Section III.D.3 of the Staff Report, the state of health thresholds and the warranty period reflect the best-in-class battery warranties offered on current model year BEVs and plug-in hybrids.

Subsections 1962.8(c)(4)(A) through (L)

Purpose

The purpose of these subsections is to provide interpretation of warranties other than exclusions in subsection (c)(7). These subsections ensures that if a propulsion-related part is not scheduled for replacement as required maintenance, a replaced part shall be warranted for the remaining warranty period. These subsections do not allow a manufacturer to shorten the warranty period once a part is replaced. The purpose is also to provide boundaries to the manufacturer on charging customers for propulsion-related part of battery repair or replacement. The manufacturer or manufacturer's authorized service network shall process warranty claims. The manufacturer must also keep a supply of parts or batteries and perform warranty repairs in a timely manner.

Rationale

These subsections are needed to define the responsibilities of the manufacturer. These provisions mirror emissions-related warranty provisions in CCR, title 13, section 2037(d) for conventional vehicles, maintaining consistency across warranty requirements and avoiding undue burden on the regulated entities. These are needed for propulsion-related parts of battery electric vehicles and batteries to make sure the consumer has confidence in these vehicles and can get the repairs needed for these parts in a timely manner and covered by the vehicle manufacturer.

Subsection 1962.8(c)(5)

Purpose

The purpose of this subsection is to require manufacturers provide to the consumer written instructions for the maintenance of the vehicle.

Rationale

The required operation, maintenance, repair, and warranty information for vehicle owners is needed to provide requisite information to the owner for when to schedule maintenance for each covered part. This can help determine if the vehicle was neglected by the owner and determine if any defect parts are covered under warranty. The proposed subsection is in line with CCR, title 13, section 2037, which contains emissions-related warranty requirements for manufacturers. This maintains consistency across warranty requirements and avoids undue burden on the regulated entities.

Subsection 1962.8(c)(6)

Purpose

The purpose of this subsection is to have each manufacturer provide a list of "high-priced" propulsion-related parts to a vehicle owner.

Rationale

The reason to have a list of high-priced parts submitted with the vehicle at the time of its delivery to a dealership is to make sure the consumer and CARB is aware which parts fall under this category and are subject to a longer 7-year or 70,000-mile warranty period, as opposed to the 3-year or 50,000-mile period for all other parts. The proposed subsection is in line with CCR, title 13, section 2037, which contains

emissions-related warranty requirements for manufacturers. This maintains consistency across warranty requirements and avoids undue burden on the regulated entities.

Subsection 1962.8(c)(7) Exclusions

Purpose

The purpose of this subsection is to provide exclusions from warranty coverage in cases where the part failure was a result of abuse, neglect or improper maintenance.

Rationale

The manufacturer is responsible for replacing or repairing propulsion-related parts under warranty unless they have been abused, neglected, or improperly maintained which causes the need to repair or replace these parts. This is necessary to protect the manufacturer from covering repair or replacement directly resulting from improper use or maintenance by the vehicle owner. The proposed subsection is in line with CCR, title 13, section 2037, which contains emissions-related warranty requirements for manufacturers. This maintains consistency across warranty requirements and avoids undue burden on the regulated entities.

Subsections 1962.8(d)(1)-(4) ZEV Warranty Information Reports

Purpose

These subsections impose warranty information reporting requirements on manufacturers. Subsection (d)(3) describes the information that must be included in the zero-emission vehicle warranty information report (ZWIR). This subsection also identifies the division within CARB receiving the manufacturer's ZWIRs and the timeline by which it must be filed.

Rationale

These provisions are necessary to require the same warranty reporting procedures that are required for ICEVs. This subsection is included to mimic the emission warranty information report requirements for ICEVs as provided in CCR, title 13, sections 2144, but modified to be appropriate for ZEVs. This maintains consistency across warranty requirements and avoids undue burden on the regulated entities.

As part of clarifying that California warranty requirements apply to zero-emission vehicles, the proposed amendments are necessary to work with the recall provisions apply to zero-emission vehicles. It is necessary to identify the specific Division to which the manufacturer submits the zero-emission vehicle warranty information

reports and a list of data that needs to be submitted by test group and when so that there is a procedure set up for the manufacturer for these reports and these reports include the requisite information for CARB. Submitting reports 25 days after the close of a calendar quarter provides sufficient time to gather data and submit the reports and sets up a process for updating these reports as more vehicles come in with a warranty claim.

Subsections 1962.8(e)(1) through (4) ZEV Field Information Reports

Purpose

The purpose of subsection (e) is to require manufacturers to submit a zero-emission vehicle field information report (ZFIR) 45 days after a ZWIR report indicates that the unscreened warranty claims for a specific emission-related component is found to exceed the 4-percent or 25-in-number threshold, whichever is greater. Subsection (e)(2) describes the information that must be included in the ZFIR. A division name is provided with the information fields and timeline by which it must be filed.

Rationale

These provisions are necessary to require the same warranty reporting procedures that are required for ICEVs. This subsection is included to mimic the emission warranty information report requirements for ICEVs as provided in CCR, title 13, sections 2145, but modified to be appropriate for ZEVs. This maintains consistency across warranty requirements and avoids undue burden on the regulated entities.

Manufacturers will be required to make modifications to the failure rate and update the ZFIR, and the new failure rate must be based on an analysis of a new set of parts. Requiring manufacturers to analyze a new set of parts will ensure that the new analysis will be based on more recent information and would more accurately represent the performance and status of parts that are currently in-use.

Subsection 1962.8(f) ZEV Information Reports

Purpose

Subsection (f) describes the ZEV information report (ZIR). A ZIR must be submitted within 90 days after a ZFIR or subsequent report update submitted in accordance with subsection (e) indicates that a cumulative total of failures for a specific propulsion-related part or battery in a test group exceeds the 4-percent or 25-in-number threshold. It also describes the information that is required to be included in the ZIR and who it must be submitted to. There is also an exemption to filing a report if the vehicle manufacturer has committed to perform a corrective action.

Rationale

These provisions are necessary to require the same warranty reporting procedures that are required for ICEVs. This subsection is included to mimic the emissions information report requirements for ICE vehicles as provided in CCR, title 13, sections 2141 and 2146, but modified to be appropriate for ZEVs. This maintains consistency across warranty requirements and avoids undue burden on the regulated entities.

Subsection 1962.8(g) Finding of Nonconformance

Purpose

The purpose of this subsection is to specify that the threshold of failure at which a test group or subgroup of a test group will be subject to corrective action is 4 percent or 50 failures. Corrective action, including recall, is required unless the Executive Officer determines from the ZIR that corrective action is unnecessary based on criteria described in subsections 1962.8(g)(2) and 1962.8(g)(3).

Rationale

This subsection is needed to provide a process for evaluating nonconformance and the need for corrective action similar to ICEVs as set forth in CCR, title 13, sections 2148 and 2143, but modified to be applicable to ZEVs. In particular, adding subsection (g)(5) is necessary to follow the same process of determination and notification of nonconformance and developing and carrying out corrective actions as already provided in section 1962.7 (in-use ZEV testing and compliance). This maintains consistency across warranty requirements, including threshold of nonconformance and when a manufacturer can expect a corrective action, as well as ZEV nonconformance processes, and avoids undue burden on the regulated entities.

Subsection 1962.8(h) Alternative Procedures.

Purpose

The purpose of this subsection is to allow a vehicle manufacturer to use an alternative procedure for tracking, analyzing, and reporting warranty claims. The alternative procedure may be used upon approval by the Executive Officer.

Rationale

This subsection is necessary to provide flexibility to vehicle manufacturers in the procedures for tracking, analyzing and reporting warranty claims, given that the vehicle manufacturer satisfies the criteria in subsection (h)(1). Allowing an alternative procedure mirrors the provisions for ICE vehicles in CCR, title 13, section 2142, with

slight modifications to be suitable for ZEVs. This maintains consistency across warranty requirements and avoids undue burden on the regulated entities.

Subsection 1962.8(i) California ZEV Warranty Statement

Purpose

The purpose of this subsection is to require vehicle manufacturers to provide a prescribed ZEV warranty statement with each new vehicle.

Rationale

This subsection is necessary to inform the consumer of the manufacturer's obligations with respect to the warranty coverage and of the consumer's rights to have repairs made for conditions covered by the warranty at no cost to the consumer. This subsection is included to mimic the emission warranty statement for ICEVs as provided in CCR, title 13, sections 2039, but modified to be appropriate for ZEVs. This maintains consistency across warranty requirements, ensures consumers are aware of the vehicle's warranty coverage, and avoids undue burden on the regulated entities.

Subsection 1962.8(j) Records

Purpose

The purpose of this subsection is to specify that vehicle manufacturers must maintain any records related to ZEV Warranty Information Reports, ZEV Field Information Reports, and ZEV Information Reports for a period of no less than two years after the warranty period has expired. These records must be made available to the Executive Officer upon request.

Rationale

This subsection is needed in order to ensure that warranty-related records are not disposed of prematurely. In the event that CARB staff investigates warranty-related issues or certain types of component failures, adequate records of warranty claim and repair history are necessary. This requirement is in line with the warranty recordkeeping requirements for ICE vehicles as set forth in CCR, title 13, sections 2119 and 2169.7, but modified to be appropriate for ZEVs. This maintains consistency across warranty requirements and avoids undue burden on the regulated entities.

Subsection 1962.8(k) Vehicle Owner Obligations

Purpose

The purpose of this subsection is to provide that the vehicle owner may be responsible for ensuring that scheduled maintenance is performed on the vehicle as instructed by the manufacturer. However, the owner's failure to ensure scheduled maintenance is performed cannot, in and of itself, be grounds for disallowing a warranty claim.

Rationale

This subsection is necessary to clarify that the vehicle owner, not the manufacturer, may be responsible for ensuring scheduled maintenance occurs, while also preserving an owner's ability to seek a warranty claim even if they miss scheduled maintenance. These provisions are similar to the vehicle owner obligation provisions for ICE vehicles as set forth in CCR, title 13, section 2040. This maintains consistency across warranty requirements and avoids undue burden on the regulated entities.

Subsection 1962.8(I) Mediation and Finding Warrantable Conditions

Purpose

The purpose of this subsection is to allow a vehicle owner to request mediation by the Executive Officer as provided for in CCR, title 13, section 2041 for an unresolved warranty dispute between the vehicle owner and the vehicle manufacturer or its authorized service network.

Rationale

This subsection is needed to allow a mechanism for mediation of unresolved ZEV warranty disputes, using a process already established for ICE vehicles in CCR, title 13, section 2041. This maintains consistency across warranty requirements and procedures and avoids undue burden on the regulated entities.

Subsection 1962.8 (m) Electronic Submittal

Purpose

The purpose of this subsection is to define the mechanism by which manufacturers must submit documents, reports, information, and requests (hereinafter, "documents") under the proposed regulations. The subsection provides that manufacturers must submit documents electronically using CARB's Document Management System, an electronic system that allows manufacturers to send documents to CARB via the internet.

Rationale

This subsection is necessary to provide manufacturers with a designated mechanism to submit required or optional documents under the proposed regulations. It is necessary for CARB to require manufacturers to submit documents under this section through CARB's Document Management System, which manufacturers already must use to submit certification documents to CARB, because it supports efficient transmittal and review, provides manufacturers with a consistent submittal mechanism across regulations, and reduces the bulk of paper. It is necessary to provide the website address https://ww2.arb.ca.gov/certification-document-management-system, which provides a detailed explanation of the system, instructions, support information, and a prominent link to log-in page for the system at https://ssl.arb.ca.gov/edms, rather than providing the address of the log-in page, which lacks these explanatory and support features.

Subsection 1962.8 (n) Severability

Purpose

This subsection is necessary to establish that if one or some of the provisions in the proposed regulation are deemed unenforceable or invalid, the remainder shall continue to be in effect.

Rationale

This subsection is necessary to preserve the overall intent of what the proposed regulation is set to achieve, even if unforeseen issues arise with enforcing any individual term of the proposed regulation.