



Air Resources Board



Matthew Rodriguez
Secretary for
Environmental Protection

Mary D. Nichols, Chairman
9480 Telstar Avenue Suite 4
El Monte, California 91731 • www.arb.ca.gov

Edmund G. Brown Jr.
Governor

July 9, 2014

MANUFACTURERS ADVISORY CORRESPONDENCE (MAC) 2014- 01

TO: ALL MANUFACTURERS OF

- PASSENGER CARS (PC)
- LIGHT-DUTY TRUCKS (LDT)
- MEDIUM-DUTY VEHICLES (MDV) AND ENGINES USED IN SUCH VEHICLES (MDE)
- OFF-ROAD LARGE SPARK-IGNITION ENGINES (LSIE)
- ALTERNATIVE FUEL RETROFIT SYSTEMS FOR ON-ROAD VEHICLES AND ENGINES, INCLUDING PC, LDT, MDV, MDE, AND HEAVY-DUTY ENGINES (HDE) AND VEHICLES (HDV)

ALL OTHER INTERESTED PARTIES

SUBJECT: Cost Limit for High-Priced Warranted Parts for 2015 Model-Year (MY) New On-Road (ONR) Vehicles/Engines, Off-Road Large Spark-Ignition Engines (LSIE), and Alternative Fuel Retrofit (AFR) Systems for ONR Vehicles/Engines Certified During 2014 and 2015 Calendar Years (CY)

This letter provides a Manufacturers Advisory Correspondence (MAC) that identifies the cost limit for high-priced warranted parts of MY2015 PC, LDT, MDV and MDE, LSIE, and AFR systems certified during CY2014 and CY2015. Also included is identification of the highest-cost metropolitan area of California for the purpose of calculating labor cost when determining the total replacement cost of a warranted part.

Item 7 in this MAC discusses the inapplicability of the replacement cost limit to warranties for vehicles voluntarily certified to the requirements of Title 13, California Code of Regulations, Section 1962.1(c) (13 CCR §1962.1(c)); that is, vehicles for which the manufacturer has requested partial zero-emission vehicle (PZEV) credit allowances. Similarly, Item 8 discusses the inapplicability of the replacement cost limit to warranties for PC, LDT and MDV optionally certified to the provisions in 13 CCR §1961.2 (a)(9); that is, vehicles certified to "LEV III" standards that earn additional "NMOG+NOx" Fleet Average Credit.

Items 2.b. and 2.c. provide the replacement cost limits to warranties for AFR systems certified during CY2014 and CY2015 for installation on MY2004 and subsequent (MY2004+), and MY1994-2003, respectively, PC, LDT, MDV and MDE, and heavy-duty engines and vehicles (HDEV) (hereinafter, altogether "ONR vehicles/engines"). The regulations and procedures for the certification of AFR systems have been implemented

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website: <http://www.arb.ca.gov>.


California Environmental Protection Agency

since the mid 1990s for MY1994 and subsequent ONR vehicles/engines. In September of 2013, the Board amended the regulations and procedures for the certification of AFR systems for installation on MY2004+ ONR vehicles/engines. The September 2013 amendments are undergoing the administrative review process for formal approval and implementation. Pending formal approval of the 2013 amendments, manufacturers may request conditional ARB certification of their AFR systems for installation on MY2004+ ONR vehicles/engines. Although the provisions for AFR system's high-priced warranted parts and their extended emissions warranty are included in the original certification/installation program and in the 2013 amendments, the annual cost limit for AFR system's high-priced warranted parts was not included in previous years' MAC on this subject. Starting with this MAC, the cost limit for AFR system's high-priced warranted parts will be provided annually to facilitate certification of AFR systems. It should be noted that for AFR systems for MY1994-2003 ONR vehicles/engines, the baseline consumer price index (CPI) upon which the cost limit is adjusted annually is different than that for the other categories (i.e., new PC, LDT, MDV and MDE, and MY2004+ AFR systems) and, as a result, the cost limits for MY1994-2003 AFR systems differ, slightly, from those for the other categories.

If you have any questions regarding LSIE warranty matters, please contact Mr. Byron Ng, Air Pollution Specialist, Off-Road Spark-Ignited Engine Certification Section, at (626) 459-4312 or by e-mail at bng@arb.ca.gov. For questions regarding warranty matters for MDE and for MY2004+ AFR systems for HDEV and MDE (and MDV into which such MDE is installed), please contact Mr. Zachary Evans, Air Resources Engineer, Compression-Ignition and Heavy-Duty Certification Section, at (626) 450-6114 or by e-mail at zevans@arb.ca.gov. For questions regarding warranty matters for MY1994-2003 AFR systems, please contact Mr. Tony Martino, Manager, Aftermarket Parts Section, at (626) 575-6848 or by e-mail at amartino@arb.ca.gov. For all other matters in this MAC, please contact Mr. Steven Hada, Air Resources Engineer, On-Road Light-Duty Certification Section, at (626) 575-6641 or by e-mail at shada@arb.ca.gov.

Sincerely,


Annette Hebert, Chief

 Emissions Compliance, Automotive Regulations and Science Division

State of California
AIR RESOURCES BOARD

MANUFACTURERS ADVISORY CORRESPONDENCE (MAC) 2014-01

SUBJECT: Cost Limit for High-Priced Warranted Parts for 2015 Model-Year (MY) New Passenger Cars (PC), Light-Duty Trucks (LDT), Medium-Duty Vehicles (MDV) and Engines Used In These Vehicles (MDE), Off-Road Large Spark-Ignition Engines (LSIE), and Alternative Fuel Retrofit (AFR) Systems Certified During 2014 and 2015 Calendar Years (CY)

APPLICABILITY:

- New MY2015 PC, LDT, MDV, MDE, and LSIE
- AFR Systems for PC, LDT, MDV, MDE, Heavy-Duty Vehicles and Engines Used In These Vehicles (HDV/E) Certified During CY2014 and CY2015

REFERENCES:

1. California Health and Safety Code Section 43205 (HSC §43205)
2. Emission Control System Warranty Regulations [Title 13, California Code of Regulations, Sections 2035 et seq. (13 CCR §2035 et seq.)]
3. Zero-Emission Vehicle Standards for 2009 Through 2017 Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles [13 CCR §1962.1(c)]
4. Defects Warranty for 2001 and Later Off-Road Large Spark-Ignition Engines [13 CCR §2435]
5. "California Certification And Installation Procedures For Alternative Fuel Retrofit Systems For 1994 Through 2003 Model Years And For 1994 Through 2003 Model Year Motor Vehicle Retrofit Systems Certified For Emission Reduction Credit" (1994-2003 AFR System Certification and Installation Procedures) incorporated by reference in 13 CCR §2030 and §2031. These amendments and certification procedures were approved by the Board at its September 26, 2013 public hearing and are pending approval by the Office of Administrative Law.

MANUFACTURERS ADVISORY CORRESPONDENCE (MAC) 2014-01

6. "California Certification And Installation Procedures For Alternative Fuel Retrofit Systems For 2004 And Subsequent Model Year On-Road Motor Vehicles And Engines" (2004+ AFR System Certification and Installation Procedures) incorporated by reference in 13 CCR §2030 and §2031. These amendments and certification procedures were approved by the Board at its September 26, 2013 public hearing and are pending approval by the Office of Administrative Law.
7. Manufacturers Advisory Correspondence No. 90-08

POLICY:

1. Identification of the Highest-Cost Metropolitan Area of California for New MY2015 PC, LDT, MDV/E, and LSIE, and MY1994 And Subsequent AFR Systems Certified During CY2014 And CY2015

According to HSC §43205(b), and 13 CCR §2037(c), §2435(b), the 1994-2003 AFR System Certification Installation Procedures, or the 2004+ AFR System Certification and Installation Procedures as applicable, the high-priced warranted parts list is based on a periodically revised cost limit as calculated for the highest-cost metropolitan area of California. For MY2015, and CY2014 and CY2015 as applicable for AFR systems, the highest-cost metropolitan area of California is determined to be San Francisco.

The labor cost, as part of a manufacturer's determination of the total replacement cost of a warranted part, is to be based on the manufacturer's labor rate in the identified highest-cost metropolitan area or, if the manufacturer has no dealerships in this area, a comparable alternative area in California.

2. a. Cost Limit for High-Priced Warranted Parts for New MY2015 PC, LDT, MDV, MDE and LSIE

According to 13 CCR §2037(c) or §2435(b), as applicable, the cost limit for high-priced warranted parts for MY2015 PC, LDT, MDV, MDE, and LSIE is calculated using the annual average nationwide urban Consumer Price Index (CPI) for 2013, i.e., the calendar year two years prior to the model-year for which the cost limit is being calculated. This CPI is published by the U.S. Bureau of Labor Statistics. Rounded to the nearest ten dollars, the MY2015 cost limit is \$590, as calculated below:

MANUFACTURERS ADVISORY CORRESPONDENCE (MAC) 2014-01

$$\begin{aligned}\text{MY2015 Cost Limit} &= \$300 \times (\text{calendar 2013 CPI/baseline CPI}) \\ &= \$300 \times (232.0/118.3) \\ &= \$590\end{aligned}$$

b. Cost Limit for High-Priced Warranted Parts for MY2004 and Subsequent AFR Systems Certified During CY2014 and CY2015

According to the 2004+ AFR System Certification and Installation Procedures, the cost limits for high-priced warranted parts for MY2004+ AFR systems certified during CY2014 and CY2015 are calculated using the annual average nationwide urban CPI for 2012 and 2013, respectively, i.e., the calendar year two years prior to the calendar year for which the cost limit is being calculated. This CPI is published by the U.S. Bureau of Labor Statistics. Rounded to the nearest ten dollars, the CY2014 and CY2015 cost limits are \$580 and \$590, respectively, as calculated below:

$$\begin{aligned}\text{CY2014 Cost Limit} &= \$300 \times (\text{calendar 2012 CPI/baseline CPI}) \\ &= \$300 \times (229.6/118.3) \\ &= \$580\end{aligned}$$

$$\begin{aligned}\text{CY2015 Cost Limit} &= \$300 \times (\text{calendar 2013 CPI/baseline CPI}) \\ &= \$300 \times (232.0/118.3) \\ &= \$590\end{aligned}$$

c. Cost Limit for High-Priced Warranted Parts for MY1994-2003 AFR Systems Certified During CY2014 and CY2015

According to the 1994-2003 AFR System Certification and Installation Procedures, the cost limits for high-priced warranted parts for MY1994-2003 AFR systems certified during CY2014 and CY2015, respectively, are calculated using the annual average nationwide urban CPI for 2012 and 2013, i.e., the calendar year two years prior to the certification's calendar year for which the cost limit is being calculated. This CPI is published by the U.S. Bureau of Labor Statistics. Rounded to the nearest ten dollars, the CY2014 and CY2015 cost limits are \$560 and \$570, respectively, as calculated below:

$$\begin{aligned}\text{CY2014 Cost Limit} &= \$300 \times (\text{calendar 2012 CPI/baseline CPI}) \\ &= \$300 \times (229.6/121.9) \\ &= \$560\end{aligned}$$

$$\begin{aligned}\text{CY2015 Cost Limit} &= \$300 \times (\text{calendar 2013 CPI/baseline CPI}) \\ &= \$300 \times (232.0/121.9) \\ &= \$570\end{aligned}$$

Table 1 at the end of this MAC is a summary of these cost limits.

3. High-Priced Warranted Parts Cost Documentation in the Applications for Certification

Manufacturers must submit in their applications for certification the documentation used to identify the high-priced warranted parts in accordance with 13 CCR §2037(c)(3), §2435(b), Sections 3(c)(v), 4(c)(ii) and 9 of the 1994-2003 AFR System Certification and Installation Procedures, or Sections 3(f)(5), 3(g), 7(b)(2) and 9 of the 2004+ AFR System Certification and Installation Procedures as applicable. The documentation shall include all emission-related parts costing more than \$490, \$480, or \$470, as applicable (i.e., calculated cost limit minus \$100) to replace. This documentation shall substantiate that the list includes all potential high-priced parts. The documentation shall include the estimated retail parts costs, labor rates in dollars per hour, and the labor hours necessary to replace the parts including standard diagnosis. If the labor hours being charged for customer-pay repairs are different from those specified by the manufacturer for warranty repairs, the manufacturer shall substantiate the labor hours specified. **All applications and required documentation (i.e., high-priced warranted parts cost list) must be submitted using the Air Resources Board's Document Management System.**

4. Voluntary Inclusion of Parts on the High-Priced Warranted Parts List

Manufacturers may include any emission-related parts on the high-priced warranted parts list without having to provide the required cost documentation if the parts are identified by the manufacturer as being consistently above the cost limit. These parts will remain on the high-priced warranted parts list until documentation is submitted by the manufacturer, and approved by the Executive Officer, to show that the total replacement cost of such an item has dropped below the identified cost limit. In this event, the manufacturer may exclude the relevant part in the high-priced warranted parts list at the beginning of the next applicable model year.

5. Warranted Parts That Are Integral Parts

If a warranted part **A** is an integral component of an assembly **B** and can only be repaired by replacing the assembly **B**, then the total replacement cost for the warranted part **A** must be determined as follows. The part's retail price and labor cost are those for the assembly **B**. The diagnostic cost shall be the highest for any diagnostic procedure for any warranted parts that are included in the assembly **B**.

For example, a vehicle's "Check Engine" lamp is a warranted part. A burned-out "Check Engine" lamp may be an integral component of the instrument dash and can only be repaired by replacing the entire instrument dash. The total replacement cost for this "Check Engine" lamp shall include the retail price and labor cost of the instrument dash. The diagnostic cost shall be the highest for the procedure related to the "Check Engine" lamp or any other warranted part(s), if any, that are also integral

MANUFACTURERS ADVISORY CORRESPONDENCE (MAC) 2014-01

components of the instrument dash (e.g., "oxygen sensor" replacement lamp, if applicable).

6. Cost Limit for High-Priced Warranted Parts for New MY2016 and Later Vehicles and Engines Certified Before a Newer Cost Limit Is Determined by the ARB

Manufacturers certifying prior to the issuance of a newer cost limit MAC have two options in obtaining a cost limit value for their certification purposes. First, the cost limit may be calculated using the annual average CPI (if available) or the average of the available monthly nationwide urban CPI figures for the most recent twelve (12) months. The calculated cost limit must be submitted for review and approval by the staff. Under the second option, the manufacturer may continue using the cost limit value from the most current cost limit MAC. This cost limit value in either option will be the manufacturer's official cost limit for those vehicles so certified (i.e., certified prior to the ARB issuing the newer cost limit MAC). For those vehicles, the manufacturer will not be permitted to delete items from the high-priced warranted parts list if the ARB calculated cost limit is greater

7. Inapplicability of Cost Limit to Warranty for Partial Zero-Emission Vehicles (PZEVs)

Any vehicles for which the manufacturer has requested certification to the requirements in 13 CCR §1962.1(c) (i.e., vehicles for which PZEV credit allowances are requested) are required under 13 CCR §1962.1(c)(2)(D) to have an extended defects and performance warranty period of 15 years (10 years for batteries for traction of hybrid electric PZEVs) or 150,000 miles, whichever occurs first. Since this warranty is not affected by the cost of a part, Items 1-6 of this MAC are not applicable to vehicles certified as PZEVs.

8. Inapplicability of Cost Limit to Warranty for LEV III Vehicles That Generates Additional NMOG+NOx Fleet Average Credits

Any vehicles for which the manufacturer has requested optional certification to the requirements in 13 CCR §1961.2(a)(9) (i.e., vehicles that do not generate PZEV credit allowances, and that generate additional NMOG+NOx fleet average credits) are required to have an extended defects and performance warranty period of 15 years (10 years for a zero emission energy storage device, e.g., battery, ultra capacitor, other electric storage device, etc.) or 150,000 miles, whichever occurs first. Since this warranty is not affected by the cost of a part, Items 1-6 of this MAC are not applicable to vehicles generating additional NMOG+NOx fleet average credits.

9. Cost Limit For AFR Systems Determined By The Calendar Year In Which Certification Is Granted

The high-priced warranted parts list and associated cost limit for AFR systems is determined by the calendar year in which certification is granted; that is, the date the

MANUFACTURERS ADVISORY CORRESPONDENCE (MAC) 2014-01

Executive Order is signed. The cost limit for AFR systems is not determined by the model year of the base vehicle/engine or when the AFR system is actually installed.

AFR system manufacturers use the specified cost limit to identify high-priced parts for extended warranty required under regulation. A list of such high-priced, extended warranty parts are required to be submitted as part of an application for certification for ARB approval. Each vehicle retrofitted with the AFR system must be provided with the list of such parts identified for extended warranty. Upon installation, these parts have the extended warranty coverage, irrespective of when such installation happens. For example, an AFR system for MY2009 PC is certified in 2014, whose part X is on the high-priced warranted parts list. Whether the AFR system is installed on the MY2009 PC in the year 2014 or 2019, part X will have extended warranty (7 years/70,000 miles, whichever occurs first) starting from the date of completed installation.

TABLE 1

Cost Limits For High-Priced Warranted Parts			
	Model Year ⁽¹⁾	Calendar Year ⁽²⁾	
	2015	2014	2015
New PC, LDT, MDV/E, LSIE ⁽³⁾	\$590	n/a	n/a
2004+ AFR Systems	n/a	\$580	\$590
1994-2003 AFR Systems	n/a	\$560	\$570

1) Model Year means the model year of the test group/engine family, irrespective of the date the Executive Order is signed.

2) Calendar Year means the calendar year in which certification of the AFR system is granted, i.e., the date (during January 1 – December 31) the Executive Order is signed, irrespective of the model year of the base vehicle/engine.

3) The high-priced warranted parts cost limit does not apply to new HDEV.