Air Resources Board

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DATE: August 4, 2017

MANUFACTURERS ADVISORY CORRESPONDENCE (MAC)
MAC #2017-01

TO: ALL MANUFACTURERS OF
-PASSENGER CARS
-LIGHT-DUTY TRUCKS
-MEDIUM-DUTY VEHICLES AND ENGINES USED IN SUCH VEHICLES
-HEAVY-DUTY VEHICLES AND ENGINES USED IN SUCH VEHICLES
-MOTORCYCLES
-ALL-TERRAIN VEHICLES
-OFF-ROAD SPORT VEHICLES
-OFF-ROAD UTILITY VEHICLES
-SPARK-IGNITION STERNDRIVE/INBOARD MARINE ENGINES
-ALL OTHER INTERESTED PARTIES

SUBJECT: Clarification of the Emission Warranty Information Report (EWIR) Formatting Requirements for 1990 and Subsequent Model Year (MY) Passenger Cars (PCs), Light-Duty Trucks (LDTs), Medium-Duty Vehicles (MDVs) and Engines Used in These Vehicles (MDEs), Heavy-Duty Vehicles (HDVs) and Engines Used in These Vehicles (HDEs), 1997 and Subsequent MY Motorcycles and All-Terrain Vehicles (ATV), 2007 and Subsequent MY Off-Road Sport Utility Vehicles (ORSUV), Off-Road Utility Vehicles (ORUV), 2009 and Subsequent MY Spark-Ignition Sterndrive/Inboard Marine Engines, and All Other Interested Parties.

This letter transmits a MAC that cancels and supersedes MAC 2013-02, to specify formatting requirements for emission warranty information reports for PCs, LDTs, MDVs, MDEs, HDVs, HDEs, Motorcycles, All-Terrain Vehicles, Off-Road Sport Vehicles, Off-Road Utility Vehicles, and Spark-Ignition Sterndrive/Inboard Marine Engines.

For questions regarding this matter, please contact Jeffrey Wong, Manager, Field Operations & Warranty Section, at (626) 575-7009 or by e-mail at jwong@arb.ca.gov

Sincerely,

Annette Hebert, Chief
Emissions Compliance, Automotive Regulations and Science Division

State of California
AIR RESOURCES BOARD

MANUFACTURERS ADVISORY CORESPONDENCE (MAC) 2017-01

SUBJECT: Clarification of the Emission Warranty Information Report (EWIR) Formatting Requirements for 1990 and Subsequent Model Year (MY) Passenger Cars (PCs), Light-Duty Trucks (LDTs), Medium-Duty Vehicles (MDVs) and Engines Used in These Vehicles (MDEs), Heavy-Duty Vehicles (HDVs) and Engines Used in These Vehicles (HDEs), 1997 and Subsequent MY Motorcycles and All-Terrain Vehicles (ATV), 2007 and Subsequent MY Off-Road Sport Utility Vehicles (ORSUV), Off-Road Utility Vehicles (ORUV), 2009 and Subsequent MY Spark-Ignition Sterndrive/Inboard Marine Engines, and All Other Interested Parties.

APPLICABILITY: 1990 and Subsequent Model Year (MY) Passenger Cars (PCs), Light-Duty Trucks (LDTs), Medium-Duty Vehicles (MDVs) and Engines Used in These Vehicles (MDEs), Heavy-Duty Vehicles (HDVs) and Engines Used in These Vehicles (HDEs), 1997 and Subsequent MY Motorcycles and All-Terrain Vehicles (ATV), 2007 and Subsequent MY Off-Road Sport Utility Vehicles (ORSUV), Off-Road Utility Vehicles (ORUV), 2009 and Subsequent MY Spark-Ignition Sterndrive/Inboard Marine Engines, and All Other Interested Parties.

REFERENCES: "Procedures for Reporting Failures of Emission-Related Equipment Components", [title 13, California Code of Regulations (CCR)] [Sections 2141-2149].

BACKGROUND: CARB issued MAC 2008-02 to provide industry the specific EWIR reporting requirements for the warranty reporting requirements in title 13, CCR, Sections 2139-2149. .

This MAC cancels and supersedes MAC 2013-02 to specify formatting requirements for emissions warranty information reports for PCs, LDTs, MDVs, MDEs, HDVs, HDEs, Motorcycles, All-Terrain Vehicles, Off-Road Sport Vehicles, Off-Road Utility Vehicles, and Spark-Ignition Sterndrive/Inboard Marine Engines.

POLICY:

EWIR Reporting Format

The recommended format for submitting the electronic EWIRs required by Title 13 CCR, Section 2144 is provided below:

1. Test Group

   The test group field (field name: Test_Group) will be set at a variable character string length of **12** characters.

2. Part Number

   The part number field (field name: Part_Number) will be set at a variable character string length of no more than **30** characters.

3. Component

   The warranty component description field (field name: Component) will be set at a variable character string length of no more than **100** characters.

4. Repair Code

   The repair code field (field name: Repair) will be set at a character string length of **one**. This field is used to determine whether a warranty claim involved an emission component replacement or repair. If an emission component was replaced, the designated code will be populated as N, and if the emission component was only repaired, the designated code will be populated as Y.

   (note: computer software updated on a vehicle without removing or replacing the computer will be considered to be a repair.)

5. Warranty Period

   The warranty period code field (field name: Warranty_Period) will be set at a variable character string length of no more than **eight** characters. This field is used to denote the warranty period of the reported emission component. The warranty period is determined by the type of component and vehicle as set forth in the table below:

Type	Warranty Period	Code Designation	Termination Point
Light or Med. Duty Gas/Diesel	3 years/ 50,000 miles	L	3 years
Light or Med. Duty Gas/Diesel	7 years/ 70,000 miles	H	5 years
PZEV Vehicles	15 years/ 150,000 miles	P	12 years
Battery Used for Vehicles Propulsion	10 years/ 150,000 miles	B	10 years
Conditional Extended	10 years/	E	10 years

Warranty	120,000 miles		
Diesel Engines (Heavy Duty)	5 years/ 100,000 miles	D	5 years
Gas Engines (Heavy Duty)	5 years/ 50,000 miles	G	5 years
Light or Med. Duty (Gas/Diesel)	3 years/ 50,000 miles	S	3 years
Light or Med. Duty (Gas/Diesel) Split Class*	7 years/ 70,000 miles	T	5 years
LEV II Vehicles	8 years/ 100,000 miles	V	8 years
Diesel Engines (Heavy Duty) Split Class*	5 years/ 100,000 miles	F	5 years
Class I-Motorcycles	5 years/ 12,000 km	M1	5 years
Class II-Motorcycles	5 years/ 18,000 km	M2	5 years
Class III-Motorcycles	5 years/ 30,000 km	M3	5 years
Off-Highway Recreational Vehicles	2.5 years/ 2,500 miles/ 250 hours	O	2.5 years
Off-Highway Recreational Vehicles	5 years/ 5,000 miles/ 500 hours	OH	5 years
Spark-Ignition Personal Watercraft and outboard marine engines	4 years/ 250 hours	PW	4 years
Spark-Ignition Marine Engines ≤373 kw	3 years/ 480 hours	W1	3 years
Spark-Ignition Marine Engines >373kw and ≤485 (electronic components)	3 years/ 480 hours	W2	3 years
Spark-Ignition Marine Engines >373kw and ≤485 (mechanical components)	3 years/ 150 hours	W3	3 years
Spark-Ignition Marine Engines >485 kw (electronic components)	3 years/ 480 hours	W4	3 years
Spark-Ignition Marine Engines >485 kw (mechanical components)	1 year/ 50 hours	W5	1 year

*A Split Class Designation occurs when a manufacturer builds and sells an engine in a multi-year chassis (e.g., engines certified for the 2003 MY are installed into a 2003 and 2004 MY chassis.) In this case, the manufacturer's EWIR would only report a 2003 MY test group or engine family when in fact, 2004 MY vehicles are being sold with the 2003 MY certified engine. As indicated in this sample, the manufacturer will have to report the 2003 MY vehicles for one additional year.

6. Sales

The sales field (field name: Sales) will be set as a numeric character with a string length of no more than **10** digits. It will specifically identify the California production sales. **[Commas must not be added to this field.]** (e.g., 1,243 is incorrect; instead, the number must be entered as 1243.)

7. Cumulative Claims

The cumulative claims field (field name: Cum_ Claims) will be set as a numeric character with a string length of no more than **10** digits. This field is used to denote the cumulative number of unscreened warranty claims for the reported emission component and will be updated cumulatively on a quarterly basis. **[Commas must not be added to this field.]** (e.g., 11,243 is incorrect; instead, the number must be entered as 11243.)

8. Percent

The percent field (field name: Percent) will be identified as a decimal character limited to one significant digit and a string length of no more than **eight** digits. The cumulative warranty claims percentage will be compiled cumulatively on a quarterly basis. The data will be represented without a percent (%) sign (e.g., 7.2% or 0.072 are incorrect; the data must be entered as 7.2).

9. Time Frame

The time frame field (field name: Quarterly) will be set at a variable character string length of **six** characters using the following format, YYYYQx (e.g., the first quarter of 2014 will be entered as 2014Q1).

10. Models

The models field (field name: Models) will be set at a variable character string length of no more than **120** characters. This field is used to denote the make/model or car-line for the reported test group. Manufacturers that utilize model codes must provide a model code decoder table defining the make/model of each model code in a separate document at the time the EWIR is submitted. **[If more than one model is identified it should be**

separated by spaces or dashes. Commas must not be added to this field.] (e.g., model, model, model is incorrect; instead, the models must be entered as model-model-model.)

11. Fuel Code

The fuel code field (field name: Fuel_Code) will be set as a single character. This field is used to denote the fuel type used by the reported test group. The fuel code character is determined by the table below:

Fuel Code	Fuel Type
C	CNG
D	Diesel
E	Ethanol (85%-100%)
G	Gasoline (includes flex fuel and hybrids)
I	Hydrogen
P	LPG
M	Methanol (85%-100% Methanol)
O	Other

12. Weight Classification

The weight classification field (field name: GVWR) will be set as a numeric character with a variable string length of no more than **six** digits. The field is used to denote the gross vehicle weight rating (in lbs) of the reported test group. **[Commas must not be added to this field.]** (e.g., 3,250 is incorrect; instead, the number must be entered as 3250). Manufacturers of marine applications shall enter 0 in the weight classification field. The correlation between GVWR and California weight classification can be seen in the table below:

Weight Classification	Minimum GVWR	Maximum GVWR
Light-Duty Vehicles	0	8,500
Medium-Duty Vehicles	8,501	14,000
Light Heavy-Duty	14,001	19,500
Medium Heavy-Duty	19,501	33,000
Heavy Heavy-Duty	33,000	999,998
Other Categories	0	999,998

EWIR REPORTING:

Character Guidance

Manufacturers should not include any of the following characters as part of their EWIR submissions:

- Commas, &-ampersand signs, %-percent signs, or quotation marks

Use of any of these characters will cause the data to fail in the upload process. Should these characters be detected, or if other problems are identified in the manufacturers' EWIR data, CARB will return the document to the manufacturer and will require the manufacturer to correct the EWIR data format so that the data can be properly uploaded into CARB's warranty reporting database. Also, manufacturers should submit the EWIR file in a comma delimited format (e.g., mfrs_file.csv).

- A Comma Delimited format, also referred to as comma separated value, is a specially formatted plain text file which stores spreadsheet or basic database-style information in a very simple format, with one record on each line, and each field within that record separated by a comma. It is important that the individual "records" within a CSV file not contain commas, as this breaks up the simple formatting when using the file in another application. CSV files are often used as a simple way to transfer a large volume of spreadsheet or database information between programs, without the need for special file types.

EWIR Example in a CSV Format:

Test Group,Part_Num,Component,Repair,Cost,Sales,Claims,Percent,Qtr,Models,Fuel_Code,GVWR
ARBAB01.2345,123456789,GAS CAP,N,L,9473,143,1.5,2012Q1,MODEL-MODEL-MODEL,G,1234