



*General Motors*

General Motors LLC  
Compliance & Certification  
MC 483-331-500  
Milford Proving Ground  
3300 General Motors Road  
Milford, Michigan 48380-3726

December 12, 2014

GG009

Ms. A. Hebert, Chief  
Emissions Compliance, Automotive Regulations & Science Div.  
Air Resources Board  
9480 Telstar Avenue, Suite 4  
El Monte, CA 91731

Dear Ms. Hebert:

Subject: 2016 Emission Control System Warranty for General Motors Passenger Car, Light Duty Truck and Medium Duty Vehicle

General Motors submits the attached emission control system warranty information for 2016 model year passenger cars, light duty trucks and medium duty vehicles per Title 13, Section 2039(c).

Attachment I is the analysis used to determine the "high-cost" parts that are warranted for a period of seven years or 70,000 miles. The list applies to passenger cars, light duty trucks and medium duty vehicles.

Attachment II is an electronic copy of the 2016 Chevrolet warranty and owner assistance information. This copy is still in draft form, though the emissions warranty sections are updated for 2016 model year passenger cars, light duty trucks and medium duty vehicles.

If you have questions, please call me at (248) 431-9935.

Sincerely,

*R. C. Harvey*

Randall C Harvey, Manager  
Compliance and Certification

PMH/ks  
Attachments  
c: CARB DMS

**2016 MY Parts ANALYSIS - CALIFORNIA 7/70 EMISSION RELATED PARTS**

<u>PART NAME</u>	<u>PART #</u>	<u>Sample Vehicle</u>	<u>PART LIST PRICE</u>	<u>LABOR OP #</u>	<u>LABOR TIME</u>	<u>TOTAL LABOR COST (\$129.00/Hr)</u>	<u>TOTAL COST (Part Price+ Labor Cost)</u>	<u>ABOVE \$580.00</u>
Camshaft Position Actuator	12606358	Chevrolet Camaro	\$132.78	4064290	7.8	1006.20	1138.98	Y
Transmission Control Solenoid Valve with TCM	24257213	Chevy Silverado	\$602.47	8463730	2.3	296.70	\$899.17	Y
Diesel Fuel Injection Pump	12661059	Chevy Silverado Duramax	\$778.95	4023910	12.9	1664.10	\$2,443.05	Y
Diesel Direct Fuel Injector Kit	19256590	Chevy Silverado Duramax	\$470.95	4022330	5.3	683.70	\$1,154.65	Y
Diesel Fuel Rail Assembly	12620532	Chevy Silverado Duramax	\$358.04	4022390	10.1	1302.90	\$1,660.94	Y
Engine Mounted High Pressure Fuel Pump	12641847	Buick Regal GS	\$259.56	4021890	0.8	103.20	\$362.76	N
Charge Air Cooler	25838896	Chevy Silverado Duramax	\$450.88	4022940	4.0	516.00	\$966.88	Y
Supercharger Assembly	19303635	Chevrolet Camaro	\$2,095.00	4068410	5.1	657.90	\$2,752.90	Y
Turbocharger Assembly	55581063	Chevrolet Cruze Diesel	\$1,646.18	4068290	1.3	167.70	\$1,813.88	Y
Diesel Exhaust Particulate Filter	22896366	Chevy Silverado Duramax	\$1,950.00	4050860	0.9	116.10	\$2,066.10	Y
Diesel Exhaust Emission Reduction Fluid Tank	22968922	Chevy Silverado Duramax	\$262.00	4025130	1.3	167.70	\$429.70	N
EGR Valve Cooler (Diesel)	12635707	Chevy Silverado Duramax	\$559.68	4023300	7.8	1006.20	\$1,565.88	Y
Fuel Tank(s)	25901671	Chevy Silverado Duramax	\$495.00	4029250	1.5	193.50	\$688.50	Y
powertrain control modules, catalytic converters and obd devices have warranty coverage exceeding 7/70 (Federal Emission Control System Warranty 8/80)								
hybrid batteries, cooling compressors, drive motors, starter generators, chargers and power inverters have warranty coverage exceeding 7/70 (GM Hybrid Warranty 8/100)								
Duramax diesel engine components have additional 5/100 coverage (Duramax Diesel Engine Warranty)								

## Emission Control Systems Warranty 25

labeled “Certified to EPA Standards” are covered by the Federal Emission Performance Warranty.

Object-ID=3975447 Owner=Patchak, Roxanne  
LMD=09-Dec-2014 LMB=Patchak, Roxanne

### California Emission Control System Warranty

This section outlines the emission warranty that GM provides for your vehicle in accordance with the California Air Resources Board.

Defects in material or workmanship in GM emission parts may also be covered under the New Vehicle Limited Warranty

Bumper-to-Bumper coverage. There may be additional coverage on GM diesel engine vehicles. In any case, the warranty with the broadest coverage applies.

This warranty applies if your vehicle meets both of the following requirements:

- Your vehicle is registered in California or other states adopting California emission and warranty regulations.\*
- Your vehicle is certified for sale in California as indicated on the vehicle's emission control information label.

\* **Important:** Connecticut, Delaware, Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, Pennsylvania, Rhode Island, Vermont, and Washington have California Emissions Warranty coverage.

California Partial Zero Emission Vehicles (PZEV) have extended coverage on all emission-related parts.

**Important:** California, Connecticut, Maine, Maryland, Massachusetts, New Jersey, New York, Rhode Island, and Vermont have PZEV

Emission Warranty Coverage. (Oregon has PZEV Hybrid battery 10 years/150,000 mile coverage only).

### Your Rights and Obligations (For Vehicles Subject to California Exhaust Emission Standards)

The California Air Resources Board and General Motors are pleased to explain the emission control system warranty on your vehicle. In California, new motor vehicles must be designed, built, and equipped to meet the state's stringent anti-smog standards. GM must warrant the emission control system on your vehicle for the periods of time and mileage listed provided there has been no abuse, neglect, or improper maintenance of your vehicle. Your vehicle's emission control system may include parts such as the fuel injection system, ignition system, catalytic converter, and engine computer. Also included are hoses, belts, connectors, and other emission-related assemblies.

## 26 Emission Control Systems Warranty

Where a warrantable condition exists, GM will repair your vehicle at no cost to you including diagnosis, parts, and labor.

### California Emission Defect and Emission Performance Warranty Coverage

For cars and trucks with light duty or medium duty emissions:

- For 3 years or 50,000 miles (5 years or 50,000 miles for Duramax Diesel), whichever comes first:
  - If your vehicle fails a smog check inspection, GM will make all necessary repairs and adjustments to ensure that your vehicle passes the inspection. This is your Emission Control System Performance Warranty.
  - If any emission-related part on your vehicle is defective, GM will repair or replace it. This is

your Short-term Emission Control Systems Defects Warranty.

- For 7 years or 70,000 miles, whichever comes first:
  - If an emission-related part listed in this booklet specially noted with coverage for 7 years or 70,000 miles is defective, GM will repair or replace it. This is your Long-term Emission Control Systems Defects Warranty.
- For 8 years or 80,000 miles, whichever comes first:
  - If the catalytic converter, vehicle powertrain control module, transmission control module, or other onboard emissions diagnostic device, including emission-related software, is found to be defective, GM will repair or replace it under the Federal Emission Control System Warranty.

- For 15 years or 150,000 miles, whichever comes first for a Partial Zero Emission Vehicle (PZEV):
  - If any emission-related part\* listed in this booklet is defective, GM will repair or replace it. This is your (PZEV) Emission Control System Defects Warranty.

\* PZEV Hybrid Batteries and Hybrid A/C compressor are covered for 10 years or 150,000 miles, whichever comes first.

Any authorized Chevrolet dealer will, as necessary under these warranties, replace, repair, or adjust to GM specifications any genuine GM parts that affect emissions.

The applicable warranty period shall begin on the date the vehicle is delivered to the first retail purchaser or, if the vehicle is first placed in service as a demonstrator or company vehicle prior to sale at retail, on the date the vehicle is placed in such service.

## Emission Control Systems Warranty 27

### Owner's Warranty Responsibilities

As the vehicle owner, you are responsible for the performance of the scheduled maintenance listed in your owner manual. GM recommends that you retain all maintenance receipts for your vehicle, but GM cannot deny warranty coverage solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

You are responsible for presenting your vehicle to a GM dealer selling your vehicle line as soon as a problem exists. The warranted repairs should be completed in a reasonable amount of time, not to exceed 30 days.

As the vehicle owner, you should also be aware that GM may deny warranty coverage if your vehicle or a part has failed due to abuse, neglect, improper or insufficient maintenance, or modifications not approved by GM.

If you have any questions regarding your rights and responsibilities under these warranties, you should contact the Customer Assistance Center at 1-800-222-1020. Spark EV call 855-4-SPARK-INFO (855-477-2754 For Volt call 1-877-486-5846 (1-877-4-Volt Info) or, in California, write to:

State of California Air Resources Board  
Mobile Source Operations Division  
P.O. Box 8001  
El Monte, CA 91731-2990

## 28 Emission Warranty Parts List

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The emission parts listed here are covered under the Emission Control System Warranty. The terms are explained in the *Emission Control Systems Warranty on page 23* under “Federal Emission Control System Warranty” and the “California Emission Control System Warranty.”

**Important:** Certain parts may be covered beyond these warranties if shown with asterisk(s) as follows:

- (\*) 7 years/70,000 miles, whichever comes first, California Emission Control System Warranty coverage.
- (\*\*) 8 years/80,000 miles, whichever comes first, Federal Emission Control System Warranty coverage. (Also applies to California certified light duty and medium duty vehicles.)

All listed parts 15 years/  
150,000 miles, whichever comes first, on California PZEV (NU6) vehicles registered in a PZEV state except Hybrid batteries and Hybrid A/C compressors, which are covered for 10 years/150,000 miles, whichever comes first.

### Powertrain Control System

Accelerator Pedal Position Sensor  
Camshaft Position Actuator \*  
Camshaft Position Actuator Valve  
Coolant Sensor  
Data Link Connector  
Engine Control Module (ECM) \*\*  
Engine Coolant Temperature Sensor  
Fuel Control Module \*\*  
Flex Fuel Sensor  
Humidity Sensor  
Intake Air Temperature Sensor  
Malfunction Indicator Lamp  
Manifold Absolute Pressure Sensor

Mass Air Flow Sensor  
Outside Air Temperature Sensor  
Oxygen Sensor(s)  
Powertrain Control Module (PCM) \*\*  
Throttle Position Sensor  
Vehicle Control Module (VCM) \*\*  
Vehicle Speed Sensor  
**Transmission Controls and Torque Management**  
Control Solenoids and Pressure Switches  
Clutch Solenoids and Switches  
Internal Mode Switch  
Park/Neutral Switch  
Transmission Control Module \*\*  
Transmission Fluid Temperature Sensor  
Transmission Speed Sensors  
**Fuel Management System**  
AFM Fuel Pump Power Module  
AFM Exhaust Valves and Controller

## Emission Warranty Parts List 29

Diesel Fuel Injection Pump \*

Diesel Direct Fuel Injector  
Assembly\*

Fuel Injector

Fuel Pressure Regulator

Fuel Pressure Sensor

Fuel Rail Assembly

Fuel Tank Fuel Pump

Fuel Temperature Sensor

High Pressure Fuel Pump (SIDI)

### **Air Management System**

Active Aero Shutters and Controller

Air Cleaner

Air Intake Ducts

Charge Air Cooler \*

Charge Air Cooler Control

Idle Air Control Valve

Idle Speed Control Motor

Intake Air Heater

Intake Manifold

Intake Manifold Gasket

Intake Manifold Tuning Valve

Supercharger\*

Throttle Body

Turbocharger\*

Turbocharger Pressure Sensor

### **Ignition System**

Camshaft Position Sensor(s)

Crankshaft Position Sensor(s)

Glow Plug(s) (Diesel)

Glow Plug Controller (Diesel)

Ignition Coil(s)

Ignition Control Module

Knock Sensor

Spark Plug Wires

Spark Plugs

### **Start/Stop System**

Auxiliary Battery or Ultra Capacitor

Battery Isolator

Battery Control Module

Transmission Fluid Accumulator and  
Solenoid

### **Catalytic Converter System**

Catalytic Converter(s) \* \*\*

Diesel Exhaust Temperature and  
Pressure Sensors

Diesel Particulate Filter (DPF) \*

Diesel Particulate Matter Sensor

Diesel Exhaust (DPF) Indirect Fuel  
Injector

Diesel Exhaust Emission Reduction  
Fluid Injector

Diesel Exhaust Emission Reduction  
Fluid Tank

Diesel Exhaust NOx Sensors

Exhaust Manifold

Exhaust Manifold Gasket

### **Positive Crankcase Ventilation (PCV) System**

Oil Filler Cap

PCV Filter

PCV Oil Separator

## 30 Emission Warranty Parts List

PCV Valve

### Exhaust Gas Recirculation (EGR) System

EGR Feed and Delivery Pipes

EGR Temperature Sensor

EGR Valve

EGR Valve Cooler \*

### Secondary Air Injection System

Air Pump and Check Valves

### Evaporative Emission Control System (Gasoline Engines)

Canister

Canister Solenoids and Valves

Fuel Feed and Return Pipes and Hoses

Fuel Filler Cap

Fuel Level Sensor

Fuel Limiter Vent Valve

Fuel Tank(s) \*

Fuel Tank Filler Pipe (with restrictor)

Fuel Tank Vacuum or Pressure Sensor

### Hybrid

Accm Hood Switch

Auxiliary Transmission Fluid Pump

Battery Cooling Circuit

Battery Control Module \*\*

Battery Pack Current Sensor

Brake Pedal Travel Sensor

Drive Motors and Resolvers\*

Drive Motor/Generator Control Module\*\*

Eboost Brake Control Module\*\*

Traction Power Inverter Module (TPIM)\*\*

Electro-Hydraulic Brake Control Module\*\*

Energy Storage Control Module \*\*

Hybrid Batteries \*

Hybrid Battery Temp. and Voltage Sensors

Starter Generator\*

Starter Generator Control Module \*\*

Starter Generator Drive Belt

SGCM Coolant Circuit (fan, relay, pump)

Wheel Speed Sensor

### Voltec/EREV Specific Components

Fuel Fill Door Sensors

High Voltage Battery Contactor

Vehicle Interface Control Module\*\*

Voltec/EREV RESS Battery\* \*\*

Onboard Charger\* \*\*

Charge Port

Charge Port Switches and Sensors

Voltec/EREV EVAP Canister Assembly High Voltage Battery Contactor

Voltec/EREV RESS Thermal Management:

E-compressor \*\*\*  
Port Valves

## Emission Warranty Parts List 31

Battery Temperature Sensors  
Battery High Voltage Heater  
Battery Coolant Pump  
Power Electronics  
Coolant Pump  
Air and Coolant Temperature  
Sensors  
Rfg. Temperature and Pressure  
Sensors

### Miscellaneous Items Used with Above Components and Certain Tires are Covered

Belts  
Boots  
Clamps  
Connectors  
Ducts  
Fittings  
Gaskets  
Grommets  
Hoses  
Housings  
Mounting Hardware

Pipes  
Pulleys  
Sealing Devices  
Springs  
Tubes  
Wiring and Relays  
Tires (Heavy Duty Applications only  
2 yr/24,000 mile Federal Emission  
Defect Warranty)  
Parts specified in your maintenance  
schedule that require scheduled  
replacement are covered up to their  
first replacement interval or the  
applicable emission warranty  
coverage period, whichever comes  
first. If failure of one of these parts  
results in failure of another part,  
both will be covered under the  
Emission Control System Warranty.

For detailed information concerning  
specific parts covered by these  
emission control system warranties,  
ask your dealer.

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### Replacement Parts

The emission control systems of  
your vehicle were designed, built,  
and tested using genuine GM parts\*  
and the vehicle is certified as being  
in conformity with applicable federal  
and California emission  
requirements. **Accordingly, it is  
recommended that any  
replacement parts used for  
maintenance or for the repair of  
emission control systems be new,  
genuine GM parts.**

The warranty obligations are not  
dependent upon the use of any  
particular brand of replacement  
parts. The owner may elect to use  
non-genuine GM parts for  
replacement purposes. Use of  
replacement parts which are not of

## 32 Emission Warranty Parts List

equivalent quality may impair the effectiveness of emission control systems.

If other than new, genuine GM parts are used for maintenance replacements or for the repair of parts affecting emission control, the owner should assure himself/herself that such parts are warranted by their manufacturer to be equivalent to genuine GM parts in performance and durability.

\* "Genuine GM parts," when used in connection with GM vehicles, means parts manufactured by or for GM, designed for use on GM vehicles, and distributed by any division or subsidiary of GM.

### Maintenance and Repairs

Maintenance and repairs can be performed by any qualified service outlet; however, warranty repairs must be performed by an authorized dealer except in a situation where the vehicle owner is significantly inconvenienced and when a

warranted part or a warranty station is not reasonably available to the vehicle owner.

In a situation where the vehicle owner is significantly inconvenienced, and an authorized dealer is not reasonably available, repairs may be performed at any available service establishment or by the owner, using any replacement part. Chevrolet will consider reimbursement for the expense incurred, including diagnosis, not to exceed the manufacturer's suggested retail price for all warranted parts replaced and labor charges based on Chevrolet's recommended time allowance for the warranty repair and the geographically appropriate labor rate. A part not being available within 10 days or a repair not being completed within 30 days constitutes a significant inconvenience. Retain receipts and failed parts in order to receive

compensation for warranty repairs reimbursable due to these situations.

If you are in a situation where you are significantly inconvenienced, and it is necessary to have repairs performed by other than a Chevrolet dealer and you believe the repairs are covered by emission warranties, take the replaced parts and your receipt to a Chevrolet dealer for reimbursement consideration. This applies to both the Federal Emission Defect Warranty and Federal Emission Performance Warranty.

Receipts and records covering the performance of regular maintenance or other repairs (such as those outlined earlier) should be retained in the event questions arise concerning maintenance. These receipts and records should be transferred to each subsequent owner. GM will not deny warranty coverage solely on the absence of maintenance records. However, GM