#### State of California AIR RESOURCES BOARD

## EXECUTIVE ORDER D-126-32

#### Relating to Exemptions Under Section 27156 of the California Vehicle Code

## General Motors LLC LS3-6.2L V8 E-ROD Kit, Part #s 19257230 and 19257234

Pursuant to the authority vested in the Air Resources Board by Section 27156 of the Vehicle Code; and

Pursuant to the authority vested in the undersigned by Section 39515 and Section 39516 of the Health and Safety Code and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: That the installation of the LS3-6.2L V8 E-ROD Kit, manufactured and marketed by General Motors LLC, 3300 GM Road, Milford, Michigan 48380, has been found not to reduce the effectiveness of the applicable vehicle pollution control systems and, therefore, is exempt from the prohibitions of Section 27156 of the Vehicle Code for all 1995 and older passenger cars and trucks with up to 4500 lbs. test weight (5725 lbs. GVWR).

The LS3-6.2L V8 E-ROD Kit is a complete engine and emission control package designed to change engines from 1995 and older passenger cars and light duty trucks within the maximum weight limit (5725 lbs. GVWR). The kit is derived from a certified 2011 Camaro LS3 engine (test group BGMXV06.2089) but with modifications to the original emission control module (ECM) calibration, exhaust system, evaporative system, and air intake system. The main components of the kit with their corresponding part numbers are listed in Attachment A. Installation of the LS3-6.2L V8 E-ROD Kit requires complete removal of the stock pre-1996 model year engine, including its exhaust and evaporative emission control system. The stock fuel tank, hoses and fuel pump are retained but need to be reconfigured to meet the installation requirements of the LS3-6.2L V8 E-ROD Kit. The kit is equipped with a fully functioning on-board diagnostic II (OBD II) system except for the evaporative system checks. The stock vehicle check engine light is retained or needs to be added for older vehicles that were not originally equipped with a check engine light in the dashboard. Exhaust system, catalytic converters and oxygen sensors must be installed in the location/orientation as prescribed in the installation instructions provided with the kit.

Installation of any modified or add-on parts to this engine package shall be prohibited unless prior approval is obtained from the Air Resources Board.

This Executive Order is valid provided that the installation instructions for the LS3-6.2L V8 E-ROD Kit will not recommend tuning the vehicle to specifications different from those of the kit manufacturer.

Changes made to the design or operating conditions of the LS3-6.2L V8 E-ROD Kit, as exempt by the Air Resources Board, which adversely affect the performance of the vehicle's pollution control system shall invalidate this Executive Order.

Marketing of the LS3-6.2L V8 E-ROD Kit using any identification other than that shown in this Executive Order or marketing of the LS3-6.2L V8 E-ROD Kit for an application other than those listed in this Executive Order shall be prohibited unless prior approval is obtained from the Air Resources Board. Exemption of the LS3-6.2L V8 E-ROD Kit shall not be construed as an exemption to sell, offer for sale, or advertise any component of the LS3-6.2L V8 E-ROD Kit as an individual device.

This Executive Order is granted based on submitted emission test data generated on a 2004 model year Pontiac GTO with an automatic transmission, modified with the LS3-6.2L V8 E-ROD Kit with aged components. Test results showed that emission levels, with the LS3-6.2L V8 E-ROD Kit installed, met passenger car Low Emission Vehicle II Ultra Low Emission Vehicle (LEV II ULEV) emission standards when tested using the Cold-Start CVS-75 Federal Test Procedure (FTP) test cycle and the Supplemental Federal Test Procedure (SFTP) test cycle. Similar test results are expected when tested on the vehicles covered in this Executive Order. Results from emissions testing conducted by General Motors are shown below (in grams per mile).

		CVS-7	75 FTP		SFTP US06	
	NMOG	CO	NOx	НСНО	NMHC+NOx	CO
Standards*	0.070	2.1	0.04	0.011	0.14	8.0
Device Test 1	0.064	1.7	0.02	0.000	0.07	1.1
Device Test 2	0.051	1.4	0.01	0.000	0.06	2.8
Device Test 3	0.054	1.5	0.02	0.000	0.10	3.7

\*LEV II ULEV CVS-75 FTP 120K emissions standards.

The Air Resources Board reserves the right in the future to review this Executive Order and the exemption provided herein to assure that the exempted add-on or modified part continues to meet the standards and procedures of Title 13, California Code of Regulations, Section 2222, et seq.

THIS EXECUTIVE ORDER DOES NOT CONSTITUTE A CERTIFICATION, ACCREDITATION, APPROVAL, OR ANY OTHER TYPE OF ENDORSEMENT BY THE AIR RESOURCES BOARD OF ANY CLAIMS OF THE APPLICANT CONCERNING ANTI-POLLUTION BENEFITS OR ANY ALLEGED BENEFITS OF THE LS3-6.2L V8 E-ROD KIT.

No claim of any kind, such as "Approved by the Air Resources Board", may be made with respect to the action taken herein in any advertising or other oral or written communication.

Violation of any of the above conditions shall be grounds for revocation of this order. The order may be revoked only after a ten-day written notice of intention to revoke the order, in which period the holder of the order may request in writing a hearing to contest the proposed revocation. If a hearing is requested, it shall be held within ten days of receipt of the request and the order may not be revoked until a determination is made after the hearing that grounds for revocation exist.

Executed at El Monte, California, this \_\_\_\_\_23<sup>rd\_</sup> day of September 2011.

Annette Hebert, Chief Mobile Source Operations Division

GENERAL MOTORS LLC - LS3-6.2L V8 E-ROD KIT - D-126-32

# Attachment A

# LS3 - 6.2L V8 E-ROD KIT CONTENTS

Kit P/N 19257230 For 40 Tooth Trans Speed Signal	Part#	Kit P/N 19257234 For 17 Tooth Trans Speed Signal	Part#
Part Description		Part Description	
INSTRUCTION MANUAL	19257246	INSTRUCTION MANUAL	19257246
EMISSIONS CERTICATION LABEL	19258176	EMISSIONS CERTICATION LABEL	19258176
Engine ENGINE ASM - 6.2L	12613711	Engine ENGINE ASM - 6.2L	12613711
EXHAUST MANIFOLD (LH) - included with kit	12611638	EXHAUST MANIFOLD (LH) - included with kit	12611638
EXHAUST MANIFOLD (RH) - included with kit	12611639	EXHAUST MANIFOLD (RH) - included with kit	12611639
ENGINE ELECTRICAL HARNESS	19244808	ENGINE ELECTRICAL HARNESS	19244808
MAP SENSOR JUMPER HARNESS	19202598	MAP SENSOR JUMPER HARNESS	19202598 19256607
CAM SENSOR JUMPER HARNESS AIR FILTER ELEMENT	19256607 19202661	CAM SENSOR JUMPER HARNESS AIR FILTER ELEMENT	19256607
	10202001		
Controls	·	Controls	
MODULE ASM-ENG CONT	19257232	MODULE ASM-ENG CONT	19257236
DATA FILE-ECM ENG CALN	19257233	DATA FILE-ECM ENG CALN	19257237
MODULE	19210737	MODULE	19210737
SENSOR ASM-HTD OXY (POSN 2) (2)	12581966	SENSOR ASM-HTD OXY (POSN 2) (2)	12581966
SENSOR ASM-HTD OXY (POSN 3) (2)	12611165	SENSOR ASM-HTD OXY (POSN 3) (2)	12611165
MASS AIRFLOW SENSOR	15865791	MASS AIRFLOW SENSOR	15865791
MASS AIRFLOW SENSOR BRKT	19166574	MASS AIRFLOW SENSOR BRKT	19166574
ACCELERATOR PEDAL	10379038	ACCELERATOR PEDAL	10379038
Exhaust		Exhaust	
CONVERTER ASM-3WAY CTLTC (LH)	92225676	CONVERTER ASM-3WAY CTLTC (LH)	92225676
CONVERTER ASM-3WAY CTLTC (RH)	92225677	CONVERTER ASM-3WAY CTLTC (RH)	92225677
OXYGEN SENSOR MOUNTING BOSS (4)	15156588	OXYGEN SENSOR MOUNTING BOSS (4)	15156588
CLAMP - EXHAUST	92202996	CLAMP - EXHAUST	92202996
NUT- EXH MANIFOLD OUTLET PIPE (4 )	15032594	NUT- EXH MANIFOLD OUTLET PIPE (4 )	15032594
Evaporative		Evaporative	
CANISTER ASM-EVAP EMIS	17113332	CANISTER ASM-EVAP EMIS	17113332

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